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Customer Satisfaction In High Demand And Low Supply Of Vegetable Oil In Indonesia

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ABSTRACT

Vegetable oil is a type of oil that is produced from plants like palm, sunflower, and even soybean. This oil can be used as cooking oil, bio-fuel, or some other product like cosmetics. When the Covid-19 pandemic hits, the production of vegetable oil decreased but was still able to fulfill the domestic demand. In the year 2022, a war involving Ukraine, the largest producer of sunflower oil, has decreased the supply of vegetable oil while the demand is still increasing. This quantitative research analyzes customer satisfaction of vegetable oil users during the low supply and high demand environment. 100 respondents who cook using vegetable oil in Indonesia have completed the survey with a response rate of 83.33%. This research also analyzes the relationships between price, product availability, and government rules regarding customer satisfaction. The result shows that price, product availability, and government rules influence customers positively. The measurement of the government rules variable lacks reliability, and a more specific measurements are needed to increase understanding of the effect of government rules on customer satisfaction.

INTRODUCTION

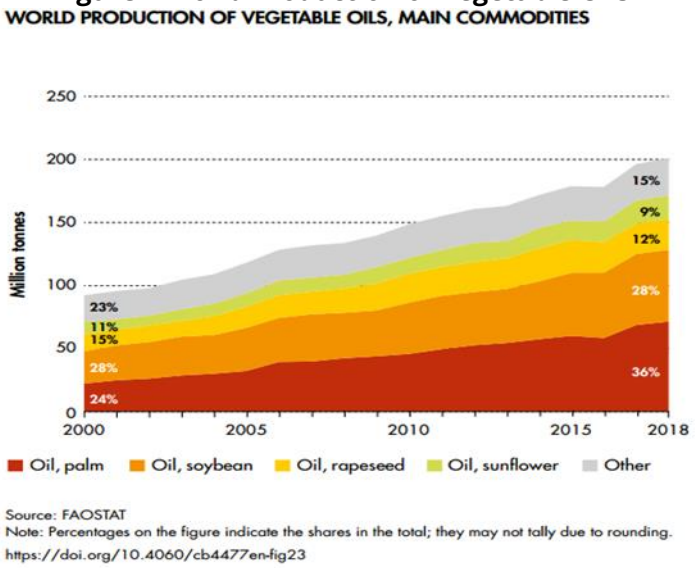
Vegetable oils are oils that are extracted from plants. Four main types of oil produced are palm oil, soybean oil, rapeseed oil, and sunflower oil (Fitrianti et al., 2018). Vegetable oils are mainly produced in Asia, which contributes more than half of the world's vegetable oil. Nearly half of Asia's vegetable oils are produced in Indonesia, mainly palm oil (FAO.2021), that's why Indonesia plays a vital role in the world's vegetable oil industry.

Vegetable oil supply has recently become a concern for the people. Vegetable oils are in high demand because they can be used as a healthy cooking oil and as biofuel, for the food and

cosmetic industry, etc. In early 2022, there is a lack of supply of cooking oil around the world thus prices of food products are increasing. Countries around the world ask other countries to import vegetable oil to fulfill the demand of their citizens. India is a producer of vegetable oil but still importing oil from other countries to fulfill domestic demand (Kumar et al., 2017).The main vegetable oil produced is palm oil with 36% of the world's production of vegetable oils in 2018. It is followed by soybean oil with 28%, rapeseed oil with 12%, sunflower oil with 9%, and other vegetable oil with 15% of world production.

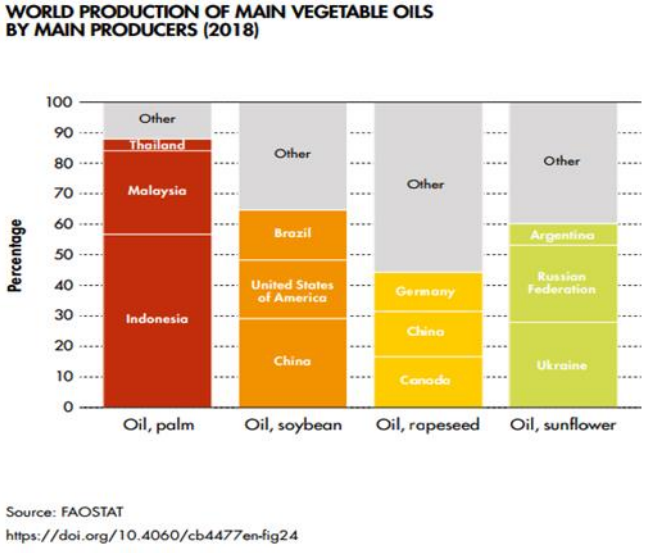
The top country producers based on vegetable oil types are shown in figure 1.2. Indonesia is the major producer of palm oil which is more than half of the world's palm oil production. For soybean oil, China is the main producer with 29 percent in 2018. Ukraine is the main producer of sunflower oil and Canada is the main producer of rapeseed oil (FAO.2021). Since the COVID-19 pandemic ended its second wave, the world economies are recovering by increasing the demand for vegetable oil. A decrease in the production of one vegetable oil will cause an increase in demand for alternatives. This affects the world's supply of vegetable oil.

