

Impact of Shopee Promotions on Spontaneous Buying in Pematangsiantar

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ABSTRACT

This study aims to determine the impulse buying behavior influenced by the Shopee marketplace sales promotion in the Sibatu-batu Block 9 community, Sitalasari, Pematangsiantar city. **This study uses** a library research design and field research. The sample of this study was 38 people. The types of data used in this study are qualitative and quantitative data, while the data sources consist of primary data and secondary data. Data collection was carried out through interviews, questionnaires, and documentation. The analysis techniques used include normality tests, qualitative descriptive analysis, and quantitative descriptive analysis. **The results** of this study show that **sales promotion** is good and impulse buying is high, and there is a strong and positive relationship between the two variables. The findings also indicate that variations in impulse buying can be explained by sales promotion, and the hypothesis test confirms that H_0 is rejected, meaning that sales promotion significantly affects impulse buying on the Shopee marketplace. Based on **these findings**, the study suggests that Shopee should consider re-adjusting the minimum purchase requirements to obtain shipping discounts, especially for areas outside Sumatra, in order to improve the effectiveness of sales promotion. Furthermore, to increase impulse buying, Shopee is advised to add time and quantity limits combined with tiered discounts.

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1. INTRODUCTION

Modern society shows a significant reliance on the internet at both personal and group levels. Technology-based businesses are experiencing significant growth, one of which is in the field of e-commerce. This is also supported by a changing market structure with more than 60% dominated by generation X-Post Gen Z [1]. This condition also makes the development of online businesses in Indonesia grow very rapidly [2]. People

are currently more interested in shopping online on e-commerce because of the effectiveness and efficiency offered. With e-commerce sites, buyers no longer need to come to the store to make transactions [3, 4]. Shopee is one of the trending e-commerce sites and is favored by all groups, both young and old [5].

The rapid growth of e-commerce, including platforms like Shopee, aligns with several Sustainable Development Goals (SDGs) [6]. Particularly, SDGs 8 (Decent Work and Economic Growth) is supported by creating new job opportunities and fostering economic inclusivity through digital marketplaces [7]. Additionally, SDGs 9 (Industry, Innovation, and Infrastructure) is reflected in the development of digital infrastructure that facilitates easier access to markets and enhances consumer convenience [8]. Understanding these contributions highlights the broader impact of e-commerce on sustainable development [9].

In Indonesia, the most popular e-commerce is the Shopee marketplace [10]. Every year, visitors to the Shopee marketplace continue to increase [11]. The Shopee site was recorded to have reached an average of 216 million visits per month throughout the third quarter of 2023 [12, 13]. And can compare prices and products in each store, and make transactions easily [14]. The convenience obtained causes someone to be impulsive when making a purchase, where consumer behavior makes purchases suddenly and instantly without considering and thinking long [15]. Impulsive buying behavior can be measured from spontaneous spending, unplanned purchases, urges to shop, and the emotional condition of the buyer. One of the factors indicated to influence impulse buying is sales promotion. Based on the results of the study [16–19] stated that sales promotion has a positive effect on impulse buying [20].

The novelty of this research lies in its focus on a specific community, the Sibatu-batu Block 9 in Pematangsiantar City, to analyze the impact of Shopee's sales promotions on impulse buying behavior [21, 22]. Unlike previous studies that have generally examined broader demographic groups or focused solely on urban settings, this study offers a localized perspective, providing insights into consumer behavior in smaller communities [23]. Additionally, it investigates unique challenges such as shipping conditions and flash sale mechanics that have not been thoroughly explored in earlier research [24]. This approach fills a research gap by offering a nuanced understanding of sales promotion effectiveness in diverse socio-economic contexts [25]. Sales promotion is part of marketing to introduce a product to increase sales [26]. Sales promotions that are often offered can vary, especially in sales promotions on e-commerce such as free shipping, flash sales, cashback, vouchers, discounts, prize draws, and points (See Figure 1) [27].

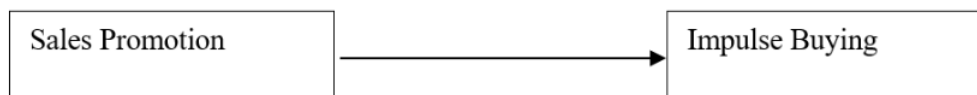


Figure 1. Conceptual Framework

Figure 1 illustrates the conceptual framework of this study, depicting the relationship between sales promotions and impulse buying behavior in the Shopee marketplace [28]. The framework is built upon previous research findings, which indicate that various promotional strategies such as free shipping, flash sales, cashback, vouchers, discounts, prize draws, and points play significant roles in triggering impulse buying [29, 30]. This visual representation helps to clarify the variables involved and the expected influence of sales promotions on consumer behavior, providing a structured approach to understanding the underlying mechanisms of impulsive purchases [31].

