International Journal of Economics, Business and Accounting Research (IJEBAR)
Peer Reviewed – International Journal
Vol.10, Issue-2, 2026 (IJEBAR)
E-ISSN: 2614-1280 P-ISSN 2622-4771
https://jurnal.stie-aas.ac.id/index.php/IJEBAR

THE EFFECT OF DISCOUNTS, PROMOTIONS, AND ALGORITHM RECOMMENDATIONS ON IMPULSIVE BUYING BEHAVIOR OF NON-HALAL FOOD ON THE GOFOOD APPLICATION IN SURABAYA

Aurelia Tiffany[1] Jessica Angeline[2] J.E Sutanto[3]
Culinary Business, Universitas Ciputra, Surabaya[1,2]
Magister Management Universitas Ciputra Surabaya[3]
E-mail: atiffany03@student.ciputra.ac.id[1], jangeline@student.ciputra.ac.id[2] , je.sutanto@ciputra.ac.id[3]

Abstract: This research seeks to investigate the impact of discount, promotion, and algorithm recommendation on impulsive buying of non-halal food through GoFood application in Surabaya. This research applies a quantitative approach using non-probability sampling with a purposive sampling technique. To be eligible for this study, participants had to meet the following requirements that include customers who have experience purchasing non-halal food through GoFood and actively use the application. Information was gathered via online. A total of 192 participants received and completed the research instrument and the gathered information was processed with the SPSS program. The results indicate that discount, promotion, and algorithm recommendation significantly influence consumers' impulsive buying behavior when purchasing non-halal food through the GoFood application in Surabaya.

Keywords: *Discount, Promotion, Algorithm Recommendation, Impulsive Buying, Responsible Consumption and Production.*

Submitted: 2026-04-08; Revised: 2026-04-18; Accepted: 2026-04-30

1. Introduction

As time moves forward, societies tend to want everything instantly. This is especially true in the culinary industry, where digital technology has changed the lifestyle of people in Indonesia, particularly in urban areas. Food and beverage orders can now be made through online commerce platforms specifically GoFood, which enhances purchasing convenience food from various restaurants efficiently. The GoFood app has many users, creating competition among culinary businesses that have various marketing strategies to attract and retain customers. On the GoFood app, impulsive buying decisions arise due to marketing stimuli such as promotions and discounts. Discounts are displayed in an attractive and easy-to-see manner for app users through notifications and advertisements on other social media. Promotions appear as advertisements on social media or on the GoFood app itself, showcasing bundling promotions, cashback, price cuts, and others. These promotional and discount strategies make customers more spontaneous in making transactions and tend to buy impulsively (Dewi & Mutia, 2021). GoFood analyzes customer algorithms using order history, favorite menus, store ratings, searches, location, and order time. GoFood's personal data-based system provides menu or store recommendations based on preferences. Algorithms accompanied by promotions and

discounts make the app persuasive because they encourage users to try recommendations that are considered relevant to their immediate needs. Impulsive buying is actually a complex process because it can be influenced by social and cultural factors. For an instance, in Indonesia, even though the majority of the population is Muslim, there are many non-halal culinary businesses, especially in cities with a high standard of living such as Surabaya. However, previous studies on impulsive buying in online food delivery platforms generally do not distinguish between halal and non-halal categories, and tend to treat all food products the same. This shows that there is still limited research that specifically discusses behavior in the context of non-halal food. This creates a research gap, particularly in understanding how consumers respond to marketing stimuli in a more segmented and culturally sensitive product category. Surabaya is one of the largest capital cities in Indonesia, which has a large population that has developed a lifestyle that demands speed and practicality. Surabaya ranks highest in per capita monthly spending in East Java, both for food and non-food expenditures, based on the following data:

Table 1. Average Monthly Per Capita Expenditure in East Java Province by City and Type of Food and Non-Food Expenditure in 2022

Kabupaten/Kota *Regency/Municipality*	Pengeluaran Perkapita Sebulan/Monthly Expenditure Per Capita		
	Rangkuman (Dalam Rupiah)/*Summary (in Rupiah)*		
	Pengeluaran Makanan *Food Expenditure*	Pengeluaran Non Makanan *Non Food Expenditure*	Jumlah *Total*
Kota/*Municipality*			
Kediri	706,619	846,212	1,552,831
Blitar	636,690	852,846	1,489,537
Malang	715,370	1,163,563	1,878,933
Probolinggo	562,485	810,501	1,372,987
Pasuruan	758,149	806,119	1,564,268
Mojokerto	736,250	932,629	1,668,879
Madiun	796,091	1,034,318	1,830,409
Surabaya	819,124	1,149,824	1,968,948
Batu	672,455	751,664	1,424,119
Jawa Timur	**600,848**	**564,290**	**1,165,138**

Source: Susenas March 2022 / The March 2022 Susenas, BPS.

