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The Impact of Product Visualization and Emotional Triggers on Impulse Buying: Moderating Role of Previous Experience in E-Commerce Among Generation Z Consumers

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Abstract

This study aims to analyze the effect of product visualization and emotional triggers on impulse purchase decisions in e-commerce and to examine the role of previous experience as a moderating variable among Generation Z consumers. This research uses a quantitative survey method. A closed questionnaire with a semantic differential scale was given to 205 respondents consisting of active users of e-commerce platforms aged at least 18 years old and who have made impulse buying in the last three months. Data were collected through questionnaires and analyzed using Structural Equation Modeling (SEM) with AMOS version 24. The results showed that product visualization and emotional triggers influence impulse purchase decisions. In addition, previous experience acts as a moderating variable that strengthens the relationship between product visualization and impulse buying. This study provides new insights into e-commerce consumer behavior in the digital era, especially among Generation Z. The implication is that marketers can design more effective visual and emotional strategies to encourage impulse buying and ensure a positive consumer experience to increase loyalty.

Keywords : *Product Visualization, Emotional Trigger, Impulse Buying, Previous Experience, Generation Z*

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INTRODUCTION

Impulse buying behavior has become an essential issue in marketing, especially with the development of e-commerce in the digital era. Impulse buying is a form of unplanned consumption behavior triggered by a strong internal drive and characterized by buying products suddenly without planning, often related to intense desire but not always based on urgent needs (Suher & Hoyer, 2020). Marketing strategies such as limited-time discount offers, bundling packages, and exclusive promotions are often designed to create emotional triggers that encourage consumers to shop impulsively (Zafar et al., 2020). Today's competitive digital environment means that e-commerce companies increasingly rely on these strategies to trigger impulse purchase decisions faster.

Product visualization plays a vital role in enhancing the influence of emotional triggers on impulse buying. Consumers ability to visualize products strengthens

emotional triggers to impulse buying (Zheng et al., 2019). In addition, research confirms that visualization of product benefits allows information to be processed emotionally, thereby accelerating impulse decision-making. (Lee & Chen, 2021). Visualization and emotional triggers are critical in triggering impulse buying behavior. Positive emotions, such as excitement and joy, are essential in buying. Research shows that brand engagement significantly increases these emotions, especially during the pre-purchase and post-purchase stages. (Razmus et al., 2024). Emotions generated from promotions, such as excitement or enthusiasm when seeing special offers, significantly increase the tendency to impulse shop. However, consumers' previous experiences may moderate the relationship between visualization and emotional triggers. Consumers with previous positive experiences are more likely to buy on impulse, as satisfaction of earlier transactions fosters a tendency for repeat purchases. (Hussain et al., 2024). Conversely, negative experiences can reduce impulse buying, leading to a more cautious approach to future purchases (Ferrinadewi, 2024). These findings support that previous experiences influence how consumers respond to product visualizations and emotional triggers in decision-making.

Djafarova & Bowes (2021) found that the factors in visualization that influence impulse buying have not been fully explicitly verified. Therefore, further research is needed to validate visual elements, such as what elements are most effective, and to examine the interaction between emotional triggers and the relationship of visual elements to impulse buying. In line with that, Jain et al. (2023) also found that the specific roles of different forms of emotional triggers and their interactions with other elements, such as promotion design or offer timing, have not been fully verified. Further research is needed to validate how variations in emotional triggers influence impulse buying, particularly in e-commerce. In addition, the role of previous experience in moderating the effects of visualization and emotional triggers has also not been fully verified. Karl et al. (2021) it was confirmed that previous experience is important in decision-making. However, further research is needed to validate how previous experience directly moderates the relationship between visualization, emotional triggers, and impulse buying. Therefore, the solution is to fill these gaps by further examining the interplay between visual elements, emotional triggers, and previous experience in influencing impulse buying behavior and testing how these three factors interact.

