

The Influence of Digital Marketing, Gamification, and Brand Image on Gen-Z Consumer Loyalty on Shopee E-Commerce Platforms

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ABSTRACT

Objective: This study examines the influence of digital marketing, gamification, and brand image on Generation Z consumer loyalty in the Shopee e-commerce platform in Indonesia. As digital natives, Gen-Z consumers prefer interactive, creative, and technology-driven shopping experiences. **Method:** Using a descriptive quantitative approach, data were collected through an online Likert-scale questionnaire from 100–150 respondents selected via simple random sampling. The Slovin formula was applied to determine sample size. Data analysis employed Structural Equation Modeling-Partial Least Square (SEM-PLS), including tests of validity, reliability, R^2 , f^2 , and bootstrapping. **Results:** Results show that digital marketing, gamification, and brand image together explain 84.6% of the variance in Gen-Z loyalty. Gamification and brand image significantly affect loyalty, with gamification being the most dominant factor. In contrast, digital marketing has a positive but insignificant effect, indicating that Gen-Z is more selective toward repetitive or impersonal promotional content. **Novelty:** These findings highlight the importance of interactive features and strong brand image in building sustainable consumer loyalty.

INTRODUCTION

Generation Z has become one of the largest consumer segments in Indonesia and is highly connected to digital technology. As a cohort born and raised during the technological era, Generation Z displays different preferences compared to previous generations, particularly in terms of digital interaction. They tend to seek personalized, interactive, and technology-driven experiences in daily life, including online shopping. E-commerce platforms, which have become an integral part of the digital lifestyle, face the challenge of meeting Generation Z's high expectations for creativity, convenience, and relevance of services. Therefore, this study is important for understanding how these strategies can be implemented to enhance consumer loyalty within this unique segment.

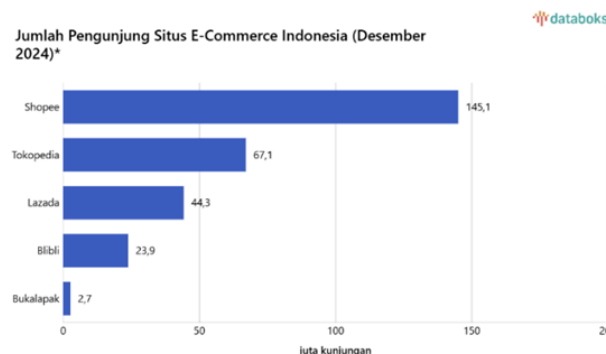


Figure 1. Graph of the Number of Visitors to Indonesian E-Commerce Sites in 2024.

Source: Databoks.

According to data retrieved from Databoks, in December 2024 Shopee Indonesia recorded a significant number of visits, reaching 145.1 million visits worldwide, according to Semrush data. This figure places Shopee as the leader in Indonesia's e-commerce industry, surpassing its nearest competitor, Tokopedia, which recorded only 67.1 million visits. Other sites such as Lazada, Blibli, and Bukalapak recorded lower visit counts of 44.3 million, 23.9 million, and 2.7 million respectively. Nevertheless, only Shopee and Blibli experienced increases in visits compared to the previous month, by 0.26% and 3.88% respectively, while Tokopedia, Lazada, and Bukalapak experienced declines. These data reflect the competitive dynamics within Indonesia's e-commerce market and indicate ongoing changes in consumer behavior [1]. Based on these data, the present study focuses on the Shopee e-commerce platform, which is the most frequently visited online shopping platform by consumers.

With increasing competition in the e-commerce industry, understanding and fulfilling Generation Z's needs through innovative approaches is key to maintaining competitiveness and relevance of e-commerce platforms in Indonesia. E-commerce, as a primary online shopping platform, is a relevant arena for analyzing the effectiveness of such approaches. Current phenomena suggest that Generation Z consumer loyalty can be increased through innovative digital interactions. Integration of digital marketing strategies, gamification elements, and strong brand image construction has proven effective in creating engaging and interactive experiences. This approach aims to satisfy Generation Z's preference for creative and relevant digital experiences, thereby not only increasing user engagement but also driving their loyalty to the e-commerce platform.