Supported by digital platforms such as GoFood, the reach of non-halal food businesses is becoming wider and easier for customers to access through search features, promotions, and social media, which has the potential to increase market demand. Foods that are not halal, which typically contain pork or alcohol, are commonly found in Surabaya and have a specific consumer market. Foods that are not halal tend to be more expensive, so promotions and discounts are important to attract consumers. On GoFood, algorithm recommendations also influence price perception and encourage impulse buying. This research is expected to be useful for developing app features and business strategies for non-halal culinary businesses to reach a wider market segment.

2. Literature Review

According to Hasbi (2022), discounts are a marketing strategy in the form of product price reductions to elevate the selling power of the product and captivate people in order to buy it.

This suggests that discounts can influence consumers to make impulse purchases, especially when it comes to non-halal foods, which are generally sold at fairly high prices. Kotler & Armstrong (2022) state that promotion is a fundamental element in the context of promotional planning to provide the target market with information about the products or services being offered. In this context, promotion functions as a communication tool that not only informs but also stimulates consumer interest, as a result influencing their purchase intentions. The algorithm recommendations on GoFood can encourage impulse purchases because they display a wide variety of food options, including non-halal items, which attract certain types of consumers. Algorithm recommendations are a system influenced by order history and favorite menus to generate recommendations personalized to the user's personal account (Sanchez, 2023).

Framework

Based on theoretical foundations and empirical studies, hypotheses were formulated and statistical tests were conducted to examine the relationship between variables. Quantitative research conducted by Mutia (2021) shows that discounts manifest a strong influence on impulsive purchases of non-halal food regarding GoFood. Research by Ariyani (2023) proves that discounts and promotions have a significant effect on impulsive purchases. Based on Ariyani's (2023) research, it shows that GoFood discount vouchers and promotional activities substantially drive impulsive buying behavior among online food delivery app users.

3. Research Method

Population and Sample

The target population for this research comprised GoFood app users in Surabaya who purchased non-halal food. Sampling was conducted using purposive sampling. According to Sugiyono (2021), the purposive sampling approach is considered effective for reaching the population relevant to the issue being studied. With a total of 16 indicators, the ideal sample size required is 160 respondents to meet the criteria for statistical adequacy.

Validity and Reliability Test

Validity Test

A validity assessment was performed to verify that the measuring instrument used can accurately measure the research construct. Validity can also be assessed through Corrected Item-Total Correlation in SPSS, where a value above 0.5 indicates that the item is valid (Jonatan & Hamidy, 2021).

Reliability Test

Reliability analysis was utilized to evaluate the internal consistency of the measuring instrument in the study. The procedure utilized for the assessment of stability and consistency of the measurements of respondents' answers to items on the questionnaire (Jonathan & Hamidy, 2021). This research adopted Cronbach’s Alpha as the primary metric for reliability testing, with internal consistency established once the alpha value exceeds 0.6.

4. Results and Discussion

4.1. Results

Data Analysis

The research instrument’s validity was verified through a sample of 30 individuals, selected for their proximity and characteristic alignment with the research’s intended setting.

The discount variable (X1) consisted of 4 statement items, the promotion variable (X2) consisted of 4 statement items, and the recommendation algorithm variable (X3) consisted of 4 statement items. Likewise, the impulsive buying variable (Y) also included 4 statement items. The questionnaire met the requirement of a significance score < 0.05, indicating the validity of the statements for X1, X2, X3, and Y. All four variables achieved a Cronbach's alpha score > 0.6, indicating their reliability. In addition, the Cronbach's alpha value for each variable was higher than the Cronbach's alpha if the item was deleted, which further confirms their reliability. This research used a quantitative method and utilized SPSS program software for data analysis. Based on the results of the multiple linear regression test, the significance value for the Discount variable (X1) was 0.035, Promotion (X2) was 0.032, and Recommendation Algorithm (X3) was < 0.001. Since all significance values were below 0.05, it can be concluded that X1, X2, and X3 partially have a significant effect on Impulsive Buying (Y). In addition, the R Square value of 0.356 indicates that the three independent variables simultaneously contribute 35.6% to the Impulsive Buying variable.