This research focuses on Generation Z, who have high exposure to digital visualizations, making them more susceptible to emotional triggers that trigger impulse buying (Isa et al., 2020). Generation Z was born between 1995-2012, growing up in the digital era, making them the primary consumer of technology products (Caraka et al., 2022). They live in a digital environment filled with visual and emotional stimuli from e-commerce platforms and social media, accelerating their tendency to make spontaneous purchase decisions (Muhammad et al., 2024). Therefore, Zhang et al. (2023) highlighted that Gen Z's previous experiences were hedonic experiences when purchasing non-essential items, especially in e-commerce, rich with visual stimuli, thus increasing impulse buying. Therefore, e-commerce is the main focus of this research, as it can utilize product visualizations such as images, videos, and reviews to attract attention and trigger emotional triggers that increase impulse buying. This is reinforced by the prediction that by 2024, the global e-commerce market value is expected to reach USD 5.14 trillion, with 15% annual growth since 2019

(Uzunoglu, 2024). In addition, in Indonesia, e-commerce growth amounted to 15.5% from the previous year, reflecting the widespread adoption of digital technology among consumers (Retailasia, 2024).

This study aims to examine the influence of visualization on positive emotional triggers and impulse buying, focusing on Generation Z. It also discusses the role of visualization as a mediator in the relationship and assesses how previous experience moderates the relationship. Hopefully, this research can provide deeper insights into the dynamics of impulse buying behavior in the digital era and help design more effective marketing strategies to influence consumer shopping decisions.

LITERATURE REVIEW

1. Impulse Buying Behavior on E-commerce in Generation Z

Online purchasing has become a fast-growing trend, along with increasing internet access and the development of digital technology. E-commerce allows consumers to purchase products and services easily through electronic devices without having to meet face-to-face with the seller, thus speeding up the transaction process (Kacen & Lee, 2002). The increase in online purchases is in line with the growing number of e-commerce platforms offering various products at competitive prices and easy access (Verhagen & van Dolen, 2011). Generation Z is the primary consumer in this digital era, where they grow up in an environment filled with technology, so they tend to be more accustomed to using digital platforms for shopping (Caraka et al., 2022). Gen Z's lifestyle that previous experience ties instant gratification and experience and is reinforced by the ease of online shopping will increase their tendency to impulse buying due to constant exposure to promotional content (Nguyen et al., 2024). E-commerce companies also optimize their marketing strategies by utilizing various attractive promotions such as discounts, limited-time offers, and product bundling to encourage consumers to make purchases faster (Dawson & Kim, 2010). During a dynamic digital environment, impulse buying has become increasingly prominent. Impulsive buying in e-commerce occurs when consumers spontaneously purchase products without previous experience planning, often triggered by solid emotional impulses due to various attractive offers visually displayed on the platform (Floh & Madlberger, 2013). Generation Z, with easy access to social media and various e-commerce platforms, is increasingly exposed to visual stimuli and attractive promotions, encouraging them to make impulse buying at a higher rate than previous generations (Muhammad et al., 2024). Impulse buying is amplified on digital platforms because consumers are exposed to visual stimuli, promotions, and emotional triggers that encourage them to buy without thinking (Verhagen & van Dolen, 2011).

2. Visualization

According to Zhao et al. (2009), visualization through images and video elements allows consumers to imagine the use of the product without the need to interact directly with it. This accelerates the decision-making process, often leading to impulsive behavior, especially when combined with digital promotional elements (Lin & Lin, 2013). Hubert et al. (2013) added that visualizations that display the benefits and aesthetics of products reinforce consumers' mental representations, increasing the tendency to buy impulsively. In line with this, it was found that immersive visual elements can increase product appeal, which also encourages impulse buying behavior (Nguyen et al., 2024). Furthermore, effective visualization in product design facilitates better communication of ideas and increases consumer engagement, leading to informed purchase decisions (Ivanov et al., 2024).

