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## Effect analysis of market segmentation on purchasing decisions local rice in modern market

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**Abstract.** The background of this study discusses market segmentation of local rice purchasing decisions that have generally been bought by the public in traditional markets, but this time it was done in the modern market, simultaneously and partially and to study the most dominant variables. The approved independent variables are: geographical (X1), demographic (X2), psychographic (X3) and behavior (X4), with the dependent variable that is the purchasing decision (Y) on local rice in the modern market. To find out the large influence of the independent variable on the dependent variable, this study used a sample of 50 respondents of local rice consumers at the Modern Market of Carrefour Pengayoman in Makassar. While sampling uses the purposive sampling method. The analysis technique used in this study is multiple linear regression. The results of the SPSS test show that: (1) Market Segmentation determines simultaneously the purchasing decisions of local rice in the modern market significantly. (2) Market Segmentation partial decision on local rice purchasing decisions in the modern market, except demographic variables. (3) Behavior is the most dominant dominant variable in purchasing decisions. The company is expected to keep paying attention to demographic segmentation and find out other factors in increasing local rice.

### 1. Introduction

The majority of Indonesia's population (more than 90%) consume rice as a staple food. Based on a study of Indonesia's rice consumption by the BPS over the past three years, we have found 114kg per capita per year or 312 grams per capita per day [1]. The basic need for rice increases each year in line with the population [2]. Rice is a politically strategic commodity in Indonesia. The government seeks to ensure that rice production meets the needs of domestic consumption and, accordingly, is interested in its performance as a matter of considerable policy significance [3].

Simatupang [4] mentioned that Indonesian rice production grew rapidly between 1977 and 1982, but the self-sufficiency achieved in 1984 was short-lived. Growth declined gradually from about 1982, eventually stabilising at a low rate in the late 1990s. South Sulawesi is one of the biggest rice producers in Indonesia. Rice production in South Sulawesi in 2018 has a total production of 5.74 million tons. Abundant products are marketed in various places, one of which is in the modern market in the city of Makassar. This modern-based sales is intended to boost the economy of the people of South Sulawesi, and increasing households incomes [5]. Various factors affect the marketing performance of agricultural products, including inter-island trade. Intrinsically, influential factors include market structure, level of market integration, and marketing margins [6].



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City of Makassar has now become one of the targets made by local and foreign business people to set up businesses. This development resulted in changes in people's lives, especially in big cities, one of which, changes in places to shop. One of the efforts made by the company to remain in an effective position is to establish market segmentation.

The large selection of rice products in the form of types (one of them is local rice), packaging, price, taste and others as well as differences and the influence of the cultural environment, social class, purchasing power, motivation and lifestyle shape different consumer behavior. There is a very close relationship between consumer behavior and market segmentation. By understanding consumer behavior, market segmentation will be properly mapped. Purchasing decisions on products are influenced by consumer behavior, for that in making sales need to be considered. Understanding of consumer behavior is not an easy task but it is quite complicated and thus require time and effort. This is caused by the many variables that are influenced and these variables tend to interact with each other and the success of marketing activities is largely determined by the ability of the marketed product to meet what is expected by consumers [7]

The attractiveness of the modern market besides shopping comfort and safety factors, is also able to provide diversity of goods. Carrefour is a market with a modern market concept that provides middle and upper service standards. One Carrefour outlet in Makassar is Carrefour Pengayoman. Customers can meet all their daily needs at the location, one of which is a local rice product. Thus given the importance of market segmentation, the authors are compelled to conduct research to determine the effect of market segmentation (simultaneous, partial and dominant) on local rice purchasing decisions.

## 2. Methods

Multiple linear regression analysis is a commonly used analysis technique in analyzing the relationships and effects of one dependent variable with two or more independent variables. Multiple regression analysis techniques can be calculated using the formula [8].

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + \dots + b_kx_k \quad (1)$$

Information :

Y	= predicted value of Y
a	= constant number
$b_1, b_2, b_3, \dots, b_k$	= coefficient of the independent variable
$x_1, x_2, x_3, \dots, x_k$	= independent variable
$x_1$	= geographic
$x_2$	= demographic
$x_3$	= psychographic
$x_4$	= behavior

Based on the hypothesis that has been stated, then for the first hypothesis, the test method is based on the Anova table (F test) and the basis for decision making as follows:

- If  $\text{sig} (p\text{-value}) > \alpha (0.05)$  then  $H_0$  is accepted, it means that the independent variables simultaneously (simultaneous) do not significantly influence the dependent variable
- If  $\text{sig} (p\text{-value}) < \alpha (0.05)$  then  $H_0$  is accepted, it means that the independent variables together (simultaneously) have a significant effect on the dependent variable.

For testing the second hypothesis the test is based on t test statistics and the basis for decision making is as follows:

- a. If sig (p-value) >  $\alpha$  (0.05) then  $H_0$  is accepted, it means that the independent variable partially has no significant effect on the dependent variable
- b. If sig (p-value) <  $\alpha$  (0.05) then  $H_0$  is rejected, it means that the independent variable partially has a significant effect on the dependent variable.