Regarding e-commerce applications such as Shopee, sound digital marketing strategies can help create more engaging and efficient shopping experiences. Digital marketing, as defined in previous studies, refers to strategies used to reach consumers via digital platforms; this includes activities such as content marketing, social media, online advertising, and accessible information that can improve consumer engagement [2]. Digital marketing serves as a bridge between companies and consumers, enabling more direct and personal interactions. In today's digital era, understanding and applying effective digital marketing strategies is necessary to compete and maintain market share. Appropriate technology use and innovation in digital marketing will be the keys to achieving sustainable success.

One concept applied across various sectors is gamification, which is commonly used in education and marketing and especially in e-commerce applications like Shopee. Gamification is the application of game elements in non-game contexts to achieve certain objectives, such as increasing motivation, engagement, and user loyalty [3]. Through many features such as mini-games, gamification provides an engaging experience that is not only entertaining but also interactive, adding incentives in the form of attractive rewards or discounts that capture consumer attention. In addition, gamification is designed to fulfill users' intrinsic needs such as satisfaction, a sense of achievement, and enjoyment thus creating stronger emotional ties with the platform. This strategy also aims

to increase the time users spend within the app, make them more engaged with available features, and ultimately encourage them to perform more transactions.

Often, Gen Z perceives brand image as an unforgettable first impression, because brands with positive images tend to attract greater attention in the market. Brand image is the perception or mental picture formed in consumers' minds about a brand based on reputation, trust, and product quality. A strong brand image can influence customer loyalty and drive purchasing decisions, especially in a highly competitive e-commerce landscape like Shopee [4]. In business reality, building a good brand image is akin to planting seeds of trust in consumers' hearts that will yield loyalty. In daily terms, consumers are more likely to choose brands whose branding is relatable or matches current trends. Thus, brand image is not merely about logos or colors but also about consumer experiences regarding quality and service.

Consumer loyalty is an essential element for business sustainability because loyal customers not only make repeat purchases but also act as brand ambassadors who can promote products to others. Consumer loyalty is defined as the customer's commitment to continue choosing or using a company's products or services based on positive experience, satisfaction with product quality, and relationships built through consistent interaction [5]. Prior research has also emphasized that customer loyalty is strongly influenced by digital marketing strategies that increase perceived product quality and create closer relationships with consumers through active interaction. Furthermore, marketing strategies integrated with digital technology enable companies to better understand customer needs and deliver personalized experiences. Therefore, companies can retain customer loyalty amid increasing competition.

However, gaps exist in previous research regarding the gamification variable, where additional creative elements such as game personalization, immersive narratives, and experience-based rewards are often ignored. Most prior studies have focused only on motivation, performance, and engagement aspects of gamification. Yet Generation Z prefers more personal and relevant experiences that may be strengthened through more innovative and creative gamification approaches. In addition, previous subjects are often limited to Shopee users in a single region. This limits the generalizability of results for Generation Z across Indonesia, considering regional preference variations. This study will not be confined to a single area but will include respondents from multiple regions to obtain more relevant and accurate results.

The objective of this study is to analyze the influence of digital marketing, gamification elements, and brand image on Generation Z consumer loyalty on e-commerce platforms in Indonesia. The study aims to deepen understanding of how these three factors contribute to creating engaging, relevant, and innovative consumer experiences that can enhance loyalty. By understanding these relationships, the study is expected to provide strategic recommendations for e-commerce actors to optimize their approaches toward Generation Z.

Problem Formulation

Based on the background described previously, the research problems in this study are formulated as follows:

1. Does digital marketing have an effect on Gen-Z consumer loyalty?
2. Does gamification have an effect on Gen-Z consumer loyalty?
3. Does brand image have an effect on Gen-Z consumer loyalty?
4. Do digital marketing, gamification, and brand image collectively have an effect on Gen-Z consumer loyalty?

Research Questions

Based on the problem formulation described above, the research questions proposed in this study are as follows:

1. How does digital marketing influence Gen-Z consumer loyalty?
2. How does gamification influence Gen-Z consumer loyalty?
3. How does brand image influence Gen-Z consumer loyalty?
4. How do digital marketing, gamification, and brand image collectively influence Gen-Z consumer loyalty?