Hussain et al. (2024) They assert that individuals who use visualization techniques to imagine a satisfying purchase outcome may strengthen their impulsive tendencies due to increased positive expectations resulting from the visualization. Keng et al. (2011) also found that visualization techniques, particularly coupled with mindfulness, can increase awareness of emotions, which may not necessarily help control impulsivity but may reinforce it in the context of impulse buying as a way of relieving stress. Visualizations that affect emotional triggers influence consumer arousal, positively impacting impulse buying (Liu et al., 2019). This is reinforced by research by Kovač et al. (2019), which showed that practical visual elements create an emotional connection between consumers and products, contributing to impulse purchase decisions.

The resulting hypothesis is:

H1: Visualizations that activate consumers' imagination have a positive effect on emotional triggers.

H2: Attractive visualization and a positive effect on impulse buying.

3. Emotional Trigger

Weinberg & Gottwald (1982) stated that emotional triggers can increase impulse buying tendencies because individuals are encouraged to seek experiences that provide momentary satisfaction, especially unplanned purchases. Mishra et al. (2023) also found that emotional triggers can affect risk perception and encourage individuals to make impulse buying as an escape from uncomfortable psychological conditions. Ertz et al. (2022) added that emotional triggers can strengthen consumers' desire to make purchases that provide happiness. Other research by Rani et al. (2023) also supports that emotional triggers can trigger impulse buying because consumers see shopping activities as a mechanism to deal with this pressure. In addition, Iyer et al. (2020) They state that emotional triggers often lead to irrational purchasing decisions, especially those triggered by the desire to obtain hedonic satisfaction through consumption.

The resulting hypothesis is:

H3: Emotional triggers experienced by consumers have a positive effect on impulse buying.

4. Previous Experience

According to Khachatryan et al. (2018), previous experience can increase or decrease impulsive urges; strong visualization can strengthen the desire to buy,

especially if the previous experience is positive. Previous experience filters consumer perceptions of product visualization (Vonkeman et al., 2017). Consumers who have positive experiences are more likely to respond emotionally to visualizations, increasing their likelihood of making impulse buying. Positive experiences affect consumer trust, improving response to product visualizations and impulse buying (Zhang et al., 2024). Findings by Hussain et al. (2024) support this argument, suggesting that positive experiences strengthen the effect of visualization on impulse buying and reduce the negative impact of bad experiences on purchase decisions. Negative experiences from previous purchases can weaken impulse buying by creating a sense of skepticism and distrust, which ultimately encourages consumers to avoid impulsive purchase decisions in the future (Çelik & Özçelik, 2024). It can be concluded that previous experience plays a vital role in influencing future impulse buying behavior, where negative experiences cause regret and reduce the tendency to buy impulsively. In contrast, positive experiences reinforce this behavior (Spiteri Cornish, 2020).

The resulting hypothesis is:

H4: Previous consumer experience moderates the relationship between product visualization and impulse buying, with positive experience strengthening the relationship while negative experience weakening it.

Research Model

After collecting the literature review and formulating the hypothesis above, the author will describe the research methodology using the following diagram:

