



ANALYSIS OF DIGITAL MARKETING STRATEGY IN IMPROVING IMPULSIVE BUYING BEHAVIOR OF MARKETPLACE CONSUMERS IN INDONESIA

ANALISIS STRATEGI PEMASARAN DIGITAL DALAM MENINGKATKAN PERILAKU PEMBELIAN IMPULSIF KONSUMEN MARKETPLACE DI INDONESIA

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Abstract

This study aims to analyze the impact of digital marketing strategies specifically brand image and flash sale promotions on impulsive buying behavior among consumers in Indonesian marketplaces, with a particular focus on the Shopee platform. The research employs a descriptive quantitative approach, using purposive sampling techniques. Out of a population of 433 university students, 115 respondents were selected as the sample. Data analysis was conducted using SPSS version 26 and Microsoft Excel 2021. The results indicate that both brand image and flash sale promotions significantly influence consumer impulsive buying behavior, both partially and simultaneously. These findings highlight the importance of optimizing digital marketing strategies to enhance impulsive purchasing behavior in the e-commerce sector.

Keywords : *Brand Image, Flash Sales, and Impulse Buying*

Abstrak

Penelitian ini bertujuan untuk menganalisis pengaruh strategi pemasaran digital, khususnya melalui variabel brand image dan flash sale, dalam mendorong perilaku pembelian impulsif konsumen pada marketplace di Indonesia, dengan fokus pada platform Shopee. Penelitian ini menggunakan pendekatan deskriptif kuantitatif dengan teknik pengambilan sampel purposive sampling. Dari total populasi sebanyak 433 mahasiswa, diperoleh 115 responden sebagai sampel. Pengolahan dan analisis data dilakukan dengan bantuan aplikasi SPSS versi 26 dan Microsoft Excel 2021. Hasil penelitian menunjukkan bahwa brand image dan flash sale memiliki pengaruh yang signifikan, baik secara parsial maupun simultan, terhadap pembelian impulsif konsumen di platform Shopee. Temuan ini menegaskan pentingnya optimalisasi strategi pemasaran digital dalam meningkatkan perilaku pembelian impulsif di era e-commerce.

Keywords : *Brand Image, Flash Sales, dan Impulsive Buying*



1. INTRODUCTION

The development of information and communication technology (ICT) has experienced significant acceleration in the last two decades. This progress has not only influenced the way humans interact, but has also fundamentally changed people's consumption behavior. The internet as the main product of the digital revolution has created a new business ecosystem, namely the electronic commerce (e-commerce) system, which allows buying and selling transactions to be carried out without space and time constraints. According to Laudon and Traver (2021), e-commerce is the process of buying and selling products or services electronically through computer networks, especially the internet.

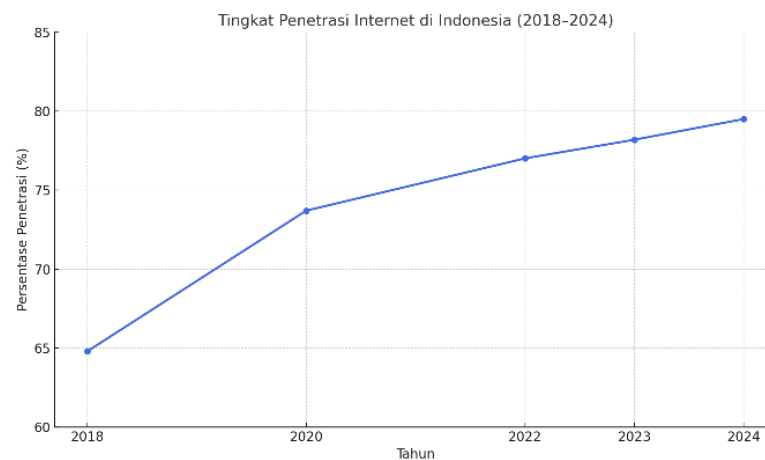


Figure 1. Internet Penetration Rate in Indonesia (2018-2024)

In Indonesia, the integration of digital technology into people's lives is increasingly evident. Based on a report by the Indonesian Internet Service Providers Association (APJII), the number of internet users in Indonesia will reach 221.56 million out of a total population of 278.69 million in 2024. The internet penetration rate will increase from 64.8% in 2018 to 79.5% in 2024. This fact shows that most Indonesians have become active users of digital technology, especially in economic activities such as online shopping.