Figure 1 World Production of Vegetable Oils



(Source: FAO.2021)

Figure 2. World Production of Main Vegetable Oils by Main Producers



(Source: FAO.2021)

Jean-Francois Mittaine (2016) mentions that Asia is mainly characterized by its vast population which leads to the impressive growth of vegetable oil demand in the past 30 years. ASIAN per capita consumption of oils and fats remains slightly below the world average of 28.3 kg/capita/year. According to Louise Chang, MD on January 19, 2010, 69 percent of fast-food restaurants uses corn oil in cooking their foods.

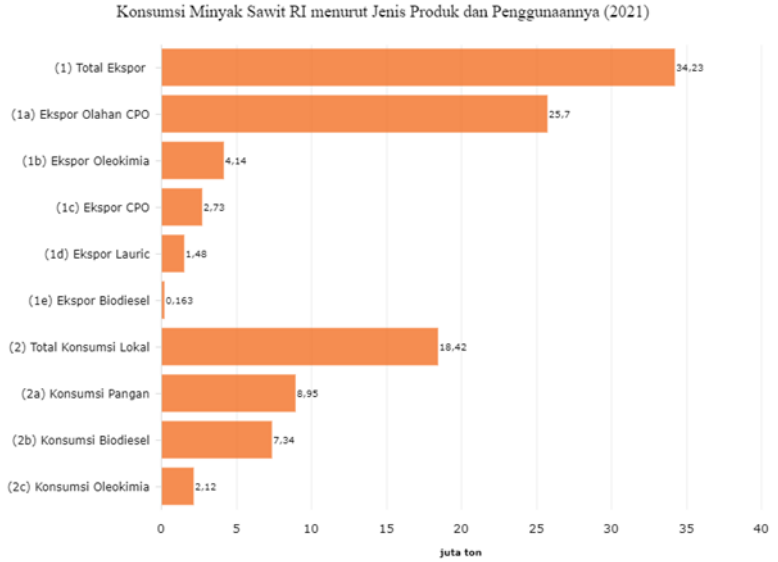
In the vegetable oil industry, each manufacturer has to satisfy its customer to increase its profit. It is measured in terms of price (Matzler, K. et al., 2006), product availability (Addis, A. K., 2020), and government rules on vegetable oils (Voi.id, 2022 and Asiatimes.com, 2022). In this study, we focus on how price, product availability, and government rules affect customer satisfaction in using vegetable oil.

Research Problem and Research Gaps

The vegetable oil industry is one of the vital industries in the world, especially in the biofuel and food industries (Ionescu et al., 2016). The research problem of this research are:

1. The increasing demand for vegetable oil. It is known from figure 1.3 and table 1.1 that the consumption of vegetable oil in Indonesia keeps on increasing in recent years. There has been an increase of 7.77% in vegetable oil consumption in 2020 from the previous year and another increase of 15.32% in
2. The shortage of vegetable oil in the Indonesian market. figure 1.6 shows the total division of produced vegetable oil in 2021. From a total of 51.30 million tons of vegetable oil produced, around two-thirds of this, or 34.23 million tons were sent for export and only one-third (18.42 million tons) were for domestic use. It was said in Tempo.co on 20th may 2022, that the monthly demand for bulk cooking oils has reached 194,634 tons. In March 2022, the vegetable oil company can only fulfill 33.2 percent of the demand per month, or 64,626.52 tons per month.

Figure 3. Indonesian Palm Oil Consumption by Product Type and Use (2021)



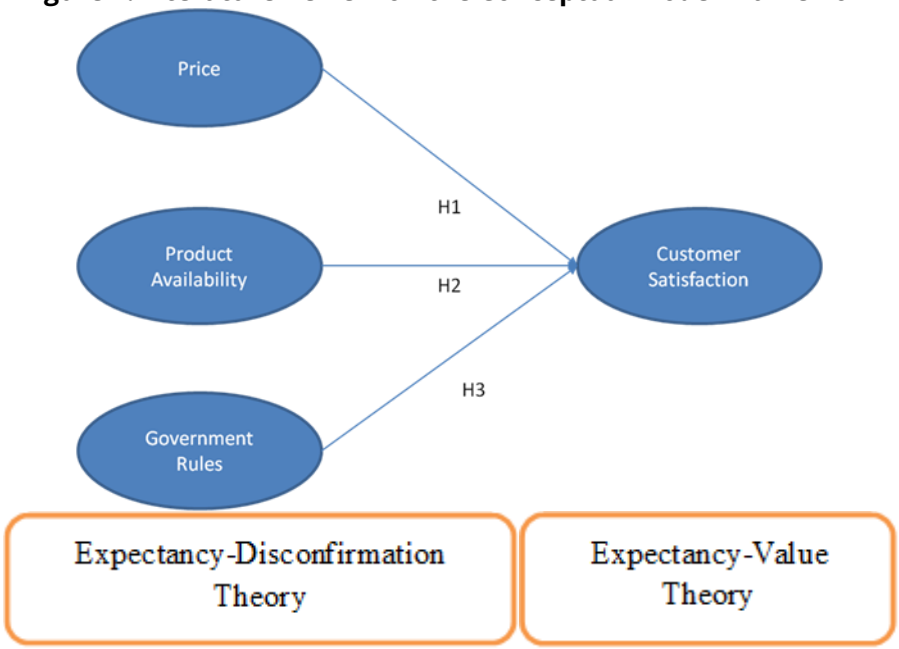
(Source: Gabungan Pengusaha Kelapa Sawit Indonesia (GAPKI), January 2022)