SDG's Category

This study is strongly related to Sustainable Development Goal (SDG) number 12, "Responsible Consumption and Production," through its focus on the influence of digital marketing, gamification, and brand image on Gen Z consumer loyalty on e-commerce platforms. By increasing consumer awareness regarding quality and sustainable products, this study aims to encourage more prudent consumption behaviors among the younger generation. Additionally, the use of gamification elements in marketing can educate consumers about sustainable practices, fostering deeper engagement with responsible choices. In this way, the study not only supports digital economic growth but also encourages producers to adopt more sustainable production practices, thereby contributing to the reduction of negative environmental impacts.

Digital Marketing

Digital marketing is defined as a marketing strategy that uses digital technology to promote products or services, aiming to create consumer satisfaction and loyalty through various platforms such as social media, e-commerce, and marketplaces. The advantages of digital marketing include wider market reach, efficiency in information delivery, and enhanced online shopping experiences for consumers [6]. Digital marketing is also defined as a marketing approach that integrates multiple digital media such as websites, social media, and other communication platforms to build customer loyalty. This strategy encompasses sales promotions, advertising, direct marketing, and public relations aimed at building brand image, increasing satisfaction, and creating more personal relationships with customers [7]. Digital marketing is not only a tool to achieve marketing objectives but also a means to realize closer and more personal relationships between companies and consumers. Companies operating within the e-commerce ecosystem must understand that the success of digital marketing heavily depends on content relevance,

communication consistency, and adaptability to dynamic market needs. The following indicators are used for the digital marketing variable:

1. Online Promotion: Use of digital advertisements and social media content to attract consumer attention.
2. Consumer Engagement: Positive interaction on digital platforms that enhances satisfaction and loyalty.
3. Accessibility: Ease of consumer access to product information via websites and applications.
4. Content Quality: Relevance and attractiveness of presented content (text, images, videos) to stimulate consumer interest.
5. Responsiveness: Speed and effectiveness in responding to consumer inquiries or feedback.

Gamification

Gamification is defined as the application of game elements such as points, rewards, and enjoyable experiences to create more meaningful interactions between users and platforms. Moreover, gamification elements designed innovatively can create personalized experiences that bind users more closely to the platform. This suggests gamification is not merely a marketing tactic but a strategic approach to add value to applications [8]. Gamification is also defined as an approach that integrates game elements—such as point systems, challenges, and rewards—into non-game contexts to increase engagement and customer loyalty [9]. For example, gamification features such as Shopee Coins and daily challenges have been shown to increase users' motivation to interact with the platform. Research findings indicate that gamification not only makes the shopping experience more enjoyable but also strengthens customer loyalty to the application. The indicators used for the gamification variable are:

1. Reward Attractiveness: The appeal of rewards offered in programs.
2. Competition: Encouraging users to compete.
3. Gamified Loyalty Program: Loyalty programs that incorporate gamification elements.
4. Playfulness: The degree of enjoyment experienced by users interacting with the program.
5. Affective Commitment: Users' emotional commitment to the program.

Brand Image

A positive perception of brand image not only builds customer loyalty but can also enhance a company's competitiveness in competitive markets. Brand image is described as a reflection of service quality, promotion, and consumer trust in a brand; these elements create positive experiences that result in customer loyalty [10]. Brand image is also defined as a combination of functional image, reputation, and brand trust that contributes to consumer satisfaction and loyalty; this further underscores that brand image mediates the relationship between brand trust and customer loyalty [11]. Brand image can be regarded as an important asset for a company because it creates emotional appeal and consumer trust. Success in building brand image is often determined by

consistency in delivering quality, benefits, and satisfying consumer experiences. The indicators used for the brand image variable are [12]:

1. Functional Image: How the product meets consumers' practical needs.
2. Emotional Image: Consumers' emotional attachment to the brand.
3. Brand Associations: Relationships between the brand and other elements such as user experience, product attributes, and social image.
4. Brand Reputation: General perception of the brand's quality and reliability.
5. Brand Recognition: The extent to which consumers recognize the brand.