### 3. Results and Discussion

The multiple linear regression test aims to measure how much influence the market segmentation (X) has on the purchasing decision (Y) of local rice described in the table below.

**Table 1.** Results of multiple linear regression coefficient analysis.

Variabel	B Koefisien	Beta	Sig
(Constant)	-0.814	-	-
Geografis (X1)	0.521	0.223	0.016
Demografis (X2)	-0.103	-0.091	0.279
Psikografis (X3)	0.623	0.423	0.000
Tingkah Laku (X4)	0.388	0.416	0.000

From the results of the above table, the regression coefficient table shows the coefficient values in the multiple linear regression equation. The value of the equation used is in column B (coefficient). The standard multiple linear regression equation can be obtained as follows:

$$Y = -0.841 + 0.521X_1 - 0.103X_2 + 0.623X_3 + 0.388X_4$$

From the above equation, it can be explained the regression coefficient value of each independent variable, this explains that the value of the constant or intercept of -0.814 states that the initial purchase decision was -0.814 points before there were geographical, demographic, psychographic and behavioral variables. If the variables X1, X2, X3 and X4 are equal to 0, the purchase decision will produce a value of -0.814.

#### 3.1. Hypothesis

*3.1.1. Simultaneous Test (F test).* Guidelines are used if the significance probability > 0.05, then there is no significant effect or  $H_0$  is accepted and  $H_a$  is rejected and if the significance probability < 0.05, then there is a significant effect or  $H_0$  is rejected and  $H_a$  is accepted.

**Table 2.** Simultaneous significance test results (Uji F).

Model	df	F	Sig	Information
Regression	4	46.123	0.000	$H_a$ : accepted
Residual	45			$H_0$ : rejected
Total	49			

From the output of table 2 above, it shows that the result of the significance is 0.000 (<0.05). So from the above analysis it can be concluded that together the independent variables consisting of Geographic (X1), Demographic (X2), Psychographic (X3), and Behavior (X4), have a significant effect on local rice purchasing decision variables (Y). In other words  $H_a$ : accepted means that the variable (X) Market segmentation simultaneously influences the decision to purchase local rice (Y) in Makassar Carrefour Modern Carrefour Market. This is consistent with what was said by Swastha & Handoko [9] interpreting market segmentation as an activity of dividing markets / markets that are heterogeneous into homogeneous market units.

3.1.2. *Partial test (T test)*. Partial test (t test) is used to test the presence or absence of the influence of market segmentation indicators consisting of Geogafis (X1), Demographics (X2), Psychographics (X3), and Behavior (X4) on local rice purchase decision variables (Y). Guidelines are used if the significance probability > 0.05, then there is no significant effect or Ho is accepted and Ha is rejected and if the significance probability is < 0.05, then there is a significant effect or Ho is rejected and Ha is accepted [10]. Partial test results can be presented in the following table.

**Table 3.** Significance results of partial test (T Test).

Variabel	B (Koefisien)	T	Sig	Information
(Constant)	-0.814	-0.499	0.365	-
X1	0.521	2.508	0.016	Ha : accepted
X2	-0.103	-1.096	0.279	Ha : rejected
X3	0.623	4.036	0.000	Ha : accepted
X4	0.388	4.043	0.000	Ha : accepted

a. T test on Geography (X1)

T test on the ability indicator (X1) Geographic, obtained a significance value of 0.016, this value is smaller than (0.05) which means that the geographical variable (X1) has a significant effect on local rice purchasing decisions (Y). In other words Ha: accepted, it means that the variable (X) Market Segmentation on the Geographical indicator (X1) partially influences the decision to purchase local rice (Y) in the Modern Carrefour Market in Makassar. This is consistent with what was said by Sofjan Assauri [11] that market segmentation can be done by considering several variables, one of which is geographical segmentation.

b. T test on Demographics (X2)

T test on Demographic (X2) obtained a significance value of 0.279 which means greater than the value (0.05), then partially the Demographic indicator (X2) does not significantly influence the purchase decision of local rice products (Y). In other words Ha: rejected means the variable (X) Market segmentation on the Demographic indicator (X2) does not have a partial effect on the purchasing decision (Y) of local rice in Makassar Carrefour Modern Carrefour Market. This is indeed not in accordance with what was stated by Sofjan Assauri [11], who said that demographic variables are the most popular basis for differentiating customer groups.

c. Psychographic t test (X3)

The t test of the Psychographic indicator (X3) obtained a significance value of 0,000 which means it is smaller than the significance value of significance (0.05). So partially Psychographic indicators (X3) significantly influence local rice purchasing decisions (Y). In other words Ha: accepted means that the variable (X) Market segmentation on the Psychographic indicator (X3) partially influences the local rice purchasing decision (Y) in the Carrefour Pengayoman Makassar Modern Market. This proves that local rice consumers who have been studied, have different lifestyles, personalities and social classes and because of that Carrefour Guiding has been declared successful in attracting consumers based on their respective psychographics. This is consistent with what was stated by Sofjan Assauri [11]. This market segment is done by grouping consumers or buyers into market shares according to variable patterns or lifestyle and personality.