From the above phenomena, it can be seen that throughout 2022 the demand for vegetable oil in the domestic market has been over the supply in the market. In 2021, the domestic demand has reached the amount of 18.077 million tons while the domestic supply has reached 18.42 million tons (indexmundi.com, 2022).

LITERATURE REVIEW

This chapter looks at a literature review that covers the variables used in this study, namely price, product availability, government rules, and customer satisfaction.

Figure 4. Literature Review on the Conceptual Model Framework



1. Independent Variables

a. Price

It is the amount of money given or set as consideration for the sale of a specified thing. It is measured by using the price-quality ratio, price transparency, and price fairness (Matzler, K. et al., 2006). The price-quality ratio is the measure of perceived value weighted against the price that must be paid (Gardner, J. 2009). Price transparency means when buyers have knowledge of the price of a product before actually buying the product (Farrell, K. S., et al. 2010). Price fairness is the consumer's assessment of the difference in price between the seller's price and other party's price (Xia, L. et al., 2004).

b. Product Availability

It is storing items and delivers different item variances. It is measured by product fill rate, order fill rate, and Cycle service level. Product fill rate is the product demand that is satisfied from inventory. Order fill rate is the orders filled from inventory. Cycle service level is the replenishment cycle (Addis, A. K., 2020)

c. Government Rules

It is a plan intended to determine the actions of the people. It was stated on Voi.id on February 12, 2022, that the government had implemented a policy of the highest retail price (HET) for cooking oil of Rp. 14,000 per liter. Then the government implemented a DMO (Domestic market obligation) where vegetable oil manufacturers must put twenty percent of their total export volume for domestic needs. As the price of vegetable oils began to rise, they imposed a limit of two liters per customer as a rationing measure (Asiatimes.com).

2. Hypothesis Development

Hypotheses in this research are:

H1 - Price positively influences customer satisfaction

H2 - Product availability positively influences customer satisfaction

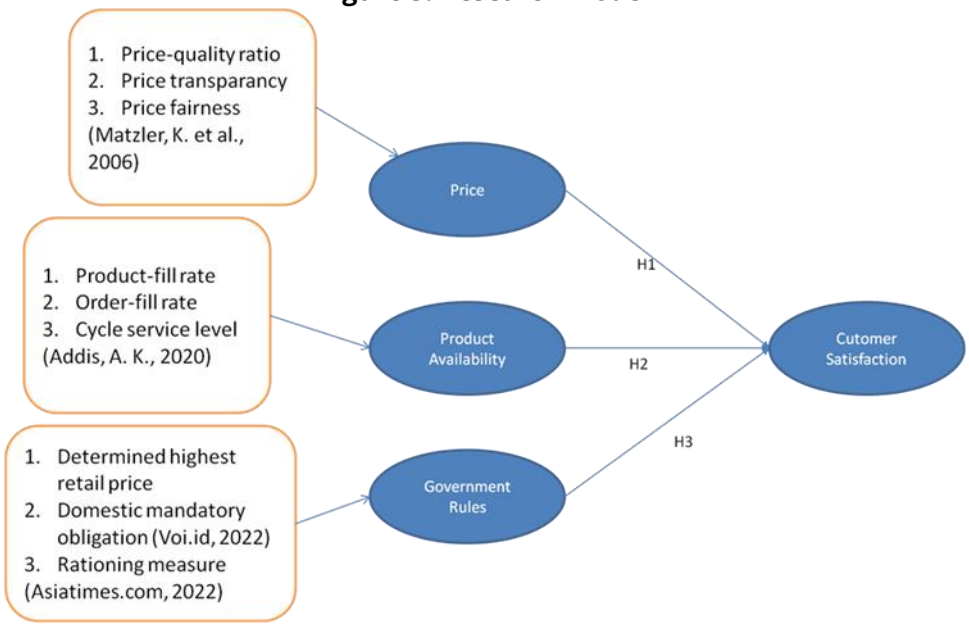
H3 - Government rules positively influence customer satisfaction

METHODS

Research Model

This chapter presents the research approach to test the hypotheses generated from previous research and relevant articles.