Based on the results of interviews with the Sibatu-batu Block 9 community, it can be seen that sales promotions are not optimal. The problem phenomenon occurs in the free shipping dimension, where Shopee offers free shipping vouchers, but the free shipping cannot be used because it has certain conditions and not all stores have free shipping [32]. Then, in the flash sale dimension offered by Shopee, sometimes when put into the Shopee cart, the flash sale items disappear, run out immediately or the price immediately returns to normal which makes consumers disappointed. From the description above, this study is intended to conduct further testing of impulse buying behavior influenced by sales promotions by the Shopee marketplace in the Sibatu-batu community, Block 9, Sitalasari, Pematangsiantar city so that the author is interested in conducting this study.

2. METHODOLOGY

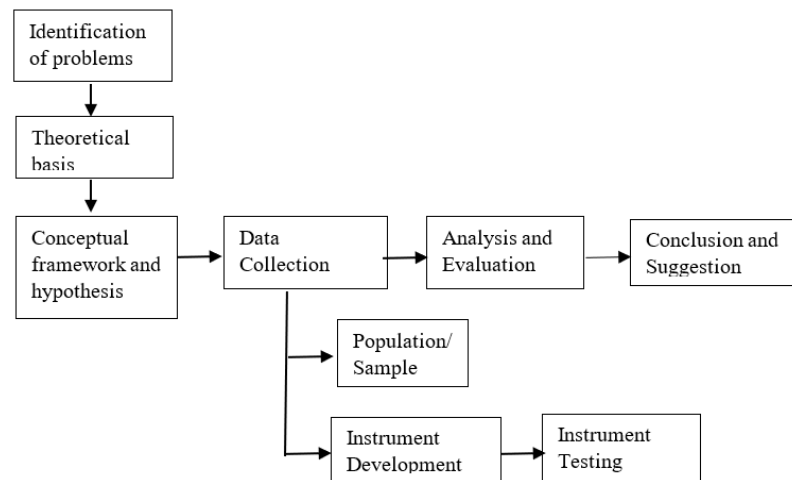


Figure 2. Flowchart of Research

Figure 2 presents the research flowchart, which outlines the step-by-step process conducted in this study. The flowchart highlights the research stages, starting from problem identification and literature review to data collection, analysis, and conclusion formulation. This visual guide is essential for understanding the research methodology and ensuring the logical flow of each phase, demonstrating a systematic approach in investigating the impact of Shopee's sales promotions on impulse buying [33].

The research design used in writing this research is field research and library research [34]. The time of this research is planned for 5 months from May to September 2024. The place where this research was conducted was in the Sibatu-batu community block 9, Siantar Sitalasari District, Pematangsiantar City [35]. The population used in this study was the entire Sibatu-batu community block 9 Bah Sorma Village, Siantar Sitalasari District, Pematangsiantar City. The sampling technique in this study used purposive sampling [36]. Namely the Sibatu-batu community block 9 who shopped using the Shopee marketplace totaling 38 people. To analyze the data in this study, the author used the normality test, qualitative analysis and quantitative analysis [37].

3. RESULT AND DISCUSSION

3.1. Normality Test

Table 1. Normality Test Results

	Sales Promotion	Impulse Buying	TOTAL
N	38	38	38
<i>Normal Parameters^{a,b}</i>			
Mean	77.37	41.39	118.76
Std. Deviation	7.96	4.65	11.65
<i>Most Extreme Differences</i>			
Absolute	0.129	0.119	0.139
Positive	0.129	0.119	0.139
Negative	-0.096	-0.080	-0.075
Kolmogorov-Smirnov Z	0.797	0.726	0.857
Asymp. Sig. (2-tailed)	0.548	0.667	0.454

a. Predictors: (Constant), Sales Promotion

Based on Table 1, which presents the normality test results for the variables of this study, it can be seen that the Asymp. Sig. (2-tailed) value for the sales promotion variable is 0.548, while for the impulse buying variable, the Asymp. Sig. (2-tailed) value is 0.667. The total Asymp. Sig. (2-tailed) value is 0.454. Referring to the Kolmogorov-Smirnov normality test criteria, if the significance value exceeds 0.05, the data distribution is considered normal. Since all significance values for both individual variables and the total are greater than 0.05, it can be concluded that the data for the variables of sales promotion and impulse buying, as well as the overall data set, are normally distributed. This indicates that the data meets the assumption of normality, allowing further parametric analysis to be conducted appropriately.