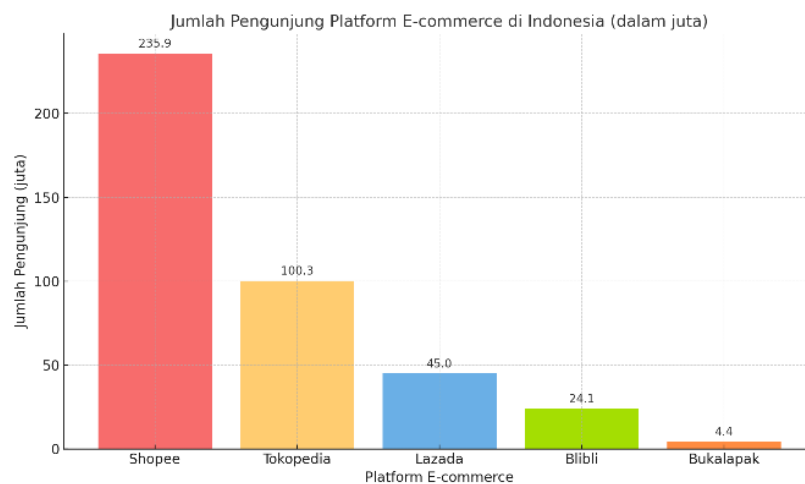


Figure 2. E-Commerce Data with the Most Visitors in Indonesia



One real form of digital consumption is the increasing popularity of marketplace platforms. According to a SimilarWeb report quoted by Bisnis.com regarding the number of visitors to the most popular e-commerce platforms in Indonesia in early 2025, Shopee is far ahead with 235.9 million visitors, making it the most popular e-commerce platform in Indonesia. Followed by Tokopedia with 100.3 million visitors, then Lazada (45.03 million), Blibli (24.15 million), and Bukalapak which is in last place with 4.42 million visitors. The image illustrates Shopee's significant dominance compared to its competitors, indicating the success of Shopee's marketing strategy in attracting consumer attention and interest through various promotional programs and attractive user experiences.

Shopee, which has been operating in Indonesia since 2015, initially adopted the C2C (customer-to-customer) model and has now evolved into B2C (business-to-customer). Various products are offered, ranging from electronics, fashion, beauty, to automotive. Its marketing strategy not only focuses on price discounts, but also creates an interesting shopping experience and triggers purchasing emotions through a strong brand image and aggressive flash sale campaigns.

According to Kotler and Keller (2021), brand image is a consumer's perception of a brand that is formed from the experiences, expectations, and information they receive. A positive brand image can increase the appeal of a brand and influence purchasing decisions, even impulsively. Shopee leverages the power of brand image through distinctive symbols, themed promotions, and collaborations with celebrities to shape the perception as a modern, trusted, and economical marketplace.

On the other hand, the flash sale strategy implemented by Shopee has also proven effective in encouraging impulsive buying behavior. Flash sales are discount programs for a limited period of time, usually lasting 10 minutes to 24 hours. According to Tjiptono (2020), this strategy creates perceived scarcity and perceived urgency, which psychologically encourage consumers to make purchases immediately. A study by Herlina et al. (2021) shows that flash sales increase the likelihood of impulsive buying because consumers feel they are getting an exclusive opportunity that is a shame to miss.

Several previous studies have also strengthened the importance of digital marketing strategies in shaping consumer behavior. Renita (2022) in her research on Shopee users in Yogyakarta found that the flash sale program had a significant influence on impulsive purchases, especially among students who were sensitive to price and promotion time. Meanwhile, Andini and Edastama (2022) stated that brand image has a positive relationship with impulsive purchases because consumer perceptions of brand quality and credibility influence their spontaneous decisions. Shibab and Siregar's (2023) research also shows that brand image and flash sales contribute greatly to Tokopedia users' purchasing decisions.