Figure 5. Research Model



This research examines the relationships between price, product availability, and government rules regarding customer satisfaction. Firstly, the study examines the relationships between price and customer satisfaction. Secondly, the research examines the relationships between product availability and customer satisfaction. Lastly, the research examines the relationships between government rules and customer satisfaction.

Research Design

As the goal of this study is to quantitatively evaluate the correlations between the constructs within the research setting, it is a descriptive study. As the hypotheses in this study were created by a logical synthesis based on prior studies and a literature analysis to ascertain the relationship between the constructs, this study used the "positivism" research philosophy. The research paradigm utilized in this research is the deductive approach, which starts by considering related theories, then develops appropriate hypotheses, performs hypotheses testing, and uses a research strategy that makes use of primary data collected through surveys or questionnaires. Based on the information gathered, the relevant variables will be evaluated and statistical tools will be used for analysis. In Table 3.1 below, the research design is summarized.

Table 1. Research Design and the Adopted Approach

No	Research Design		Approach
1	Research philosophy		Positivism
2	Research paradigm		Deductive
3	Research strategy		Online Survey
4	Research method	Choice	Quantitative
		Time horizon	Cross-sectional
		Technique and procedures	Data collection and analysis

Research Context and Unit Analysis

The research context of this research is people that use vegetable oil in Indonesia and took place during the low supply and high demand environments. It was said in Tempo.co on 20th may 2022, that the vegetable oil company can only fulfill 33.2 percent of the demand per month. The research will use online questionnaires to obtain data from the respondents who cook using vegetable oils in Indonesia.

Table 2. Research Context

Context	Unit of Analysis	Respondents
Indonesian Citizens	Home-cooker, cooks and chefs	100 people who cooks using vegetable oil

Data Collection

a.Sampling Method

The sampling strategy utilized in this study was simple random sampling with probability sampling. As the name indicates, simple random sampling entails each subject with an equal chance of being selected. The unit analysis of this study is home-cooker, cooks, and chefs in Indonesia.

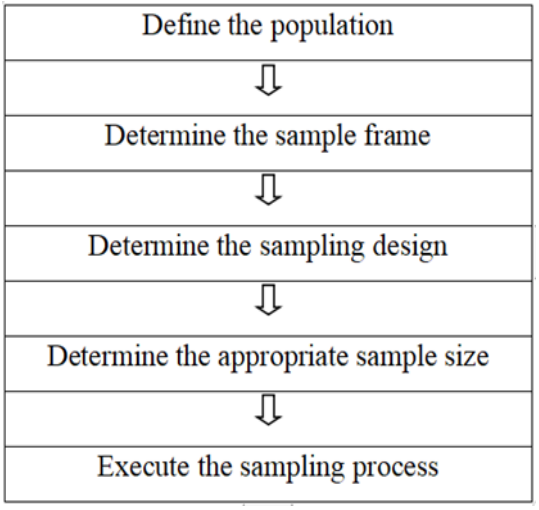
b.Sampling Procedures

Sampling is the process of choosing a sufficient number of the appropriate elements from a population such that the researcher can generalize the sample's characteristics to the characteristics of the population's elements after studying and analyzing the sample. Sekaran and Bougie (2016) outline a few essential phases in sampling, including characterizing the population, choosing the sample frame, designing the sample, selecting the right sample size, and carrying out the sampling procedure. As was already established in the research setting, the population of this study is Indonesian citizens. The next step is to choose the sample frame, which is a representation of every component of the population from which the sample is drawn. The third step is choosing the sampling strategy, previously mentioned as simple random sampling. Establishing the proper sample size is the fourth step. Ekawati (2016) presented an approach for the ideal sample size when tight on time. The study's minimal sample size is 96 based on the Lemenshow formula.

Minimum number of sample using a Lemeshow formula: $\frac{n = Z2 \times P(1-P)}{d2}$

For “n” is the minimum number of sample, “Z” is the score of belief 95% = 1.96; “P” is the estimation maxima of 0.5; and “d” is the alpha (0.10) or error sampling of 10%.The sampling process is carried out as the last phase, and the questionnaires are distributed to the respondents. Figure 3.2 outlines the steps mentioned above.