3.2. Qualitative Descriptive Analysis

Descriptive analysis is intended to obtain an overview or description of consumer responses regarding sales promotions and impulse buying on the Shopee marketplace (Case Study on the Sibatu-batu Community, Block 9, Siantar Sitalasari, Pematangsiantar City) [38]. The respondents in this study were the Sibatu-batu community, Block 9, Siantar Sitalasari, Pematangsiantar City who had shopped online at the Shopee marketplace. The following is a description of respondents based on gender, age, and length of use of the Shopee marketplace:

3.2.1. Respondent Description

Table 2. Description of Respondents Based on Gender

No	Gender	Frequency (F)	Percentage (%)
1.	Male	9	23.7%
2.	Female	29	76.3%
Total		38	100%

Source: Questionnaire processing results (2024)

Table 2 presents the gender distribution of the respondents involved in this study. Out of 38 total respondents, 9 individuals (23.7%) are male, while the majority, 29 individuals (76.3%), are female. This indicates that female participants dominate the sample, reflecting a potential trend where women are more actively engaged in online shopping activities on Shopee [39]. Understanding this gender composition is crucial as it may influence the interpretation of impulse buying behavior, especially in the context of sales promotions [40].

Here the author also describes the description of respondents based on age. The data can be seen in the following table:

Table 3. Description of Respondents Based on Age

No	Ages	Frequency	Percentage (%)
1	17–24 years old	24	63.2%
2	25–32 years old	7	18.4%
3	33–40 years old	2	5.3%
4	41–48 years old	4	10.5%
5	> 48 years old	1	2.6%
Total		38	100%

Source: Questionnaire processing results (2024)

Table 3 shows the age distribution of respondents, offering a clearer understanding of the demographic profile of Shopee users in this study [41]. The largest proportion of respondents is aged 17–24 years old, accounting for 63.2% of the total sample [42]. This dominance suggests that younger individuals are more active in utilizing online marketplaces, potentially driven by higher digital literacy and familiarity with mobile apps for shopping [43]. The 25–32 years old group follows at 18.4%, indicating that young adults also contribute significantly to online shopping activities. Respondents aged 41–48 years old make up 10.5%, reflecting a growing interest in e-commerce among older age groups, possibly due to the increasing accessibility and convenience of online shopping. Meanwhile, the 33–40 years old group represents 5.3%, and those over 48 years

old account for only 2.6%, suggesting that older age groups might still prefer traditional shopping methods or have limited exposure to digital platforms. These insights are essential for understanding consumer behavior and tailoring marketing strategies according to different age segments [44].

Next, the author describes the characteristics of respondents based on the length of use of the Shopee marketplace, which can be seen in the following table:

Table 4. Respondent Description Based on Length of Use of Shopee

No	Length of Use	Frequency (F)	Percentage (%)
1	> 1 year	7	18.4%
2	1–3 years	20	52.6%
3	4–5 years	5	13.2%
4	> 5 years	6	15.8%
Total		38	100%

Source: Questionnaire processing results (2024)

Table 4 illustrates the length of time respondents have been using Shopee, reflecting their experience and familiarity with the platform [45]. The majority of respondents, accounting for 52.6%, have been using Shopee for 1–3 years, indicating that a significant portion of users are relatively familiar with the platform but not yet long-term users [46]. Meanwhile, 18.4% of respondents have used Shopee for less than one year, suggesting a growing influx of new users, potentially driven by the platform's increasing popularity and aggressive marketing strategies [47]. Respondents with 4–5 years of experience make up 13.2%, showing a smaller group of users with a deeper understanding of the platform's features and promotional tactics. Lastly, 15.8% of respondents have used Shopee for more than five years, representing loyal users who may have witnessed the platform's evolution and adapted to its changing dynamics. This distribution highlights a diverse user base, with varying levels of experience that could influence their shopping habits and responsiveness to sales promotions [48].

3.3. Overview of Sales Promotions on the Shopee Marketplace

The sales promotion program provided will attract consumer interest and encourage consumers to buy and consume a product being marketed [49, 50]. Sales promotions have the power to increase sales figures. Some sales promotions in the current digital marketing era can even encourage impulsive buying behavior such as discounts, free shipping, cashback and flash sales [19, 24]. Sales promotions on the Shopee marketplace can be measured in seven dimensions, namely free shipping, flash sales, cashback, vouchers, discounts, prize draws, and points.