However, there is still a lack of research that specifically combines the influence of brand image and flash sales in the context of the Shopee marketplace and is studied on the student population as an active digital generation. Based on an initial survey conducted on students of the Latifah Mubarakiyah School of Economics (STIE-LM) Tasikmalaya, 88% of the 50 respondents stated that they use Shopee more often than other platforms for online shopping. This is a strong basis for examining their behavior in more depth.

Therefore, this study aims to analyze how digital marketing strategies, especially brand image and flash sales, contribute to increasing the impulsive buying behavior of marketplace consumers in Indonesia, focusing on Shopee users among STIE-LM Tasikmalaya students.



This study is expected to contribute to the development of more effective and targeted digital marketing strategies in today's digital economy era.

2.1 Brand Image

Brand image is a perception formed in the minds of consumers about a brand as a result of interaction, communication, and experience with the brand (Keller, 2013). A strong brand image will form positive associations and consumer trust, which can influence purchasing behavior, including impulsive purchases. According to Kotler and Keller (2021), brand image not only plays a role in differentiating products from competitors but also influences purchasing decisions by creating ongoing trust. Brands that have a strong and consistent identity are more likely to trigger unplanned purchases because consumers feel confident in the quality and value offered by the brand. Research by Yoon and Kim (2016) also shows that a positive brand image significantly increases the likelihood of consumers making impulsive purchases, especially in the context of fast-paced e-commerce.

2.2 Flash Sale

Flash sale is a form of promotion with limited product offerings and a very short time, which aims to create a sense of urgency and scarcity that can trigger spontaneous purchases (Tjiptono, 2020). This strategy psychologically encourages consumers to make quick decisions without deep consideration. Herlina et al. (2021) stated that *flash sales* are an effective marketing strategy in attracting consumer interest, especially on digital platforms. Flash sales activate the “fear of missing out” (*FOMO*) effect, which is the fear of missing an opportunity, which encourages consumers to immediately make a purchase even though they initially had no intention of buying. In addition, a study by Wu et al. (2020) in the context of Chinese e-commerce showed that *flash sales* were significantly correlated with impulsive buying behavior due to high time pressure and the perception of a profitable deal.

2.3 Impulsive Buying

Impulsive buying is the act of buying suddenly without any prior planning and is often influenced by external stimuli (Rook, 1987). This purchase is emotional and irrational, and is influenced by environmental factors such as product displays, discounts, limited-time promotions, and brand perceptions. According to Kotler & Armstrong (2018), impulsive purchasing decisions occur due to the influence of psychological drives, such as momentary desires, time pressure, and the presence of attractive stimuli in the consumer environment. E-commerce increases the opportunity for impulsive buying due to the speed of information and ease of access. Sultan (2012) also emphasized that impulsive buying occurs due to strong emotional interactions that arise spontaneously, which makes consumers not logically consider the consequences of their purchasing decisions. Recent research by Verhagen and van Dolen (2022) supports this by stating that application interface design and digital marketing elements significantly increase the likelihood of impulsive buying on online platforms.

2. RESEARCH METHODS

This study uses a descriptive quantitative approach, which is an approach that aims to describe objective phenomena or conditions systematically and factually based on numerical data. This approach was chosen because it is able to provide a detailed, transparent, and in-depth picture of the impulsive buying phenomenon that occurs in the Shopee marketplace, especially those triggered by digital marketing strategies such as brand image and flash sales.

This research falls into the category of replication research, which is a study that adopts variables, indicators, and analysis methods from previous research to re-test the validity of the



results in a different context or sample. The purpose of replication is to strengthen previous findings or find possible differences in results in new conditions.

3.1 Population and Sample

The population in this study were all students who use the Shopee application as a means of online shopping. Because there is no definite data on the number of students using Shopee, the population in this study is considered unknown with certainty (*infinite population*).

The sample in this study were students of the Latifah Mubarokiyah Tasikmalaya College of Economics (STIE) who met the criteria of having the Shopee application and having made a purchase transaction during the flash sale program. The total number of active students at STIE Latifah Mubarokiyah was 433 students, and the number of samples was determined based on the inclusion criteria. Determination of respondents was carried out by distributing questionnaires as the main instrument for data collection.

3.2 Sampling Techniques

The sampling technique used is *purposive sampling* , which is a technique of selecting samples intentionally based on certain criteria that are relevant to the research objectives (Sugiyono, 2016). This technique is suitable for application in non-generalization quantitative research, where researchers have control over the characteristics of respondents needed in the study.