Figure 6 Sampling Procedure



a. Measure Data Collection
   Self-administered online questionnaires are used to collect the data, which are then given out to random people in Indonesia. The survey will be more rapidly distributed across the nation by using online questionnaires, and respondents will be able to complete it at their own pace.
b. Research Samples
   In this study, People who are using vegetable oil served as the sampling frame. By sending them the link to the questionnaire by email, WhatsApp, and other social media platforms, this study will ask participants to take part in the survey.
c. Research Instruments
   The research instruments are represented in Table 3 below :

Table 3 Research Instrument

Variables	Dimensions	Observed Variables	Sources
Price	Price-quality ratio	1 variable	Matzler et al. (2006)
	Price transparancy	1 variable	
	Price fairness	1 variable	
Product Availability	Product-fill rate	1 variable	Addis (2020)
	Order-fill rate	1 variable	
	Cycle service level	1 variable	
Government Rules	Determined highest retail price	1 variable	Voi.id, (2022)
	Domestic mandatory obligation	1 variable	
	Rationing measure	1 variable	Asiatimes.com, (2022)
Customer Satisfaction	Price	1 variable	Nazari et al. (2014)
	Product Availability	1 variable	Handoko (2016)
	Government Rules	1 variable	Hossain et al. (2020)
Total		12 variables	

Data Analysis Method

In this research, structural equation modeling (SEM) with SmartPLS is used to analyze survey data. According to Hair et al. (2019), SEM is a statistical model that better explains correlations between numerous variables than other regression or multivariate methods. According to Hair et al. (2019), SEM is best used when dealing with several constructs that are represented by a variety of measurable variables, which is precisely the study's model

SEM is now the most popular multivariate method, according to Hair et al. (2019). Every relationship in the model can be simultaneously estimated using SEM. SEM analyzes the connection of variables to constructs, also known as loading, based on theory because it is a confirmatory rather than an exploratory technique. Another justification for the choice of SEM is that one of the objectives of this study is to examine the relationships between the components. SEM does this by analyzing the residuals—differences between observed and estimated covariance matrices—where smaller residuals signify that the research model more closely approaches the relationship that actually exists in reality. An estimated covariance matrix is the theoretical covariance matrix should the relationships in the model be true, as opposed to an observed covariance matrix, which is a covariation among all measured variables (Hair et al., 2019)

Figure 7 depicts the overall structural model incorporating all variables observed from the respective constructs in the theoretical research model.

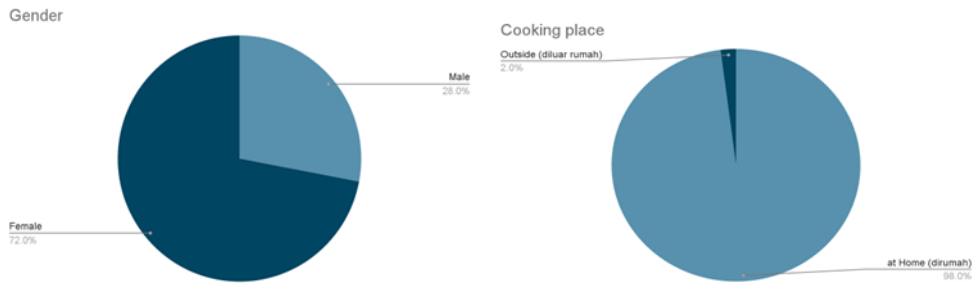
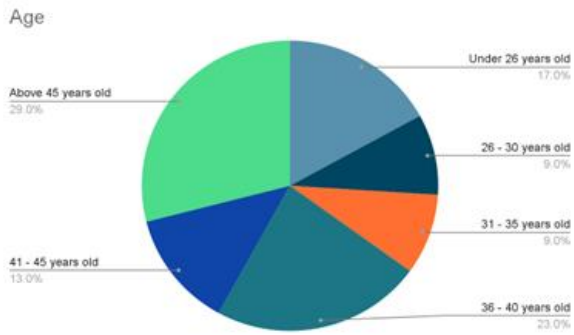


Figure 8 Overall Structural Model Incorporating All the Observed Variables



RESULTS

1. Sample and Procedures

   Data were collected from google forms and distributed randomly to people in Indonesia. Respondents were asked to participate in the survey by sending them the questionnaire's link through e-mail, WhatsApp, and other social media platforms. As outlined in the previous chapter, the unit analysis of this study is home-cooker, cooks, and chefs in Indonesia. The survey has been distributed to approximately 120 people and gained responses from 100 respondents, which was an 83.33% response rate.

2. Demographic of Survey Respondent
   The respondents are mostly female (72% of total respondents) with the age group mostly above 45 years old (29% of total respondents). The second most age group is the age group of 36 - 40 years old (23% of total respondents), followed by the age group under 26 years old and the age group of 41 - 45 years old (17% and 13% of total respondents respectively). The last two groups of respondents with age groups of 26-30 years old and 31 - 35 years old are at an equal representation of 9.0% of total respondents. Most of the respondents cook at home (98%).