Furthermore, the rise of global e-commerce platforms has significantly influenced consumer behavior, creating a more competitive environment where sales promotions play a crucial role in capturing attention and driving sales [51]. Trends such as personalized marketing, real-time promotions, and the use of AI-driven recommendation systems have been adopted by major platforms, including Shopee, to enhance the online shopping experience and stimulate impulse buying [52]. Understanding these trends One of the factors indicated to influence impulse buying is sales promotion [53]. Based on the results of the study [54–57] stated that sales promotion has a positive effect on impulse buying [58]. marketers to align their strategies with global best practices, ensuring that promotional activities not only attract consumers but also build long-term engagement and brand loyalty. The following is a table of respondents answers about sales promotions on the Shopee marketplace [18].

Table 5. Recapitulation of Respondents Answers Regarding Sales Promotion

No	Dimensions	Average Answer Value	Answer Criteria
1.	Free Shipping	3.75	Good
2.	Flash Sale	3.67	Good
3.	Cashback	3.68	Good
4.	Voucher	3.75	Good
5.	Discount	3.76	Good

6.	Drawing	3.54	Good
7.	Point	3.66	Good

Source: Questionnaire processing results (2024)

From the Table 5, it can be seen that for the free shipping dimension, the average value is 3.75 with good answer criteria, this is because Shopee provides free shipping to every consumer who shops through the Shopee application [59, 60]. The determination of the amount of free shipping is determined based on the minimum purchase and/or choice of shipping services provided by the merchant on the Shopee application [61]. For the flash sale dimension, the average answer is 3.67, with good answer criteria. This is because Shopee also implements a flash sale program to attract buyers. However, this flash sale is a promotion that is limited in terms of time and quantity of products, so it is possible that consumers will be disappointed because the products run out in a short time. In the cashback dimension, the average answer is 3.68, with good answer criteria. This is because Shopee facilitates the provision of cashback for consumers who shop. The nominal cashback will be sent by Shopee and can be received by consumers after the buyer has confirmed the delivery.

In the voucher dimension, the average result is 3.75 with good criteria. This is because consumers get various types of vouchers from the Shopee application or from merchants such as discount vouchers, free shipping vouchers. For the discount dimension, the average answer is 3.76, with good criteria, this is because the Shopee marketplace provides discounts to consumers who shop at Shopee. The discounts given by Shopee, in addition to vouchers, live discounts, or video discounts, so you don't need to wait for a certain event to get a product discount.

Then the prize draw dimension got an average result of 3.54 good results, this is because Shopee provides a prize draw program for Shopee customers as an appreciation for choosing to shop at Shopee. The draw program is generally carried out during events such as Harbonas, Shopee Payday Festival or Mid Year Sale which will be announced via flyers on the Shopee homepage. In this case, consumers are less interested in participating in the draw because of the small opportunities. Furthermore, the point dimension got an average result of 3.66 with good answer criteria. In this case, Shopee gives points to consumers either through product reviews, games, shopee live or shopee videos that can be exchanged for the next purchase. Overall, it can be seen that the highest average sales promotion value is in the discount dimension with an average result of 3.76 good results. The lowest average sales promotion value is in the draw dimension which gets an average result of 3.54 with good answer criteria.

3.3.1. Overview of Impulse Buying on the Shopee Marketplace

Impulse buying is the behavior of an individual who makes a purchase because of a sudden desire and without thinking. Impulse buying occurs when someone is tempted to buy spontaneously without prior planning that provides a sense of satisfaction and is able to accept the consequences that may occur. Impulse buying can be measured through four dimensions, namely spontaneity, unplanned purchases, urges to shop, and emotional conditions.

The following table shows respondents answers regarding purchasing decisions on the Shopee marketplace.