3.3 Data Analysis Techniques

The data obtained from the results of the questionnaire distribution will be analyzed through several stages of statistical testing to ensure the validity of the research results. The first stage is the research instrument test, which consists of a validity test and a reliability test. The validity test aims to measure the extent to which each question item in the questionnaire is able to represent the variables studied, while the reliability test is carried out to determine the level of consistency of the measuring instrument used.

Next, a classical assumption test is carried out, which includes a normality test, a multicollinearity test, and a heteroscedasticity test. The normality test is used to see whether the data is normally distributed, the multicollinearity test is carried out to determine whether there is a relationship between independent variables that is too high, and the heteroscedasticity test aims to detect whether there is inequality of variance from the residuals in the regression model.

The final stage is multiple linear regression analysis, which is used to analyze how much influence the independent variables, namely brand image and flash sale, both simultaneously and partially have on the dependent variable, namely impulsive buying. This analysis allows researchers to understand the relationship between variables and the significance of the influence that occurs. The entire data analysis process was carried out with the help of SPSS statistical software version 26 and Microsoft Excel 2021 to obtain accurate calculation results and facilitate systematic data interpretation.

3. RESULTS AND DISCUSSION

Based on data processing conducted on 115 respondents using the SPSS version 26 application for Windows, the results obtained were that all of the 18 statement items tested met the validity criteria. This means that all statements used in the questionnaire were proven valid and can be used for further analysis.

4.1 Normality Test



The normality test was conducted to ensure that the analyzed data were normally distributed, which is one of the basic assumptions in parametric statistical analysis. The test was conducted using the Kolmogorov-Smirnov method. The test results showed a significance value of 0.016. Although this figure is less than the general significance value ($\alpha = 0.05$), the interpretation of the normality test also takes into account the sample size. In this case, with a large number of respondents ($n > 100$), the Kolmogorov-Smirnov test tends to be sensitive to small deviations from normality. Therefore, the data can still be considered to have a distribution that is close to normal if there are no significant deviations visually in the histogram or PP Plot. Thus, the assumption of normality in this study is still acceptable.

4.2 Multicollinearity Test

Multicollinearity test is conducted to detect the existence of high linear relationship between independent variables, which in this study are Brand Image and Flash Sale. If there is multicollinearity, then the regression interpretation can be inaccurate because the independent variables influence each other significantly.

The test results show that the Tolerance value for both variables is 0.699, which is greater than the minimum limit of 0.10. In addition, the Variance Inflation Factor (VIF) value for both variables is 1.430, which is still far below the maximum tolerance limit of 10. Based on these results, it can be concluded that there are no symptoms of multicollinearity among the independent variables tested. Thus, the regression model used meets the assumption of being free from multicollinearity.

4.3 Heteroscedasticity Test

The heteroscedasticity test aims to determine whether there is inequality of variance of the residuals in the regression model. The ideal assumption in linear regression is homoscedasticity, which is a constant residual variance. To detect heteroscedasticity, two approaches are used: the significance test of the sig. value and visualization through scatter plots.

The test results show that the Brand Image variable (X1) has a significance value of 0.41 (> 0.05), which indicates that there are no symptoms of heteroscedasticity in the variable. On the other hand, the Flash Sale variable (X2) has a significance value of 0.000 (< 0.05), which means that there are symptoms of heteroscedasticity in this variable.

However, to support these results, visual observation was also carried out through a scatter plot between the predicted and residual values. The scatter plot shows that the points are randomly distributed above and below the horizontal axis (Y-axis = 0) without forming a particular pattern. This random distribution pattern indicates that in general, the regression model does not experience serious problems related to heteroscedasticity.

4.4 Correlation Coefficient (r)

The correlation test was conducted to determine the extent of the closeness of the relationship between two independent variables, namely Brand Image (X1) and Flash Sale (X2), to the dependent variable Impulsive Buying (Y) simultaneously. The results of data processing show that the significance value (Sig. 2-tailed) is 0.000, which is smaller than the significance limit of 0.05. This indicates that there is a significant relationship between the independent and dependent variables. Furthermore, the correlation coefficient value (Pearson Correlation) between Brand Image and Impulsive Buying is 0.576, while between Flash Sale and Impulsive Buying is 0.598. Both values show a fairly strong and positive relationship, which means that the higher the consumer perception of Brand Image and the more attractive the Flash Sale offer, the consumer's tendency to make impulsive purchases also increases.