Figure 9 Demographic Data of the Respondents

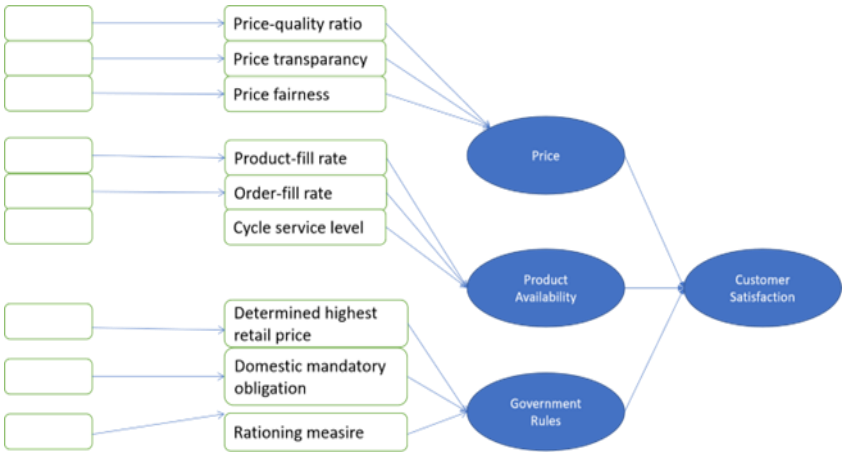


Table 4 Demographic Data

No	Demographic Variable	Grouping	Amount	Percentage (%)
1	Gender	Male	28	28%
		Female	72	72%
2	Age	Under 26 years old	17	17%
		26 - 30 years old	9	9%
		31 - 35 years old	9	9%
		36 - 40 years old	23	23%
		41 - 45 years old	13	13%
		Above 46 years old	29	29%
3	Cooking Place	At home	98	98%
		Outside	2	2%

3.Pre-Data Analysis Measures

a. Data Screening and Analysis
   After the data is gathered, it is exported from Google Forms to Excel. The original survey data will subsequently be coded such that it is SmartPLS ready. After that, a Mahalanobis Distance (MD) analysis is conducted to check for any incorrect or outlier data in SPSS. Outliers are those that deviate significantly from the allowable range established by MD analysis's data sample mean. Data will be plotted by MD, which will determine the maximum permissible distance from the center. The probability value is first determined by comparing the MD

distribution to a chi-square distribution with the same degrees of freedom. The total number of independent variables employed in this study, which is three (3), will correspond to the degrees of freedom. An indicator of a multivariate outlier is a probability value less than 0.001. Since there were no data outliers identified by the MD analysis in this study, the data from 100 respondents were retained as the final sample for analysis.

b. Normality, Collinearity, and Homogeneity

1) Normality

To determine whether the survey's data have a normal distribution, a normality test is carried out. Skewness and kurtosis can be used in SmartPLS to examine the results. If the number is greater than +1 or lower than -1, there is a substantially skewed distribution. The same for kurtosis, greater than +1 means too peaked while lower than -1 means too flat (Hair et al., 2017). Both findings calculate to be between +1 and -1 for all variables, indicating that the data distribution is normal. Table 5 below displays the results of the normality test.

Table 5 Test of Normality

Variables	Skewness	Excess Kurtosis
Price	0.436	-0.814
Product Availability	0.577	-0.508
Government Rules	0.042	-0.113
Customer Satisfaction	0.066	-0.191

2) Collinearity

When two or more independent variables in a multiple regression model are highly correlated, a statistical phenomenon called multicollinearity occurs. In this study, correlations between independent factors and both dependents and independent variables are tested by the use of SmartPLS collinearity statistics (VIF). If the VIF value is less than 5, there is no collinearity between the variables. Table 6 shows the result of the VIF test.

Table 6 Collinearity Test

Outer VIF Values	
Variables	VIF
Pri_1	1.597
Pri_2	1.687
Pri_ 3	1.362
Avlb_1	1.479
Avlb_2	1.894
Avlb_3	1.801
Grul_1	1.359
Grul_2	1.351
Grul_3	1.046
Csat_1	1.771
Csat_2	1.169
Csat_3	1.927
Inner VIF Values	
Variables	Customer Satisfaction

Price	1.659
Product Availability	1.800
Government Rules	1.464

c. Reliability

Internal consistency, or how closely connected a group of things is to one another, is measured by Cronbach's alpha. It is also regarded as a measure of scale reliability. Generally speaking, a reliability coefficient of 0.70 or more is considered "acceptable" in social science study settings. As shown in Figure 4.2, price and product availability have a value above 0.70 which means they are acceptable and have a high level of internal consistency. But the value of government rules and customer satisfaction is lower than 0.70 which means they are not acceptable and have a low level of internal consistency.

Figure 10 Reliability Test

	Cronbach's Alpha
Customer Satisfaction	0.697
Government Rules	0.384
Price	0.750
Product Availability	0.790

4.Descriptive Statistic Analysis

This study employed descriptive statistics with SmartPLS 3 to analyze the collected data and carry out respondent profiling for the relevant constructs. In the price variable, price fairness has the highest mean value, followed by the price-quality ratio, and price transparency. This indicates that respondents agree that price fairness can affect their satisfaction in using vegetable oil. The descriptive statistics for the price variable can be seen in table 7 below.