d. T Test on Behavior (X4)

T test of the Behavior indicator (X4) obtained a significance value of 0,000, which means it is smaller than the value of the probability of significance (0.05). So partially the Behavior indicator (X4) has a significant effect on local rice purchasing decisions (Y). In other words Ha: accepted means that the variable (X) Market segmentation on the Behavior indicator (X4) partially influences the purchasing

decisions (Y) of the Modern Market local rice at Carrefour Pengayoman Makassar. This proves that Makassar Carrefour Caring Services are good for consumers. This is a consideration by consumers to subscribe or to extend local rice subscriptions in a longer period. This is in accordance with what was said by Sofjan Assauri [11] that there are groups of people who always expect high results (high achievers) and who expect low (low achievers). With this basis, it can be determined that market segments of the people who like high quality products and market segments that feel sufficient with products of mediocre quality.

### 3.1.3. Dominant Test

**Table 4.** Results of dominant market segmentation indicators.

Variabel	Standardized Coefficients	Korelasi Y	Kontribusi (%)
Geografis (X1)	0.219	0.700	15.33
Psikografis (X3)	0.363	0.761	27.62
Tingkah Laku (X4)	0.448	0.823	36.87
Total			79.9

Table 4 shows that the dominant indicator of influence is Behavior (X4), the value of the contribution can be determined by calculating Standardized Coefficients multiplied by the Correlation Y of X4 (0.448 x 0.823), from the results obtained a contribution of 36.87%. This shows that behavior is the most optimal realization of market segmentation and in accordance with Knowledge, Attitudes, Use and Responses. This is in line with what was done by Bahari [12] said that segmentation based on behavior that the benefits of a product really have valuable value, and is very beneficial because it provides a true picture of the form of segmentation that occurs in the field.

### 3.1.4. Determination Coefficient Test ( $R^2$ )

**Table 5.** Determination coefficient test ( $R^2$ ).

Model	R	R Square	Adjusted R Square	Std. Error of The Estimate
1	0.894	0.804	0.786	1.515

The results of the regression calculations in the table can be seen that the coefficient of determination (adjust R square) obtained is 0.786. This means that 78.6% of local rice purchasing decisions in modern markets are influenced by market segmentation variables (X) consisting of geographical (X1), demographic (X2), psychographic (X3) and behavior (X4), while the rest are 21.4% of local rice product purchasing decisions are influenced by other variables not examined in this study.

## 4. Conclusion

Based on data that has been found in research in the field and after processing the effect of market segmentation on local rice purchasing decisions in the Modern Carrefour Market Guiding Makassar, conclusions can be drawn as follows, simultaneously or together, market segmentation (geographical, demographic, psychographic and behavior) influence on local rice purchasing decisions. Partially, geographical, psychographic and behavioral market segments have a significant effect on local rice purchasing decisions. However, demographic market segmentation variables in this study did not significantly influence purchasing decisions. Of the market segmentation variables (geographical, demographic, psychographic and behavioral) the most dominant influence on local rice purchasing decisions is the behavior variable.

**Reference**

- [1] Waspada 2015 Konsumsi Beras Orang Indonesia Per Tahun
- [2] Badan Pusat Statistik 2018 *Statistik Pangsa Luas, Produktivitas, dan Produksi Padi Provinsi Sulawesi Selatan terhadap Nasional 2011-2018*. Jakarta. Badan Pusat Statistik.
- [3] Mariyono J 2014 Rice production in Indonesia: policy and performance *Asia Pacific J. Public Adm.* **36** 123–34
- [4] Simatupang P and Peter Timmer C 2008 Indonesian rice production: policies and realities *Bull. Indones. Econ. Stud.* **44** 65–80
- [5] Arsyad M, Pulubuhu D A T, Kawamura Y, Maria I L, Dirpan A, Unde A A, Nuddin A and Yusuf S 2020 The role of public health services (PHS) in agricultural poverty alleviation *Enfermería Clínica* **30** 194–7
- [6] Susilowati S H Perdagangan Antarpulau Beras di Provinsi Sulawesi Selatan 2018
- [7] Agustina T 2011 Analisis Perilaku Konsumen Beras Organik di Kabupaten Jember *JSEP (Journal Soc. Agric. Econ.* **5** 15–21
- [8] Prasetyo F 2011 *Manajemen Analisis Journal* (Surabaya: Bayumedia Publishing)
- [9] Swasta D, Handoko B and Hani T 2000 *Manajemen Pemasaran: Analisa Perilaku Konsumen. Cetakan ketiga, BPFE: Yogyakarta.*
- [10] Asnawi H N and Masyuri H 2011 *Metodologi dan Riset Manajemen Pemasaran* (Malang: Uin-MalikiI Press)
- [11] Assauri S 2004 *Managemen Pemasaran* (Jakarta: Rajawali Pers)
- [12] Bahari A 2013 *Analisis Pengaruh Segmentasi Pasar terhadap Keputusan Pembelian Produk Telkom Speedy. Telkom University: Bandung.*

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