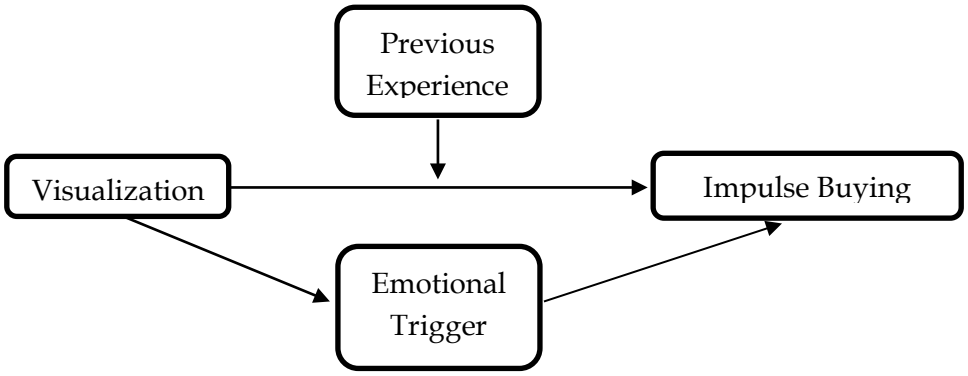

Figure 1. Research Model

Source: Processed by the author, 2024

METHODOLOGY

This research uses a verification research design. According to Uma Sekaran & Bougie (2019), verification research aims to establish cause-and-effect relationships between variables and test predetermined hypotheses. The data used is cross-section data, namely primary data. Based on the definition of Hair et al. (2019), primary data is data collected directly to be analyzed to find solutions to the problems under study. In this study, primary data is in the form of responses from respondents regarding the effect of product visualization on emotional triggers and their impact on impulse buying behavior, which is moderated by previous shopping experiences on e-commerce platforms.

Data collection is closely related to the research population. According to (Uma Sekaran & Bougie, 2019), population refers to the entire group of people, events, or exciting things that are the object of research. Population data is used as the basis for decision-making or hypothesis testing. Based on this concept, the population in this study includes all Generation Z in Indonesia. Because the data coverage of the research object is comprehensive, this study uses a sample to enable generalization to the population. McDaniel & Gates (2015) defines a sample as a portion of the population selected to represent the whole. The sampling technique used in this research is probability sampling, with stratification of relevant elements. This study uses non-probability purposive sampling techniques with the following criteria: 1) Generation Z aged 17-29 years; 2) Have online shopping experience for at least the last three months; 3) Actively using e-commerce platforms.

This research was prepared using the survey method and a quantitative approach (Saunders et al., 2019). This study uses a semantic differential scale with a 10-point measuring scale (Bordens & Abbott, 2021). A semantic differential scale with an interval scale of 10 assesses respondents' attitudes, where a rating of 1-5 means disagree, and 6-10 means agree. (Bougie, 2019). Some questionnaire statements used reverse-scored items to minimize biases arising from standard methods. In addition, this study ensures a clear separation between dependent and independent variables, which is expected to improve the accuracy of respondents' answers.

According to Hair et al. (2019), the representative sample size is 100 to 200 respondents with a minimum good sample of five times and a maximum of ten times the number of indicators. The number of estimated parameters in this study was 41. Thus, the minimum sample size in this study was five times the estimated parameters, or 41 x 5 = 205. Thus, the minimum sample size used in this study is 205 respondents. Data were collected through a questionnaire that included questions related to respondent characteristics, online shopping experience, perceptions of product visualization, emotional triggers when shopping and impulse buying tendencies on e-commerce platforms.

This study uses data analysis techniques with the Structural Equation Modeling (SEM) method, with the help of AMOS software version 24. Structural Equation Modeling (SEM) is described as an analysis that combines several approaches, namely factor analysis, structural models, and path analysis (Suliyanto, 2011).

This study used covariance-based SEM as an analytical tool, starting with building a conceptual model to formulate research hypotheses. Next, the collected data was examined to ensure no missing data met the data criteria for SEM analysis. Then, validity and reliability tests were conducted to ensure that the measurement items could represent the research variables and were consistent. After ensuring the measurement items are feasible, model testing is continued to provide the model fits. After the model is categorized as fit, testing continues by examining the significance of the influence between the variables offered in the research hypothesis (Hair J et al., 2019).

RESULT AND DISCUSSION

Respondent Characteristics

Online questionnaires were distributed from July to September 2024. This study obtained data from 205 respondents, divided into several characteristics based on the criteria and sample size set.