Consumer Loyalty

Consumer loyalty is one indicator reflecting a brand's success in retaining customers amid intense competition in the e-commerce industry. Consumer loyalty can be defined as customers' commitment to continue doing business with an organization, purchasing its products or services, and recommending them to others [13]. Consumer loyalty is also defined as the commitment to continue repeat purchases, support a brand, and recommend it to others [14]. Loyalty arises from customer satisfaction with their experiences and is influenced by several factors that contribute to building long-term relationships with consumers. By improving customer satisfaction through quality service and building trust in the brand, companies can foster stronger loyalty. The indicators used for the consumer loyalty variable are [15]:

1. Repeat Purchases: Frequency of customers' repeat purchases.
2. Retention: The company's ability to retain customers.
3. Referrals: Customers' recommendations of the brand or product to others.
4. Satisfaction: Customers' satisfaction after using the product or service.
5. Emotional Attachment: Strong emotional bonds between customers and the brand that may affect purchase decisions.

RESEARCH METHOD

Data Sources

This study employs a descriptive quantitative method to analyze the influence of digital marketing, gamification, and brand image on Gen Z consumer loyalty on e-commerce platforms in Indonesia. Data were collected using an online Likert-scale questionnaire (1-5) distributed via Google Forms, with respondents determined by simple random sampling [16].

Population and Sample

The study population comprises Gen Z consumers in Indonesia who actively use the Shopee e-commerce platform. The Slovin formula was used to determine the sample size, allowing researchers to obtain a representative sample size by accounting for margin of error [17]. Generally, the sample size ranges from 100 to 150 respondents. This study does not limit respondents to a single region to encompass diverse perspectives from various regions in Indonesia. This approach is expected to provide more comprehensive and accurate insights regarding Gen Z consumer behavior on Shopee.

Data Analysis

Instruments were tested using the outer model: validity test with outer loading (values > 0.7 and AVE > 0.5) and reliability using Cronbach's Alpha coefficient (values > 0.7 considered reliable). Data analysis was conducted using SEM-PLS, including R^2 testing to measure the ability of independent variables to explain the dependent variable (where 0.75 indicates strong, 0.50 moderate, and 0.25 weak) and f^2 testing to measure effect size (where 0.02 indicates small, 0.15 moderate, and 0.35 large) [18]. To confirm influences and test the hypotheses, bootstrapping was performed with T-statistic criteria ($T > 1.96$ and P-value < 0.05) [19].

Conceptual Framework

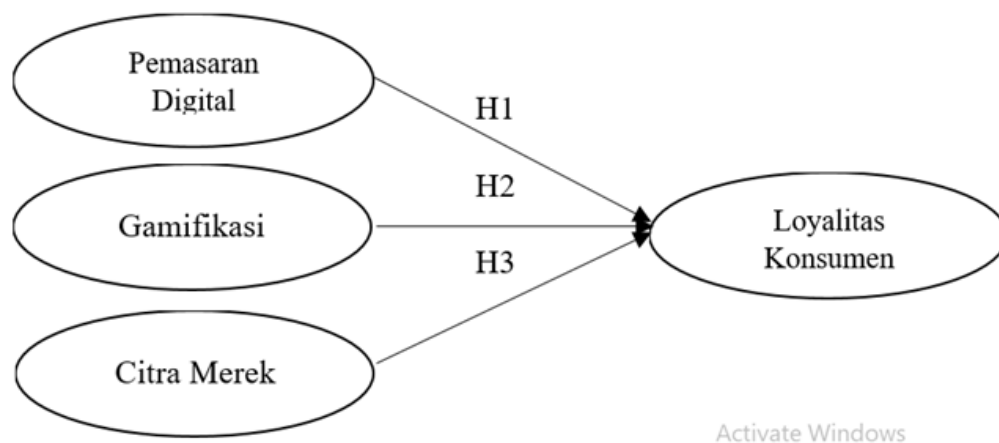


Figure 2. Conceptual Framework.

H1: Digital Marketing influences Consumer Loyalty.

H2: Gamification influences Consumer Loyalty.

H3: Brand Image influences Consumer Loyalty.

RESULTS AND DISCUSSION

1. Outer Model

Table 1. Outer Loadings.