Table 7 Descriptive Statistics of Price Variable

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Price-quality ratio	100	1.000	5.000	2.470	1.307
Price transparency	100	1.000	5.000	2.370	1.390
Price fairness	100	1.000	5.000	2.860	1.334
Valid N (listwise)	100				

In the product availability variable, the order-fill rate has the highest mean value, followed by product-fill rate, and cycle service level. This indicates that respondents agree that the order-fill rate can affect their satisfaction with using vegetable oil. The descriptive statistics for product availability can be seen in table 8 below.

Table 8 Descriptive Statistics of Product Availability Variable

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Product-fill rate	100	1.000	5.000	2.330	1.297
Order-fill rate	100	1.000	5.000	2.400	1.273
Cycle service level	100	1.000	5.000	2.300	1.323
Valid N (listwise)	100				

In the government rules variable, the rationing measure has the highest mean value, followed by the determined highest retail price, and domestic mandatory obligation. This indicates that respondents agree that rationing measure can affect their satisfaction with using vegetable oil. The descriptive statistics for government rules can be seen in table 4.6 below.

Table 9 Descriptive Statistics of Government Rules Variable

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Determined highest retail price	100	1.000	5.000	3.020	1.503
Domestic mandatory obligation	100	1.000	5.000	2.790	1.235
Rationing measure	100	1.000	5.000	3.250	1.410
Valid N (listwise)	100				

The complete results of descriptive statistical analysis is summarized in table 10 below.

Table 10 Descriptive Statistical Analysis Results

Variables	Dimensions	Min	Max	Mean	SD	Cronbach:s Alpha
Price	Price-quality ratio	1	5	2.470	1.307	0.750
	Price transparancy	1	5	2.370	1.390	
	Price fairness	1	5	2.860	1.334	
Product Availability	Product-fill rate	1	5	2.330	1.297	0.790
	Order-fill rate	1	5	2.400	1.273	
	Cycle service level	1	5	2.300	1.323	
Government Rules	Determined highest retail price	1	5	3.020	1.503	0.384
	Domestic mandatory obligation	1	5	2.790	1.235	
	Rationing measure	1	5	3.250	1.410	

Structural Equation Modelling Analysis

a. Measurement Model Analysis

The single factor model is explored in this chapter since this construct has dimensions (SFM). The AVE value of the price variable for the single factor model was 0.666, greater than the cut-off value of 0.50, indicating that the model for the price variable would be considered acceptable, reliable, and valid. Price has a reliability value of 0.856. This leads us to the conclusion that the price measurement model analysis is reliable.

The AVE value of the product availability variable for the single factor model was 0.704, greater than the cut-off value of 0.50, indicating that the model for the price variable would be considered acceptable, reliable, and valid. Product availability has a reliability value of 0.877. This leads us to the conclusion that product availability measurement model analysis is reliable.

The AVE value of the government rules variable for the single factor model was 0.477, lower than the cut-off value of 0.50, indicating that the model for the government rules variable may not be considered acceptable, reliable, and valid. Government rules has a reliability value of 0.716. This leads us to the conclusion that government rules measurement model analysis is reliable.

The AVE value of the customer satisfaction variable for the single factor model was 0.589, greater than the cut-off value of 0.50, indicating that the model for the customer satisfaction variable would be considered acceptable, reliable, and valid. Customer satisfaction has a reliability value of 0.801. This leads us to the conclusion that customer satisfaction measurement model analysis is reliable.

Table 11 Variables' Validity and Reliability

	Cronbach's Alpha	Rho_A	Composite Reliability	Average Variance Extracted (AVE)
Price	0.750	0.778	0.856	0.666
Product Availability	0.790	0.800	0.877	0.704
Government Rules	0.384	0.444	0.716	0.477
Customer Satisfaction	0.679	0.801	0.801	0.589

b. Structural Modeling Analysis

The structural modeling analysis is conducted to measure the relationships between each variable in the research model as shown in figure 11 The result will be used in hypothesis testing.

Figure 11 Research Model

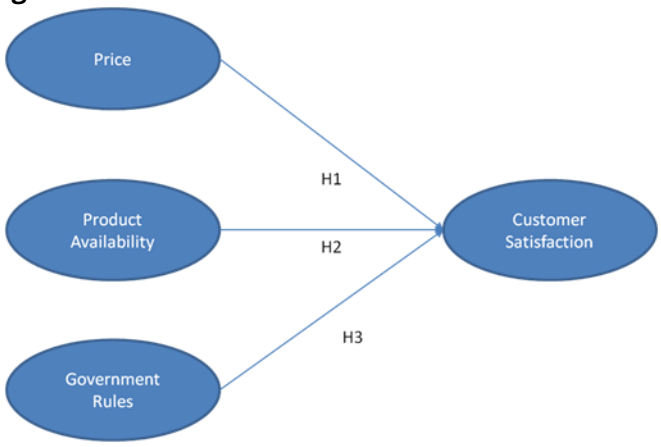
c. Hypotheses Testing Results

This section will show the result of the hypotheses testing of this research. Hypotheses in this research are 1. the relationship between price and customer satisfaction, 2. the relationship between product availability and customer satisfaction, and 3. the relationship between government rules and customer satisfaction. The result of the hypothesis testing shows that all three hypotheses are supported. Table 12 shows the hypotheses result of this study and figure 11 shows the value of the path coefficient and T-values.