Table 1. Respondent Characteristics

Characteristics	Attribute	Frequency	Percentage
Gender	Male	97	47,3%
	Female	108	52,7%
Age	17-23 years old	84	40,7%
	24-29 years old	121	59,3%
Domicile/address	West Jawa	180	87,8%
	Central Java	7	3,4%
	East Java	10	4,9%
	Jakarta	8	3,9%
Jobs	Student	82	40%
	Self-Employee	53	26%
	Private Employee	39	19%
	Others	31	15%
Platform Frequently used e-commerce	Shopee	187	54,02%
	Tokopedia	82	23,72%
	Lazada	27	7,81%
	Blibli	16	4,63%
	Bukalapak	13	3,76%
	Zalora	12	3,47%
	Others	9	2,60%
	Shopee	187	54,02%
	Tokopedia	82	23,72%

Source: Processed by the author, 2024

Based on data analysis, 52.7% of women and 47.3% of men were respondents, showing a relatively balanced gender distribution. Most respondents are aged 24-29, accounting for 59.3%, while respondents in the 17- 23 age range account for 40.7%. From a domicile perspective, most respondents came from West Java, with a proportion of 87.8%, followed by respondents from East Java (4.9%), Jakarta (3.9%), and Central Java (3.4%). Based on occupation, the largest category is students, which accounts for 40% of the total respondents, followed by self-employed (26%), private employees (19%), civil servants (10%), and others (5%). Furthermore, regarding the most used e-commerce platform, Shopee is the top choice of respondents with a percentage of 54.02%, followed by Tokopedia (23.72%), Lazada (7.81%), Blibli (4.63%), Bukalapak (3.76%), Zalora (3.47%), and other categories (2.60%).

SEM Assumption Test

In SEM analysis, a data normality test is needed to determine whether the data obtained is usually distributed (Hair et al., 2019). Based on the analysis results, the normality test shows no critical ratio value, both univariate and multivariate, which exceeds the ±2.58 limit. Thus, the data is declared normal and suitable for further analysis. After the normality test is conducted, the next step is to test for outlier data

univariately and multivariately. The univariate and multivariate outlier tests aim to avoid biased research results (Hair et al., 2019). To detect multivariate outliers, it is necessary to compare the chi-square table value with the highest output value of the Mahalanobis distance. The chi-square table value is 40.790, while the highest value of Mahalanobis distance is 38.702. This result shows that the research data successfully passed the normality test.

Table 2. Measurement, Loadings, CR, and AVE

No.	Questionnaire Statement	Variables	Dimensions	Loading Factor	CR	AVE
1.	I see product details clearly from pictures or videos that influence purchasing decisions.	Visualization	Visual Clarity	0,729	0,802	0,452
2.	The visual beauty of a product image or video is very appealing to me.		Aesthetics	0,79		
3.	Animations and visual effects in images or videos grab my attention while shopping.		Animation and Visual Effects	0,625		
4.	The visually presented special offers were striking and influenced my buying interest.		Visual Presentation of Special Offers	0,607		
5.	Visualizing user reviews or testimonials increases my confidence in purchasing the product.		Use of Testimonial or Visual Reviews	0,588		
6.	I often feel a strong emotional urge to impulse buy products when I see visuals.	Emotional trigger	Arousal	0,767	0,784	0,477
7.	My mood while shopping affects my buying decisions.		Mood States	0,634		
8.	My feelings of affection towards the product		Emotional Attachment to the Product	0,649		

	influence my unplanned purchase decision.					
9.	Friends or influencers on social media influence my impulse buying.		Social Environment Influence	0,707		
10.	Previous experience with the product influences my decision when viewing visuals.	Previous Experience	Sensory Experience	0,728	0,777	0,466
11.	My direct experience of using the product influences my purchase decision.		Practical Experience	0,623		
12.	Previous experiences of thinking about and evaluating products influence decisions when shopping.		Cognitive Experience	0,664		
13.	My emotional and social connection with the brand influences my e-commerce purchase decision.		Relationship Experience	0,713		
14.	I often buy products out of the blue without planning when I see exciting visuals.	Impulse buying	Spontaneous Purchase	0,696	0,753	0,434
15.	I often ignore further considerations when purchasing products.		Mindless Purchasing	0,727		
16.	I often feel pressured to buy a product immediately after seeing an offer deadline.		Rash Purchases	0,606		
17.	My emotional state drives impulse		Purchases Influenced by Emotional	0,599		