	Brand Image	Gamification	Consumer Loyalty	Digital Marketing
CM1	0.810			
CM2	0.769			
CM3	0.792			
CM4	0.800			
CM5	0.786			
G1		0.805		
G2		0.841		
G3		0.870		
G4		0.850		
G5		0.829		
LK1			0.718	
LK2			0.855	
LK3			0.857	

LK4	0.806	
LK5	0.790	
PD1		0.853
PD2		0.793
PD3		0.750
PD4		0.857
PD5		0.815

Source: SEM-PLS processed data, 2025

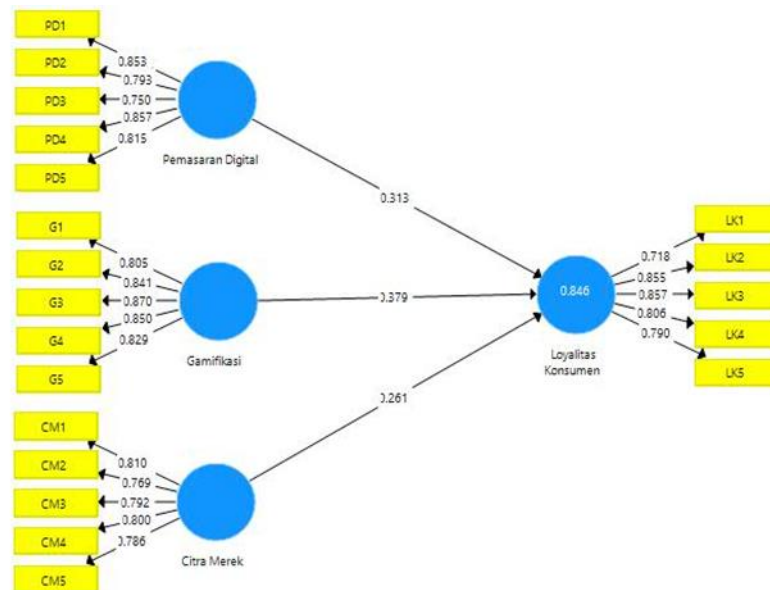


Figure 3. Path Diagram of Outer Loadings.

Source: SEM-PLS processed data, 2025.

The outer loading results demonstrate that all indicators have values above 0.70. These values indicate that each indicator well reflects the measured construct. For instance, indicators of the Brand Image variable (CM1 = 0.810; CM2 = 0.769; CM3 = 0.792; CM4 = 0.800; CM5 = 0.786) illustrate that items related to functional image, emotional image, reputation, and brand recognition consistently represent the brand image construct. A similar pattern is observed for the Gamification variable, where the highest outer loading reaches 0.870 for indicator G3, indicating that the playfulness aspect strongly shapes respondents' perceptions. Likewise, indicators for Digital Marketing show a highest outer loading of 0.857 for PD4, and Consumer Loyalty has a highest outer loading of 0.857 for LK3. Thus, the questionnaire effectively measures the research constructs.

Validity Test

Table 2. Construct Validity.

	Average Variance Extracted (AVE)	Explanation
Brand Image	0.626	Valid
Gamification	0.705	Valid
Consumer Loyalty	0.651	Valid

Digital Marketing	0.663	Valid
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Source: SEM-PLS processed data, 2025.

In this study, the AVE values for all variables are above 0.50 (Brand Image = 0.626; Gamification = 0.705; Consumer Loyalty = 0.651; Digital Marketing = 0.663). Conceptually, high AVE values indicate that more than 50% of indicator variance can be explained by their respective constructs. This means the instruments have adequate indicator representation and explanatory power; respondents (Gen Z) understood each questionnaire item in accordance with the intended variable context.

Reliability Test

Table 3. Construct Reliability.

	Cronbach's Alpha	Composite Reliability	Explanation
Brand Image	0.852	0.893	Reliable
Gamification	0.895	0.923	Reliable
Consumer Loyalty	0.865	0.903	Reliable
Digital Marketing	0.872	0.908	Reliable

Source: SEM-PLS processed data, 2025.

In this study, as shown in Table 2, the Cronbach's Alpha values for each variable are greater than 0.70 (Brand Image = 0.852; Gamification = 0.895; Consumer Loyalty = 0.865; Digital Marketing = 0.872). Similarly, the Composite Reliability values all exceed 0.90, confirming that the research instruments possess a high level of internal consistency. This indicates that the respondents provided stable and consistent responses to the indicators within each variable. Practically, this means that when Generation Z consumers evaluate certain aspects of gamification or brand image, their assessments tend to remain steady and do not fluctuate significantly. Therefore, the reliability of the research instrument can be considered strong, affirming that the questionnaire is capable of generating trustworthy data for further analysis.

2. Inner Model

R² (Coefficient of Determination)

Table 4. R-Square.