Table 12 Hypothesis Testing Result

No	Hypothesis Relationship	Variable Coefficient	T-Values	Hypotheses testing result
1	Price positively influence customer satisfaction	0.126	0.917	Supported
2	Product availability positively influence customer satisfaction	0.223	1.531	Supported
3	Government rules positively influence customer satisfaction	0.299	2.036	Supported

Figure 12 Model's Structural Coefficient and T-value



d.Overall Model Fit Analysis

Table 13 shows the results of the overall model fit analysis. The overall model fit analysis of this research indicates that the research is not a good fit as every model fit index shows non-fitted research.

Table 13 Model Fit Analysis

Item	Overall Model Fit	Fit Conclusion
SRMR	0.099	Not fitted (≤0.08)
NFI	0.696	Not fitted (≥0.95)

DISCUSSION

The study result shows that all of the hypotheses are supported.

a. Price [H1: Supported]
   Price positively influences customer satisfaction, which is the first hypothesis, is supported. The T-value of 0.917 and the variable coefficient of 0.126 show a substantial positive correlation between the two variables. This is in line with the research done by Haq in 2018 and Mahendra, et al. In 2019 in which they state that price has a significant and positive influence on customer satisfaction.
b. Product Availability [H2: Supported]
   Product availability positively influences customer satisfaction, which is the second hypothesis, is supported. The T-value of 0.223 and the variable coefficient of 1.531 show a substantial positive correlation between the two variables. This is in line with the study done by Handoko in 2016 in which the researcher states product availability increases customer satisfaction.

c. Government Rules [H3: Supported]
Government rules positively influence customer satisfaction, which is the last hypothesis, is supported. The T-value of 0.299 and the variable coefficient of 2.036 show a substantial positive correlation between the two variables. This is in line with the research done by Mosimanegape, et al. In 2020 where they state that the government is tasked to deliver goods and services to meet citizens' or customers' needs. Failure to provide services and poor customer feedback is linked to public satisfaction.

Research Contributions

By supplying new information to the body of existing research, this study contributes to the data currently available on consumer satisfaction with the use of vegetable oil in conditions of limited supply and high demand. The research's conclusions can be used in the practical way to the business field.

a. Theoretical Contribution
The research's conclusions have theoretical implications for the accepted concept. As far as the author is aware, previous studies have not yet undertaken integrated research among the contemplated variables, therefore this study not only confirms the correlations among the anticipated variables in this study. The study, according to the researchers, raises domestic market awareness of the potential for a scarcity of vegetable oil. This study supports the idea that both product availability and pricing have a favorable impact on customer satisfaction. Government regulations have also been shown to improve customer happiness, however, their measurement is not very reliable.

b. Contribution
This research is also making a useful contribution from a business standpoint to deal with keeping customers satisfied during a crisis. The researcher hopes that the study's findings have made the vegetable oil business more aware of its domestic market customers and given the government some useful information about how to manage supply in a situation where there is an imbalance between high demand and low supply. According to this research, the government can implement the rationing measure regulation, which restricts the amount of vegetable oil that can be purchased per customer, to ensure the supply of vegetable oil during periods of low supply and high demand.

CONCLUSION

Based on the results of the analysis, it can be concluded that all three hypotheses were supported. The study examined the relationships between price, product availability, and government rules on customer satisfaction and found that each of these factors had a positive influence on customer satisfaction. Specifically, price, product availability, and government rules all contributed to enhancing customer satisfaction. These findings suggest that businesses and policymakers should consider these factors when aiming to improve customer satisfaction and overall customer experiences.

SUGGESTION

Based on the results of this research, several key recommendations and suggestions can be drawn for businesses and policymakers:

1. Pricing Strategies: The study demonstrated that price has a positive influence on customer satisfaction. To enhance customer satisfaction, businesses should consider implementing competitive pricing strategies. This may include price matching, offering discounts, or developing transparent pricing policies to ensure customers perceive good value for their money.

2. Product Availability: The research highlights the importance of product availability in influencing customer satisfaction. To meet customer demands and maintain high levels of satisfaction, businesses should focus on effective inventory management and supply chain optimization. Maintaining consistent product availability and preventing stockouts can contribute to an improved customer experience.
3. Government Regulations: The study also found that government rules positively affect customer satisfaction. Policymakers should consider implementing and enforcing regulations that protect consumer rights and ensure fair business practices. Businesses should comply with these regulations and actively engage with policymakers to create a positive regulatory environment that fosters customer trust and satisfaction.

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