Hypothesis Testing
Validity Test

Table 1. Validity Test Results

Variables	Indicator	Pearson Correlation	Significance	Remarks
Discount (X1)	X1.1	0.715	0.000	Valid
	X1.2	0.791	0.000	
	X1.3	0.714	0.000	
	X1.4	0.686	0.000	
Promotion (X2)	X2.1	0.727	0.000	
	X2.2	0.827	0.000	
	X2.3	0.728	0.000	
	X2.4	0.515	0.004	
Algorithm Recommendation (X3)	X3.1	0.516	0.003	
	X3.2	0.730	0.000	
	X3.3	0.726	0.000	
	X3.4	0.774	0.000	
Impulsive Buying (Y1)	Y1.1	0.896	0.000	
	Y1.2	0.844	0.000	
	Y1.3	0.789	0.000	

	Y1.4	0.810	0.000	

Sources: Processed Data SPSS (2026)

The data in Table 1 reveal that all indicators achieved significance levels of < 0.05, confirming the construct validity of all research items.

Reliability Test

Table 2. Reliability Test Results

Variables	Indicator	Cronbach's Alpha Overall	Cronbach's Alpha if item deleted	Remarks
Discount (X1)	X1.1	0.637	0.662	Reliable
	X1.2		0.609	
	X1.3		0.633	
	X1.4		0.703	
Promotion (X2)	X2.1	0.705	0.643	
	X2.2		0.603	
	X2.3		0.582	
	X2.4		0.747	
Algorithm Recommendation (X3)	X3.1	0.637	0.646	
	X3.2		0.523	
	X3.3		0.528	
	X3.4		0.548	
Impulsive Buying (Y1)	Y1.1	0.851	0.762	
	Y1.2		0.798	
	Y1.3		0.838	
	Y1.4		0.842	

Sources: Processed Data SPSS (2026)

As illustrated in Table 2, all constructs achieved Alpha values greater than 0.6. The observation that no single item's removal would improve the aggregate reliability confirms that all eximined variables in this research are statistically reliable.

Multiple Linear Regression Equation

In testing hypotheses, the analysis yielded multiple linear regression equations, complemented by partial hypothesis testing (t-tests) to measure the individual effect of each predictor variable.

Table 3. Result of t-Test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.431	1.276		5.401	<.001
	Discount	.198	.093	.170	2.122	.035
	Promotion	.145	.067	.180	2.161	.032
	Algorithm Recommendation	.291	.062	.364	4.687	<.001

Sources: Processed Data SPSS (2026)

As illustrated in Table 3, the partial hypothesis testing reveals that discounts, promotions, and algorithmic recommendations achieve significance levels of < 0.05. Consequently, it can be concluded that each variable substantially drives impulsive buying among GoFood users.

Table 4. ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	141.920	3	47.407	29.062	<.001
	Residual	257.191	158	1.628		
	Total	399.111	161			
a. Dependent Variable: Impulsive Buying						
b. Predictors: (Constant), Discount, Promotion, Algorithm Recommendation						

Sources: Processed Data SPSS (2026)

According to Table 4, the F-test yielded a value of 29.062 ($p < 0.001$). These findings demonstrate that the independent variables collectively affect the dependent variable, thereby establishing the statistical feasibility and robustness of the regression model implemented in this study.

Table 5. Coefficient of Determination Result

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.596	.356	.343	1.27585

a.	Predictors: (Constant), Discount, Promotion, Algorithm Recommendation
b.	Dependent Variable: Impulsive Buying

Sources: Processed Data SPSS (2026)

As illustrated in Table 5, the R square is 0.356, revealing that the combined predictors—discounts, promotions, and algorithmic recommendations account for 35.6% of the variance in impulsive buying behavior. The remaining 64.4% may be affected by other variables outside the current research model.

4.2. Discussion

The Effect of Discount on Impulsive Buying

The study finds that discounts play a significant role in encouraging impulsive buying behavior. This effect can be explained by the psychological perception of gaining immediate economic value, where consumers feel they are obtaining a better deal than usual. Discount reduce the perceived financial risk and creates a sense of urgency, especially when presented as limited-time offers. The study finds that discounts offered by the GoFood app encourage consumers to do impulsive buying. Kotler and Armstrong (2022) also state that discounts are one of the marketing strategies that can trigger consumers to do impulsive purchases.

The Effect of Promotion on Impulsive Buying

The study concluded that promotions significantly influence impulsive buying behavior. The findings reveal that promotions offered through the GoFood application can lead consumers to engage in spontaneous purchases. According to Kotler and Armstrong (2022), promotions are an important element in marketing strategies that serve to provide consumers with information about the products or services offered. This result is aligned with the study conducted by Yulianda et al. (2024), which explains that sales promotions can increase consumers' tendency to make impulsive purchases. This influence occurs because promotional activities not only provide information but also attract attention and stimulate consumers' emotions. Promotions usually appear as visual exposure such as banners, push notifications, etc that can interrupt consumers initial intentions. As a result, consumers may rely more on promotional cues rather than rational evaluation, leading to quicker and less planned decisions.