	R Square	R Square Adjusted	Explanation
Consumer Loyalty	0.846	0.842	Strong

Source: SEM-PLS processed data, 2025.

The R² value of 0.846 for the Consumer Loyalty variable indicates that the combination of Digital Marketing, Gamification, and Brand Image variables is able to explain 84.6% of the variation in Consumer Loyalty. This suggests that the research model possesses a very strong explanatory power. Accordingly, this result implies that the three independent variables examined are highly relevant in shaping Gen-Z consumer loyalty toward Shopee. However, the remaining 15.4% of the variation in consumer loyalty is influenced by other factors outside the model, such as product

quality, customer service, or competitive pricing. Therefore, although the model demonstrates strong explanatory capability, it is important to consider other external variables that may also affect consumer loyalty.

F2 (Effect Size)

Table 5. F-Square.

	Nilai F ²	Explanation
Digital Marketing	0.063	Weak
Gamification	0.107	Weak
Brand Image	0.097	Weak

Source: SEM-PLS processed data, 2025.

The f^2 values for each variable indicate a weak contribution to Consumer Loyalty (Digital Marketing = 0.063; Gamification = 0.107; Brand Image = 0.097). This finding implies that individually, each independent variable exerts only a minor influence on changes in Consumer Loyalty. However, when combined within a single model, the three variables collectively produce a significant effect and effectively explain the dependent variable. This interpretation is important as it suggests that Generation Z's consumer loyalty is not shaped by a single dominant factor, but rather results from the interplay of multiple factors working together. In other words, although each variable contributes only a small effect on its own, their simultaneous presence generates a substantial overall impact on consumer loyalty.

3. Hypothesis Testing (Bootstrapping)

Table 6. Path Coefficient.

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Brand Image -> Consumer Loyalty	0.261	0.260	0.131	2.002	0.046
Gamification -> Consumer Loyalty	0.379	0.365	0.134	2.837	0.005
Digital Marketing -> Consumer Loyalty	0.313	0.330	0.166	1.882	0.060

Source: SEM-PLS processed data, 2025.

H1: Digital Marketing Influences Consumer Loyalty

The test results indicate that digital marketing has a positive relationship with consumer loyalty; however, the influence is not statistically significant. The original sample value is 0.313, with a T-statistic of $1.882 < 1.96$ and a P-value of $0.060 > 0.05$. This implies that although Shopee's digital marketing strategies have the potential to enhance Gen-Z consumers' loyalty, the effect is not strong enough statistically to establish actual loyalty. This finding suggests that Gen-Z tends to be more selective toward digital content, particularly when it is repetitive or lacks personalization. They are more

responsive to creative, interactive, and personalized marketing strategies. Therefore, Shopee should focus its digital marketing efforts on personalization, storytelling, and interactivity to foster emotional engagement that can ultimately lead to consumer loyalty.

This finding contrasts with previous research by Zulfiana et al. (2024), which revealed that digital marketing had a positive and significant influence on consumer loyalty toward the Shopee application in Makassar [2]. The difference in results may be attributed to variations in respondent segments, as the previous study involved general consumers, whereas the present study focuses on Generation Z. Generation Z exhibits distinct preferences; they tend to reject digital advertisements perceived as repetitive or irrelevant. This reinforces the notion that the effectiveness of digital marketing is highly influenced by market segmentation, particularly when targeting digital-native generations.

H2: The Effect of Gamification on Consumer Loyalty

The results of the hypothesis testing for H2 indicate that gamification has a significant influence on Gen-Z consumer loyalty on the Shopee platform. The original sample value of 0.379 with a T-statistic of 2.837 (> 1.96) and a P-value of 0.005 (< 0.05) demonstrates that Gen-Z consumers respond positively to gamification features such as reward points, daily missions, and interactive games offered by the platform. Gamification not only provides entertainment but also fosters a sense of achievement, emotional engagement, and encourages consumers to interact more frequently with the application. Practically, the implementation of gamification strategies increases user engagement duration, transaction frequency, and strengthens long-term consumer loyalty toward the e-commerce platform. These findings reinforce the position of gamification as the most dominant factor in building Gen-Z loyalty compared to other variables examined in this study.