Table 6. Recapitulation of Respondents Answers Regarding Impulse Buying

No	Dimensions	Average Answer Value	Answer Criteria
1.	Spontaneity	3.74	High
2.	Unplanned purchases	3.69	High
3.	Urge to shop	3.80	High
4.	Emotional Condition	3.80	High

Source: Questionnaire processing results (2024)

Based on the Table 6, it can be seen that the spontaneity dimension obtained an average result of 3.74 with a high answer criterion. This is because consumers feel compelled to immediately take spontaneous purchasing action, especially for flash sale products, considering the time limit and number of products, making consumers make purchases immediately. In the unplanned purchase dimension, an average answer of 3.69 was obtained, a high criterion. Unplanned purchases that often occur are buying products that were not thought

of before or are not really needed. This happens because the interest that arises after seeing the product catalog/review, the minimum purchase offer to get a discount or free shipping discount causes someone to add other products. In this case, consumers also tend to cancel their shopping intentions when they are not yet able to meet the minimum purchase to get free shipping or shipping discounts, because consumers often measure it from the total costs incurred in purchasing a product

Then in the urgency dimension to shop, the average result was 3.80, a high criterion. This is because the limited time or quantity makes consumers feel pressured to shop immediately, trending products, or because of need. Furthermore, in the emotional condition dimension, the buyer obtained an average result of 3.80, a high result. This is because consumers (respondents) who are predominantly women stated that their emotional condition improved when browsing offers and shopping on the Shopee marketplace. Overall, it can be seen that impulse buying on the Shopee marketplace obtained the highest value in the dimensions of urgency to shop and emotional condition, namely 3.80 with high answer criteria. The lowest average impulse buying value was in the unplanned purchase dimension with an average result of 3.69, high answer criteria. From the analysis description, it can also be seen that free shipping, discounts, and flash sales are the reasons for impulsive purchases in this study. This is certainly in line with previous research by [19, 24] which stated that cashback, free shipping, discounts, and flash sales have an effect on impulse buying.

3.4. Quantitative Descriptive Analysis

3.4.1. Multiple Linear Regression Analysis

This study aims to analyze how much sales promotion can influence impulse buying on the Shopee marketplace by the people of Sibatu-batu, Block 9. Siantar Sitalasari District, Pematangsiantar City. The data analysis used is linear regression analysis. The analysis was carried out using respondent tabulation on the questionnaire that had been run.

Table 7. Multiple Linear Regression Results

<i>Model</i>	Unstandardized Coefficients		Standardized Coefficients
	B	Std. Error	Beta
(Constant)	10.489	5.526	
Sales Promotion	0.399	0.071	0.684

a. Dependent Variable: Impulse Buying

Source: Results of processing the questionnaire with SPSS version 21 (2024)

Based on the results of processing the questionnaire with SPSS version 21 in the Table 7 above, the following regression equation can be obtained $Y = 10.489 + 0.399X$, meaning that if sales promotion increases by one unit, impulse buying on the Shopee marketplace [62]. From this description, it can be concluded that sales promotion has a positive effect on impulse buying on the Shopee marketplace. This is in line with previous studies [54–57].

3.4.2. Correlation Analysis and Determination Coefficient

At this stage, the correlation is calculated in the form of the degree or depth of the relationship between changes, called the coefficient symbolized by r . In this test, the relationship between the independent variable (sales promotion) and the dependent variable Y (impulse buying) is calculated. By using the coefficient of determination (Adjusted R Square). The following are the results of the correlation coefficient and determination coefficient tests with the help of the SPSS version 21 program as follows:

Table 8. Analysis of Correlation Coefficient and Determination Coefficient of Sales Promotion with Impulse Buying

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.684 ^a	0.467	0.453	3.442

a. Predictors: (Constant), Sales Promotion

b. Dependent Variable: Impulse Buying

From the Table 8 above, the correlation value $r = 0.684$ is obtained, meaning that there is a strong relationship (moderately high correlation) between sales promotion and impulse buying on the Shopee marketplace by the people of Sibatu-batu, block 9, Siantar Sitalasari, Pematangsiantar City. The results of the coefficient of determination value of 0.467 mean that the high and low impulse buying on the Shopee marketplace by 46.7% can be explained by sales promotion, while the remaining 53.3% is explained by other variables not discussed in this study such as price, brand image, lifestyle, and other factors not discussed in this study.

3.4.3. Hypothesis Testing (Partial Test - t-Test)

This test is carried out partially, namely to ensure whether the hypothesis is accepted or not. Hypothesis testing is carried out to determine whether the sales promotion variables being tested have an effect on impulse buying. If $t \text{ count} > t \text{ table}$ or significance < 0.05 then H_0 is rejected. Hypothesis testing can be seen in the following table:

Table 9. Results of the t-test of Sales Promotion on Impulse Buying

Model	T	Sig.
(Constant)	1.898	0.066
Sales Promotion	5.622	0.000

a. Dependent Variable: Impulse Buying

Source: Results of questionnaire processing with SPSS version 21 (2024)

Based on Table 9 above, the t-count value for the sales promotion variable is $5.622 > t\text{-table}$ with a df level = $n-k-1$ ($38-1-1 = 36$) of 2.02809 or with a significance level of $0.000 < 0.05$, then H_0 is rejected, meaning that sales promotions have a positive and significant effect on impulse buying on the Shopee marketplace (Case study on the Sibatu-batu Community Block 9, Siantar Sitalasari, Pematangsiantar City). This is supported by previous studies [54–57], which state that sales promotions have a positive and significant effect on Impulse buying.