The Effect of Algorithm Recommendation on Impulsive Buying

According to the findings of this research, discounts significantly affect impulsive buying behavior because recommendation algorithms themselves appear based on consumers' search history, which makes it easier for consumers to find products that match their preferences. This personalized exposure reduces the effort required in searching and evaluating alternatives, which in turn accelerates the decision-making process and increases the likelihood of spontaneous purchases. As a result, consumers can make impulsive purchases. A study conducted by Sutanto et al (2021) also confirms that recommendation algorithms can encourage consumer purchasing decisions because they show products that match consumers' references and make it easier for consumers to find the restaurants or foods they want.

The Effect of Discount, Promotion, and Algorithm Recommendation on Impulsive Buying

The findings of this research indicate that discounts, promotions, and algorithm recommendation simultaneously have a significant influence on impulsive buying behavior, as these factors work together in shaping consumers' responses during the purchasing process. Discounts provide immediate economic incentives, promotions attract attention and create urgency, while recommendation algorithms present relevant product options that simplify decision-making. These combined effects reduce consumers' tendency to engage in rational evaluation and encourage quicker, more spontaneous decisions. These results are similar with previous analysis conducted by Yulianda et al. (2024), which reveals that sales promotions contribute positively to impulsive buying behavior in online commerce. In addition, research on product recommendation algorithms on GoFood also shows that recommendations provided by the system can influence impulsive buying behavior because they display products that match user preferences (Prasetiyo et al., 2024).

5. Conclusion

Based on the findings the conclusions are as follows:
Discounts have a significant effect on impulse purchases of non-halal food on the GoFood app. Promotions have a significant role in encouraging impulsive purchases of non-halal food through the GoFood app. Algorithm recommendation has a significant impact on impulsive purchases of non-halal food on the GoFood platform.. Discounts, promotions, and algorithm recommendations lead to significant effects on impulsive buying behavior of non-halal food on the GoFood app.

Suggestions

Suggestions for future researchers: this research project can be used as a source of reference for developing research using the same variables or adding new variables that have not been studied before. In addition, the results of this study are expected to provide reverence for non-halal food businesses and GoFood in enhancing appropriate discount and promotion strategies to encourage impulsive purchases by consumers.

References

Andriany, D., & Arda, M. (2021, January). The effect of discount prices toward impulse buying halal food on go food consumers in medan. In *Proceeding International Seminar of Islamic Studies* (Vol. 2, No. 1, pp. 54-61).

Ariyani, R., Lestari, F. S., Putra, H. T. P., Zikrinawati, K., & Fahmy, Z. (2023). Pengaruh voucher diskon gofood dan gaya hidup hedonisme terhadap pembelian impulsif pada mahasiswa di aplikasi gojek. *Investama: Jurnal Ekonomi dan Bisnis*, *9*(2), 121-134.

Jonatan, J., & Hamidy, A. F. (2021). Pengaruh Digital Marketing dan Word Of Mouth Terhadap Brand Awareness Toko Retail Olahraga sportaways. com Depok Jawa Barat. *Journal of Economics and Business UBS*, *10*(2), 146-158.

Kotler, P., & Armstrong, G. (2010). *Principles of marketing*. Pearson education.

Hasbi, I., Syahputra, S., Syarifuddin, S., Wijaksana, T. I., & Farías, P. (2022). The impact of discount appeal of food ordering application on consumer satisfaction in Southeast Asia. *Journal of Eastern European and Central Asian Research (JEECAR)*, *9*(6), 978-991.

Salsabila, A., & Prasetyo, B. (2024). The effect of S-commerce Tiktok Shop recommendation products on changes in consumer impulsive buying behavior: a study with

signaling theory. *Journal of Advances in Information Systems and Technology*, *6*(1), 45-61.

Sanchez-Loor, D. A., & Chang, W. S. (2023). Experimental study of the effects of structural assurance, personal experiences, and product reviews on repurchase behavior in e-commerce platforms. *Electronic Commerce Research*, *23*(3), 1971-2010.

Sugiyono. (2021). Metode Penelitian Pendidikan (Edisi ke-3) Alfabeta.

Sutanto, J. E., Minantyo, H., & Soediro, M. (2021). Business of Increasing Culinary Business Sales Through go Food and Grab Food in Surabaya City.

Yulianda, E., Hendry, R. S. M., & Siregar, M. R. (2025). Pengaruh perilaku belanja konsumtif, motif belanja, harga, dan promosi penjualan terhadap Impulsive buying pada konsumen Shopee. *Jurnal Bisnis Mahasiswa*, *5*(6), 2837-2850.