buying on e-commerce.		State

Source: Processed by the author, 2024

After testing the SEM assumptions, the next step is to conduct validity and reliability tests. Validity relates to how well the measures used define concepts, while reliability relates to the consistency of these measures. Based on Table 2, all loading factor values of the research indicators show values > 0.4. This indicates that all variable indicators represent the research construct. Each Average Variance Extracted (AVE) value of the variable must be> 0.4, and the Composite Reliability (CR) value of each indicator must be> 0.70 to fulfill the reliability test. All AVE values on the variables of this study are above 0.4 (see Table 2), and the composite reliability coefficient values of each indicator of this study are also above 0.70. Thus, it can be concluded that all constructs in this study have good validity and reliability. The feasibility test of the research model was carried out by evaluating the goodness of fit value listed in Table 3. Based on the results of this analysis, the RMSEA value meets the established criteria, so it can be concluded that this research model is suitable for further study.

Table 3. Goodness of Fit (GoF) SEM-AMOS Model

Goodness of index	Cut-off value	Model Results	Description
Chi-Square	Expectedly Small	218,978	Fit
RMSEA	≤0,08	0.059	Fit
GFI	≥0,90	0.899	Marginal Fit
AGFI	≥0,90	0.864	Marginal Fit
CMIN/DF	≤2,0	1.237	Fit
TLI	≥0,95	0.951	Fit
CFI	≥0,95	0.959	Fit

Source: Processed by the author, 2024

Hypothesis Testing

Hypothesis testing is carried out to evaluate the relationship between latent variables in the model under study. (Hair et al., 2019). In structural equation modeling, hypothesis testing is carried out by path analysis using AMOS 24 software assistance. Hypothesis testing indicators through path analysis are carried out by paying attention to the output results of the critical ratio or t-value and p-value. If the p-value is below 0.05, then the hypothesis is accepted. In addition, the influence of variables can be seen in the positive or negative value of the critical ratio (t value) (Hair et al., 2019).

Table 4. Hypothesis Testing

Dimensions			*Estimate*	SE.	CR.	P	Description
ET.	<---	V	0,220	0,107	2,047	0,041	Accepted
IB.	<---	V	0,540	0,111	4,871	0,000	Accepted
IB	<---	ET	0,187	0,076	2,459	0,014	Accepted
IB	<---	PE	0,190	0,079	2,415	0,016	Accepted
IB.	<---	Interaction	0,003	0,001	5,324	0,000	Accepted

Source: Processed by the author, 2024

Based on this table, the following is an explanation of the results of the hypothesis

testing;

1. **Hypothesis 1 (H1)**: Visualization (V) has a positive effect on an emotional trigger (ET), with an estimate of 0.220, a CR value of 2.047, and a p-value of 0.041 ($p < 0.05$). These results indicate that attractive product visualization significantly increases consumers' emotional triggers, supporting hypothesis H1.
2. **Hypothesis 2 (H2)**: Visualization (V) has a positive effect on impulsive buying (IB), with an estimate of 0.540, a CR value of 4.871, and a p-value < 0.001 (***). These results indicate that good product visualization significantly increases consumers' tendency to make impulse buying.
3. **Hypothesis 3 (H3)**: Emotional trigger (ET) has a positive effect on impulsive buying (IB), with an estimate of 0.187, a CR value of 2.459, and a p-value of 0.014 ($p < 0.05$). These results indicate that the higher the emotional trigger consumers feel, the greater their tendency to impulse buying.
4. **Hypothesis 4 (H4)**: Previous experience (PE) affects impulsive buying (IB), with an estimate of 0.190, a CR value of 2.415, and a p-value of 0.016 ($p < 0.05$). This suggests that previous shopping experience also influences impulse buying decisions. The moderating variable coded "interaction" represents the moderating effect of previous experience on the relationship between visualization and impulse buying. The interaction estimate is 0.003, the CR value is 5.324, and the p-value is < 0.001 (***). These results indicate that the interaction or moderation is significant, meaning that previous experience moderates the relationship between visualization and impulse buying. In other words, the effect of visualization on impulse buying is influenced by consumers' previous experiences; positive experiences strengthen the relationship, while negative experiences may weaken it.