4.5 Coefficient of Determination (R^2)

The coefficient of determination is used to measure how much of the dependent variable can be explained by the independent variables in the model. Based on the results of the regression analysis, the R^2 value was obtained at 0.482. This means that 48.2% of the variation in Impulsive Buying behavior can be explained by a combination of Brand Image (X_1) and Flash Sale (X_2). The remaining 51.8% is influenced by other factors outside the model that were not examined in this study, such as other promotions, emotional needs, or user shopping experiences.

4.6 Multiple Linear Regression Analysis

Multiple linear regression analysis is used to determine the effect of each independent variable on the dependent variable. Based on the results of data processing, the following regression equation is obtained:

$$Y = 2401.125 + 0.172X_1 + 0.265X_2 + e$$

Information:

- The constant (Intercept) of 2401.125 indicates that if Brand Image and Flash Sale are at zero, then the Impulsive Buying value is estimated at 2401.125 units. This positive value indicates that the model tends to increase as the value of the independent variable increases. This means that impulsive buying continues to occur due to other factors outside the variables studied.
- The Brand Image (X_1) coefficient of 0.172 means that every one unit increase in Brand Image will increase Impulsive Buying by 0.172, assuming other variables are constant. This relationship is positive, indicating that the better the brand image, the greater the tendency of consumers to make impulsive purchases.
- The Flash Sale coefficient (X_2) of 0.265 indicates that a one-unit increase in Flash Sale will increase Impulsive Buying by 0.265. This positive relationship indicates that the flash sale strategy has a significant influence on consumer behavior to make unplanned purchases.

4.7 t-Test (Partial)

The t-test aims to determine the effect of each independent variable on the dependent variable partially. With the number of respondents $n = 115$, the degrees of freedom (df) = $n - k - 1 = 115 - 2 - 1 = 112$. The t-table value at a significance level of 5% ($\alpha = 0.05$) and $df = 112$ is around 1.981.

- For Brand Image (X_1), the t-count value is obtained = 2.069 and significance = 0.041. Because $t\text{-count} > t\text{-table}$ and significance value < 0.05 , then H_a is accepted and H_0 is rejected. This means that Brand Image has a positive and significant effect on Impulsive Buying.
- For Flash Sale (X_2), the t-count is obtained = 4.489 and significance = 0.000. Because $t\text{-count} > t\text{-table}$ and significance value < 0.05 , then H_a is also accepted and H_0 is rejected, which means Flash Sale has a positive and significant influence on Impulsive Buying.

Thus, both independent variables partially have an influence on impulsive purchasing behavior in consumers, with Flash Sale having a more dominant influence.



4.8 F Test (Simultaneous)

The F test is used to see whether the independent variables simultaneously have an influence on the dependent variable. Based on the test results, the F-count value is obtained = 24.757 with significance = 0.000. The F-table value at $df_1 = 2$ and $df_2 = 112$ at a significance level of 0.05 is around 3.08. Because $F\text{-count} > F\text{-table}$ and the significance value < 0.05 , then H_a is accepted and H_0 is rejected. This shows that the Brand Image and Flash Sale variables simultaneously have a significant effect on Impulsive Buying.

Thus, the regression model used in this study has been proven valid and significant in explaining the influence of two independent variables on consumer impulsive buying behavior, especially on the Shopee platform .

4.9 Discussion

Based on the results of research conducted on 115 respondents who use the Shopee platform, it was found that the two independent variables, namely brand image and flash sale, have a significant influence on impulsive buying behavior. These results indicate that the digital marketing strategy implemented by business actors on the Indonesian e-commerce platform is able to encourage consumers to make spontaneous purchases, even without any initial intention to buy.

