

Consumer preferences of purchasing “*ayam geprek*” products using online transportation services during the Covid-19 pandemic

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Abstract

Ayam geprek is an Indonesian crispy battered fried chicken crushed and mixed with hot and spicy chili sauce. The objectives of this study were to examine consumer preferences for various attributes of *ayam geprek* and determine the effect of product attributes on purchasing decisions through GO-FOOD and GRAB- FOOD in the COVID-19 pandemic. The study involved 100 student consumers in Yogyakarta as samples who were taken by purposive sampling method. Primary data was collected by survey method through interviews to the respondents using a questionnaire that has been tested for validity and reliability. Consumers preferences for the attributes of *ayam geprek* were explained using index analysis with a Likert scale. The effect of product attributes on *ayam geprek* purchasing decisions was analyzed using multiple linear regression with the OLS method. The transformation of ordinal data into intervals as a condition for using regression analysis was carried out using the successive interval method (MSI). The results showed that the respondent's level of preference for *ayam geprek* attributes was in the high category with an average index value of 85.97. Promotional attributes and payment systems have a significant influence ($P < 0.01$) on purchasing decisions, so they need to be considered in attracting *ayam geprek* consumers through online transportation.

Introduction

The COVID-19 pandemic does not only have an impact on public health, but also affects the economic condition and social life of the community. In tackling the spread of Covid 19, the Indonesian government since 2020 has adopted a lockdown policy, and PSBB (Large-Scale Social Restrictions), followed by the PPKM (Enforcement of Community Activity Restrictions) policy. The policy recommends all schools, lectures, offices, and activities of most employees to do work from home (WFH). Despite the lockdown conditions until PPKM, people still need food. In this pandemic situation, the existence of digital platforms such as the online transportation *gojek* helps consumers and food producers to adapt and maintain productivity. Digital platform applications that are widely used in the culinary field are

food ordering and delivery services through online applications, including GO-FOOD and GRAB-FOOD, namely online transportation with motorcycles developed by the largest online transportation company in Indonesia, namely PT. GOJEK and PT. GRAB Indonesia. Yogyakarta is one of the provinces known as the City of Students, because of the existence of universities including one of the largest in Indonesia, namely Gadjah Mada University. The number of students who come to Yogyakarta every year, provides a large market opportunity for food demand, including *ayam geprek*. Currently, it is a very popular traditional food, especially in Yogyakarta with the main consumers being students, resulting in fierce competition between business actors [1]. In facing this competition, entrepreneurs must observe what are the preferences of consumers so that they can be used as a basis for increasing buying interest and expanding the market. Consumer preference is the choice or preference of consumers for the products and services offered [2]. Consumer preferences are influenced by various factors including cultural, social, individual, psychological, and services offered [3]. Consumers have various preferences regarding products, including fried chicken products. The use of online transportation services has advantages, including ease of ordering and time and cost efficiency [4]. Business actors who understand consumer behaviour will provide products or goods and services that are in accordance with consumer desires with the aim of increasing consumer satisfaction and business actors' profits [5]. A product attribute is a component attached to a product that is considered and is expected to provide benefits to consumers. The product attribute elements consist of quality, product features and dimensions, as an illustration, including product quality, price, promotion, payment system, and service quality [2]. Consumer purchasing decisions are a process in which consumers evaluate alternative products based on the strength of various attributes attached to the product [5].

The purpose of this study was to examine consumer preferences for various attributes of *ayam geprek* through online motorcycle taxis during the COVID-19 pandemic and determine the effect of product attributes on purchasing decisions for *ayam geprek* through online motorcycle taxis.

Materials and Methods

The research population is *ayam geprek* consumers who use online transportation applications who are undergraduate students in Sleman Regency, City, and Bantul Regency, Yogyakarta. The exact number of student population using the application is unknown (infinite population). The Lemeshow formula in [6] used to calculate the number of samples of the infinite population is as follows.

$$n = \frac{\left(\frac{Z_{1-\alpha}}{2}\right)^2 \cdot p(1-p)}{d^2}$$

Where:

n = Number of samples

z = critical value at 95% confidence according to the value of = 5%

p = Maximum estimate 50% = 0.5

d = Sampling error rate (Margin of error) 10% = 0.1

So that the calculation of the number of samples is obtained as follows.

$$n = \frac{\left(\frac{Z_{1-\alpha}}{2}\right)^2 \cdot p(1-p)}{d^2}$$

$$n = \frac{(1,96)^2 \cdot 0,5 (1 - 0,5)}{0,1^2}$$

$$n = 96,41 (100) .$$

Data collection was carried out using survey method with the help of questionnaire tool a structure with a Likert scale that has been tested for validity and reliability [7].

The consumer preference index analysis of Likert scale data is carried out using the following formula.

$$\text{Index Value} = \frac{[(\%F1 \times 1) + (\%F2 \times 2) + (\%F3 \times 3) + (\%F4 \times 4) + (\%F5 \times 5)]}{\text{number of score categories}} \quad (1)$$

Information:

F1, F2, F5 = number of respondents who chose answers 1, 2, 5 of the scores used in the questionnaire [8], [9].

The calculation of the index value category interval is carried out as follows.

$$\text{Category interval} = \frac{\text{Upper Category Limit} - \text{Lower Category Limit}}{\text{Number of Categories}} \quad (2)$$

$$\text{Category interval} = \frac{100-20}{3} = 26,67$$

Category intervals: Low (20.00 – 46.67), Medium (46.68 – 73.34), and High (73.35 – 100).