Discussion

The results of this study highlight the significant role of product visualization in triggering emotional responses that drive impulse buying behavior. Visual elements such as clarity, aesthetics, and visual effects are critical stimuli that increase consumers' emotional arousal, ultimately influencing impulse purchase decisions. This finding aligns with previous research showing that product visualization on e-commerce platforms is a potent stimulus that increases emotional engagement and accelerates purchase decision-making (Liu et al., 2019). This study confirms that emotional triggers mediate the relationship between visualization and impulse buying, with emotions such as excitement driving consumers to buy when exposed to visually appealing products. In addition, the moderating effect of previous experience is evident, where consumers with positive previous experience are more likely to buy impulse when exposed to effective visual stimuli. In contrast, consumers with negative experiences tend to exhibit more cautious purchasing behavior. This finding supports the research of Hussain et al. (2024), which shows that previous experience serves as a filter that influences consumer responses to visual stimuli in decision-making, strengthening trust in familiar products and reducing risk in unfamiliar products. This moderating role of previous experience suggests that consumer behavior is not entirely driven by impulsivity but is shaped by their previous interactions with the

brand or product. This reinforces that satisfaction with earlier purchases can facilitate future impulse-buying tendencies. Therefore, e-commerce players must create positive consumer experiences to capitalize on this tendency.

Implications

From a practical perspective, these findings provide important implications for e-commerce marketers. Understanding the interplay between product visualization and emotional triggers offers valuable insights for designing more effective marketing strategies. First, emphasizing visually rich product presentation through high-quality images, engaging videos, and aesthetically pleasing layouts can increase consumer engagement and encourage impulse purchase behavior. Visual tools that evoke positive emotions, such as excitement and desire, can increase sales conversion rates.

Secondly, e-commerce platforms should previously experience customer retention through personalized experiences. Given the moderating effect of previous experience, maintaining positive post-purchase interactions is critical to encourage repeat impulse buying. Good post-purchase support, engaging communication, and offers tailored to purchase history can increase customer loyalty and encourage impulse buying on subsequent transactions.

In addition, time-limited promotions, exclusive offers, and product bundling should be visually displayed to maximize emotional engagement. By leveraging emotional triggers such as urgency, brands can drive more effective spontaneous buying behavior, ultimately improving sales performance.

CONCLUSION

This study attempts to contribute to the literature on consumer behavior in e-commerce by examining the relationship between product visualization, emotional triggers, impulse buying, and the moderating role of previous experience. The findings show that well-designed visual stimuli evoke emotional responses and significantly influence impulse purchase behavior, especially in consumers with positive previous experiences. These results emphasize the importance of integrating emotional and visual elements in e-commerce strategies to increase consumer engagement and sales.

Future research could explore the impact of more innovative visual formats, such as augmented reality or virtual try-ons, on impulse purchase behavior across different consumer segments. In addition, examining the long-term impact of impulse buying triggered by emotional triggers could provide deeper insights into consumer satisfaction and post-purchase behavior. Overall, this study highlights the critical role of emotional and visual factors in shaping impulse buying tendencies in digital marketplaces.

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