3.5. Evaluation

3.5.1. Sales Promotion on the Shopee Marketplace

Based on the results of the analysis of sales promotions, it can be concluded that sales promotions are good. In several dimensions that still need attention, such as the free shipping dimension, it is better to consider re-setting the minimum purchase with the condition of a shipping discount from areas outside Sumatra. In the flash sale dimension, you can consider providing tiered discounts during the flash sale period. In the lottery dimension, Shopee can consider providing special draws for members according to their level.

In addition to the improvements above, sales promotions can be improved by paying attention to the factors that influence sales promotions according to [54–57] including price discounts, free gifts, free shipping, and banded or joint sales (bundling) [63].

3.5.2. Impulse Buying on Shopee Marketplace Products

Impulse buying is a sudden and unplanned purchasing decision behavior. Based on the results of the recapitulation of respondents answers, it can be concluded that impulse buying on the Shopee marketplace is high. In the spontaneous purchase dimension, Shopee should consider adding time and quantity limits with tiered discounts. Meanwhile, for the unplanned purchase dimension, Shopee can consider reviewing the minimum spending that gets a shipping discount, especially for outside the merchant's area. In addition to the improvements above, impulse buying can be improved by paying attention to the factors that influence impulse buying according to [14, 26] including spontaneity, strength, excitement and stimulation, indifference to the consequences.

4. MANAGERIAL IMPLICATIONS

The findings of this study offer several implications for management, particularly for businesses utilizing Shopee as a digital marketplace. First, understanding the demographic composition of users, predominantly aged 17–24 years old, allows companies to tailor their marketing strategies to better engage younger audiences through social media campaigns and personalized promotions. Additionally, the diverse length of use among respondents highlights the need for targeted customer retention strategies, such as loyalty programs for long-term users and onboarding incentives for new users. Moreover, insights into user experience and preferences

can guide product placement and advertisement strategies to enhance customer satisfaction. Ultimately, these implications empower businesses to optimize their digital marketing approaches and strengthen their competitive edge in the e-commerce landscape.

5. CONCLUSION

Based on the description presented in the previous chapter, the author concludes that the results of the qualitative descriptive analysis of sales promotions are good, and impulse buying is also high. The results of the quantitative descriptive analysis obtained linear regression results stating that the existence of sales promotions can positively and significantly influence impulse buying on the Shopee marketplace. In addition, the results of the correlation coefficient analysis state that there is a strong relationship between sales promotions and impulse buying on the marketplace. These findings also align with the Sustainable Development Goals, particularly SDGs 8 and SDGs 9, as the development of e-commerce supports economic activity and digital innovation.

From the conclusions above, it is necessary to put forward several suggestions that can be useful for the Shopee marketplace, namely to increase sales promotions on the Shopee marketplace, it is better to consider re-setting the minimum purchase with the condition of shipping discounts from areas outside Sumatra, considering providing tiered discounts during the flash sale period and providing special draws for members according to their level.

To optimize impulse buying, Shopee should consider adding time limits or quantities with tiered discounts. Meanwhile, for the unplanned purchase dimension, Shopee can consider reviewing the minimum spending that gets shipping discounts, especially for outside the merchant's area.

6. DECLARATIONS

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6.2. Author Contributions

Conceptualization: JJ; Methodology: LS; Software: ZM; Validation: MS and LJ; Formal Analysis: MD and SB; Investigation: JJ; Resources: LS; Data Curation: ZM; Writing Original Draft Preparation: MS and LJ; Writing Review and Editing: MD and SB; Visualization: JJ; All authors, JJ, LS, ZM, MS, LJ, MD and SB, have read and agreed to the published version of the manuscript.

6.3. Data Availability Statement

The data presented in this study are available on request from the corresponding author.

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The authors received no financial support for the research, authorship, and/or publication of this article.

6.5. Declaration of Conflicting Interest

The authors declare that they have no conflicts of interest, known competing financial interests, or personal relationships that could have influenced the work reported in this paper.

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