This result is consistent with the previous findings of Aprilia and Purwanto in their study entitled "The Effect of E-Servicescape and Gamification on Tokopedia Customer Loyalty." Their research also demonstrated that gamification had a positive and significant effect on customer loyalty of Tokopedia users in Surabaya, with a path coefficient value of 0.312 and a T-statistic of 3.174 (> 1.96) [13]. The entertainment dimension was found to be the most dominant aspect of gamification in enhancing customer loyalty, as it creates an enjoyable experience that fosters stronger emotional attachment to the application. Therefore, in both the Shopee and Tokopedia contexts, gamification has been proven effective in enhancing consumer loyalty particularly among younger generations who value interactive, entertaining, and digitally challenging experiences in their online shopping activities.

H3: The Influence of Brand Image on Consumer Loyalty

The test results indicate that brand image has a positive and significant influence on Gen-Z consumer loyalty. The original sample value is 0.261, with a T-statistic of 2.002 > 1.96 and a P-value of 0.046 < 0.05 . This finding suggests that Shopee's reputation, reliability, and brand quality successfully build consumer trust and pride, ultimately strengthening loyalty. Generation Z tends to choose platforms with a consistent,

trustworthy brand image that aligns with their expectations. A positive brand image not only encourages repeat purchases but also fosters brand advocacy, as satisfied consumers are more likely to recommend the platform to others.

This finding is consistent with the previous study by Zulfiana et al. (2024), which also demonstrated that brand image has a positive and significant effect on consumer loyalty. It indicates that brand image remains a relatively stable factor influencing loyalty among both general consumers and Gen-Z [2]. The generational differences do not significantly alter the critical role of brand image, as trust and positive brand perception continue to serve as the foundation for loyalty formation. Therefore, building a strong, consistent, and lifestyle-relevant brand image is a crucial strategy for Shopee to retain its consumers amidst the intense competition in the e-commerce industry.

In this study, the results of the bootstrapping hypothesis test indicate that Digital Marketing has a positive but insignificant effect on Generation Z Consumer Loyalty on the Shopee platform. In contrast, Gamification and Brand Image were found to have significant effects, with Gamification emerging as the most dominant factor. These findings emphasize that Generation Z consumer loyalty is more strongly influenced by interactive experiences and a strong brand image rather than relying solely on digital marketing strategies.

CONCLUSION

Fundamental Finding : This study finds that Gen Z consumer loyalty on the Shopee e-commerce platform is strongly influenced by the combination of digital marketing, gamification, and brand image; these three variables together explain 84.6% of the variance in consumer loyalty. However, partial testing reveals differences in significance levels among the variables. Gamification is the most dominant and significantly influences loyalty, as Gen Z values interactive, enjoyable, and challenging shopping experiences. Brand image also significantly affects loyalty, indicating that trust, reputation, and brand consistency are important for building emotional bonds with consumers. Conversely, digital marketing shows a positive but not significant effect, suggesting Gen Z's selectivity toward digital content and reluctance to be influenced by general and repetitive online advertisements. Therefore, the main conclusion is that Gen Z consumer loyalty is more strongly shaped by interactive experiences and positive brand perceptions than by mere exposure to digital marketing. **Implication :** Practically, these findings can guide e-commerce practitioners in designing marketing strategies suited to Gen Z's characteristics. Gamification is shown to be effective in increasing engagement, so companies can develop interactive features with rewards, missions, and personalization. Maintaining a consistent brand image is also important to build trust and long-term loyalty. Digital marketing should instead emphasize personalized, creative, and interactive approaches to better align with Gen Z needs. Academically, this study contributes to the literature on Gen Z consumer loyalty in the digital era using the PLS approach. **Limitation :** This study has limitations, including a sample size limited to 100–150 respondents, which may not fully represent the Gen Z population across

Indonesia. Additionally, the study focused on a single e-commerce platform, Shopee, so results cannot be generalized to other platforms. The variables examined are limited to three factors, although loyalty can also be influenced by product quality, customer service, price, or broader shopping experiences. **Future Research** : Future research is advised to increase sample size and include respondents from diverse regions across Indonesia for more representative results. Studies could also compare multiple e-commerce platforms to identify differences in the effects of variables on consumer loyalty. Adding variables such as service quality, price, trust, or customer satisfaction would provide a more comprehensive picture. Employing mixed methods or longitudinal designs could deepen findings and capture the dynamics of Gen Z loyalty over time.

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