This finding is in line with the theory put forward by Keller (2013), which states that brand image is a perception formed in the minds of consumers through interactions and experiences with a brand. When a brand succeeds in building a strong and positive image, consumers tend to have a high level of trust, which ultimately influences purchasing behavior. In the context of Shopee, the brand image formed through the presence of an official store, collaboration with celebrities, and guarantees of product authenticity make consumers feel more comfortable and confident, so that they are encouraged to make impulsive purchases. This is reinforced by research by Yoon and Kim (2016), which found that a positive brand image significantly increases the likelihood of impulsive purchases in the context of e-commerce.

On the other hand, the flash sale variable is proven to have a more dominant influence on impulsive buying compared to brand image, with a stronger regression coefficient value and significance. The flash sale strategy creates an atmosphere of urgency and fear of missing out (FOMO), as expressed by Tjiptono (2020), which can trigger quick and unplanned purchasing decisions. This phenomenon occurs due to time pressure and the perception that the product offered has a higher value than the price paid. Users of platforms such as Shopee are often exposed to notifications of countdown times, limited stock, and large discounts in a short time, which psychologically encourages them to buy immediately without thinking twice. Research by Wu et al. (2020) also shows that flash sales have a strong positive correlation with impulsive buying in the context of e-commerce in China, and this is also proven to be relevant in the Indonesian context.

Furthermore, the results of the correlation test show that both brand image and flash sales have a fairly strong and positive relationship with impulsive buying behavior. The coefficient of determination (R^2) of 0.482 indicates that almost half of the variation in impulsive buying behavior can be explained by these two variables. The remaining 51.8% is likely influenced by other factors not examined in this study, such as digital advertising, influencer promotions, application interfaces, or consumer emotional factors. This is also supported by Verhagen and van Dolen (2022) who emphasize that interface design and digital marketing elements significantly contribute to increasing the likelihood of impulsive buying on online platforms.



Overall, the results of the regression analysis show that both partially (through the t-test) and simultaneously (through the F-test), both independent variables have a significant influence on consumer impulsive buying behavior. With an F-count value that is much greater than the F-table, and a significance of 0.000, it can be concluded that the regression model used is valid and can explain the relationship between digital marketing strategies and impulsive buying convincingly. This study emphasizes the importance of building a strong brand image and implementing flash sale promotions strategically in order to maximize the opportunity for impulsive buying, which can ultimately increase sales on e-commerce platforms such as Shopee.

4. CONCLUSION

5.1 Conclusion

This study successfully revealed that digital marketing strategies, especially through Brand Image and Flash Sale, have a positive and significant influence on consumer impulsive buying behavior in the Indonesian marketplace. Based on multiple linear regression analysis, both Brand Image and Flash Sale simultaneously were able to explain 48.2% of the variability in impulsive buying behavior. Flash Sale proved to be a more dominant factor in driving impulsive buying than Brand Image, indicating that time-based promotions and flash discounts are very effective in triggering unplanned purchasing decisions. Thus, marketplaces that want to increase impulsive sales need to utilize these two strategies optimally.

5.2 Suggestions

Based on the research results, several suggestions can be given to business actors and marketplace managers in Indonesia. First, it is important for marketplaces to continue to strengthen their brand image through consistent and attractive digital campaigns, in order to build consumer trust and loyalty. Second, the implementation of flash sale programs must be designed strategically by considering time, frequency, and competitive discounts in order to maximize the impulsive effect of consumers. In addition, the development of interactive and personalization features in marketplace applications is also recommended to improve the shopping experience that can trigger spontaneous purchases. Finally, further research is recommended to examine other factors such as the influence of social media, consumer reviews, and digital payment methods that also have the potential to influence impulsive buying behavior.

5.3 Implications

The findings of this study have important practical implications for the development of digital marketing strategies in the marketplace. By understanding that Flash Sale and Brand Image significantly influence impulsive purchases, marketplace management can allocate resources more effectively for targeted promotional and branding programs. This will not only increase short-term sales but can also build long-term relationships with consumers through a strong brand image. In addition, the implications for the development of digital marketplace technology are the need to integrate responsive promotional features and deep personalization in order to create urgency and emotional appeal for consumers. From an academic perspective, this study adds to the literature on digital marketing in Indonesia and provides an empirical basis for the development of marketing strategies that are more adaptive to the increasingly dynamic behavior of modern consumers.



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