Furthermore, to determine the effect of product attributes on consumer preferences for purchasing decisions, using multiple linear regression analysis. Previously, ordinal data from a Likert scale was first transformed into interval data using the Method of Successive Interval (MSI) [10]. Multiple linear regression analysis was performed using the Ordinary Least Square (OLS) method Montgomery *et al.* [11], Sekaran and Bougie [7] so that the data met the normal distribution requirements, completing the analysis using the SPSS 21 program. The Multiple Regression Model is as follows.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e \quad (3)$$

Where:

Y = Consumer preference

β_0 = Constant

$\beta_{1,2,...5}$ = Regression Coefficient

X₁ = Product Quality Attribute

X₂ = Price Attribute

X₃ = Promotion Attribute

X₄ = Payment System Attribute

X₅ = Service Quality Attribute

e = Error term.

Results and Discussion

Consumer Preference

The results showed that the average age of student consumers was 21.61 years, with 34% male and 66% female. The respondent's average income or pocket money is Rp. 1,224,000/month. The most widely used type of online motorcycle taxi service is GRAB-FOOD on the GRAB application as much as 66% with payment methods using an electronic wallet (e-wallet) as much as 70%. Respondents know information about *ayam geprek* stalls from information sources with social media (Twitter, Instagram, Facebook) as much as 45.6% and the rest from other media sources such as family, friends, or relatives, print and electronic media such as television or radio. The level of preference is measured using the index calculation from formulas (1) and (2) [8], [9]. The results of the average index values obtained by each attribute are as follows: Table 1.

Table 1. The Average Value of The Attribute Index of *Ayam Geprek* Products

No.	Attribute	Index Value	Category
1.	Product Quality	91,05	High
2.	Price	76,95	High
3.	Promotion	89,60	High
4.	Payment System	85,00	High
5.	Service Quality	87,24	High

Consumer preferences for the five attributes of *ayam geprek* products by purchasing through online transportation are in the high category. However, the price attribute has the lowest index value compared to other product attributes. This is because the indicators that make up the price attribute variable consist of the suitability of the price with pocket money or income, the suitability of the price with the quality of the product, and the suitability of the price with the quality of the services offered. The low value of the price attribute index is caused by a mismatch of consumer expectations for the prices offered by online motorcycle taxis, namely the desire to obtain *ayam geprek* products with good product quality and service quality and affordable prices cannot be fulfilled. Under various conditions, consumers have expectations of a high price relationship with better product and service quality [5]. The existence of the COVID-19 pandemic condition causes consumers to be able to understand the situation so that consumers do not have high expectations of prices.

The Influence of Product Attributes on Consumer Preference

The results of the regression analysis of the effect of *ayam geprek* product attributes on consumer preferences for purchasing decisions are shown in Table 2.

Table 2. Results of Multiple Linear Regression Analysis of The Effect of *Ayam Geprek* Product Attributes on Consumer Preferences for Purchasing Decisions

No.	Variable	Coefficient β	t arithmetic	Sig ($\alpha=0,05$)
Constant		7,605	4,493	0,000
1	Product Quality	0,143	1,112	0,269
2	Price	0,034	0,308	0,759
3	Promotions	0,333	3,312	0,001 ^{***})
4	Payment Systems	0,510	3,029	0,003 ^{***})
5	Service Quality	-0,039	-0,401	0,689
F count		13,738		
F Sig. ($\alpha=0,05$)		0,000 ^b		
R square		0,423		
Adjusted R square		0,392		

***) Significant at the level of $P < 0.01$

Table 2 shows that the five attributes of *ayam geprek* products together have a significant effect on consumer preferences for the purchase of *ayam geprek* (F Sig. = 0.05), with Adjusted R square 0.392 (39.2%). Furthermore, partially with the t test, only the promotion and payment system attributes have a significant effect on consumer preferences for the purchase of *ayam geprek*. Saputra's research [12] states that there are several variables that influence consumer decision trends in purchasing *ayam geprek* through online transportation (GO-FOOD), namely price, GO-FOOD promotions and partners, and transaction systems.

The results of descriptive research indicate that promotions that are often offered by online transportation partners are price discounts on products or product delivery costs (shipping costs). Students as respondents in this study took advantage of the promotion of *ayam geprek* products through online transportation. Low purchasing power during the COVID-19 pandemic has forced entrepreneurs to hold promotions, for example in the form of product price discounts to keep meeting their sales targets. Boone and Kurtz [13] state that one of the promotional objectives is to increase and stabilize sales. The two online transportation companies, GRAB, during the Covid-19 pandemic, offered many promotions in the form of bigger discounts if consumers used a payment system with a consumer's electronic wallet, so many respondents were interested in using the e-wallet payment system to get a discount. Parameswara [14] states that one of the marketing mix strategies implemented by GRAB online transportation is using promotional media through social media and offering product price cuts to free delivery fees when using a payment system via e-wallet.

Conclusion

The level of consumer preference of students in Yogyakarta who purchase *ayam geprek* products through online motorcycle taxis is in the high category, in terms of the attributes of Product Quality, Product Price, Promotion, Payment System and Service Quality. However, the product price

index value is the lowest, possibly because during the pandemic period of the lockdown regulations, prices do not meet consumer expectations of product quality and service quality. Product attributes that significantly affect consumer preferences are promotional attributes and payment systems, so these two attributes need to be considered in attracting consumers to purchase *ayam geprek* via online motorcycle taxis during the COVID-19 pandemic.

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