

THE EFFECT OF GAMIFICATION AND BRAND COOLNESS ON BRAND LOYALTY WITH BRAND ENGAGEMENT AS A MEDIATING VARIABLE

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Abstract

This study aims to analyze the effects of gamification and brand coolness on brand loyalty, with brand engagement serving as a mediating variable among Generation Z consumers of Fore Coffee. This study employed a causal quantitative approach using a survey method, with an online questionnaire administered to 200 respondents selected through purposive sampling. The data were analyzed using Partial Least Squares-based Structural Equation Modeling (PLS-SEM) with SmartPLS 4.0. The results indicate that brand coolness has a positive and significant effect on brand engagement, while brand engagement has a positive and significant effect on brand loyalty. In contrast, gamification does not have a significant effect on either brand engagement or brand loyalty, whether directly or through mediation. Brand coolness also does not have a significant direct effect on brand loyalty; however, it has a significant indirect effect through brand engagement. Thus, brand engagement acts as a full mediator, representing indirect-only mediation, in this relationship. These findings indicate that brand engagement is a central mechanism in shaping brand loyalty among Generation Z consumers, whereas the implementation of gamification in the Fore Coffee application has not yet been effective in building brand engagement or brand loyalty. This study provides practical implications for Fore Coffee to strengthen its consumer engagement strategies in order to build sustainable brand loyalty.

Keywords: Gamification, Brand Coolness, Brand Engagement, Brand Loyalty

1. INTRODUCTION

The coffee shop industry in Indonesia has grown rapidly as coffee consumption has increasingly become part of consumers' lifestyles and social identities, particularly among Generation Z, a consumer group that has grown up alongside the development of digital technology. In the current era, people visit coffee shops not merely to enjoy coffee, but also as part of their modern lifestyle. An article published by RCTI+ (2024) even emphasized that, for Generation Z, drinking coffee is not merely an act of consumption but also a means of fulfilling social needs. This is consistent with the findings of Putra (2021), who explained that coffee-drinking culture among young people is closely associated with the need for social recognition and self-identity. Visiting coffee shops has become a social activity that reflects a person's identity, preferences, and lifestyle. For many individuals, coffee shops are no longer merely places to drink coffee; they are also places to work, complete assignments, relax, meet friends, or simply enjoy a comfortable and aesthetically appealing atmosphere. According to Firdaus (2022), the aesthetics of coffee shop spaces are not only

intended to provide comfort but are also designed to encourage consumers to share their experiences on social media, thereby expanding market reach. This indicates that coffee consumption has shifted from the fulfillment of a basic need to a lifestyle and experiential activity, contributing to the increasingly rapid growth of modern coffee shops.

Domestic coffee consumption has also continued to increase along with the growing number of coffee consumers in Indonesia. During the 2024/2025 period, domestic coffee consumption increased from 4.45 million bags in 2020/2021 to 4.8 million bags by the end of 2025 (Kompas.id, 2025). This reflects the strength of the coffee consumption culture embedded in the daily routines of Indonesian society. Along with this increase in coffee consumption, the Indonesian coffee market is projected to grow by USD 1.1 billion, with a possible compound annual growth rate (CAGR) of approximately 4.6% between 2025 and 2030 (Kompas.id, 2025). This growth creates substantial opportunities for industry players while simultaneously intensifying competition among coffee shop brands.

The object of this study is Fore Coffee, a local coffee shop brand established in 2018 and recognized as a pioneer of technology-enabled coffee chains in Indonesia. Fore Coffee applies gamification elements, including point systems, vouchers, and referral codes, through its mobile application and develops brand coolness through visual aesthetics, collaborations with influential figures, such as the Fore Essentials Icon 2024, and social campaigns such as #FOREssentiallyYou. Since its establishment, Fore Coffee has relied on its mobile application for online coffee ordering and has implemented an online-to-offline system. This strategy is aligned with the lifestyle of urban communities, which increasingly demands efficiency and speed. In 2025, Fore Coffee successfully conducted an Initial Public Offering (IPO) on the Indonesia Stock Exchange (IDX) as part of its business strengthening strategy, as reported on the fore.coffee.id website. This indicates that Fore Coffee is a growing company that continues to expand its market reach. Fore Coffee also uses digital technology as a central component of its operations and purchasing processes, including purchases made through its application. This innovation has positioned Fore Coffee as one of the coffee shop brands capable of integrating technology with a modern lifestyle.

From a business performance perspective, Fore Coffee has demonstrated highly significant growth. Based on the sales reports of PT Fore Coffee Indonesia Tbk, the company's sales were recorded at IDR 482 billion in 2023, IDR 1.038 trillion in 2024, and IDR 1.947 trillion in 2025. Over a two-year period, Fore Coffee's sales continued to increase and exceeded IDR 1 trillion. This reflects an increase in the number of transactions and a continuously expanding customer base. Although this achievement indicates favorable business conditions, it does not imply that Fore Coffee can remain passive and merely rely on its current performance. Data from the Top Brand Index (TBI) for 2023-2025 indicate that Fore Coffee remained substantially behind Kopi Kenangan and Janji Jiwa, recording TBI values ranging from only 6.9% to 9.5%, compared with more than 39% for both competitors (Top Brand Award, 2023-2025). The gap between transaction growth and the relatively low brand loyalty index represents the principal issue addressed in this study, namely that Fore Coffee's brand loyalty has not developed proportionately to its business growth. Therefore, Fore Coffee must continue striving to remain consumers' primary choice. Moreover, an increasing number of new players have entered the coffee shop industry by relying on innovation and differentiation strategies. Established coffee shop brands have also continued to adjust their strategies in order to maintain their market shares. Consequently,

Fore Coffee faces intense competition and must maximize its efforts to remain consumers' primary choice. Accordingly, Fore Coffee needs to understand and effectively manage the principal factors that encourage consumers to remain loyal.

This phenomenon provides an interesting and relevant foundation for the study. Fore Coffee has recorded exceptional year-to-year sales growth, reflecting an increase in transactions and an expanding customer base. On the other hand, Fore Coffee's TBI remains substantially lower than those of Janji Jiwa and Kopi Kenangan, indicating a gap between transaction growth and the development of genuine brand loyalty. In other words, consumers may increasingly purchase Fore Coffee products without necessarily becoming truly loyal customers, namely customers who consistently choose, recommend, and remain committed to Fore Coffee over other brands. In this context, Fore Coffee needs to strengthen its marketing strategies, particularly by developing stronger and more meaningful relationships with customers in order to increase genuine brand loyalty.

Based on the phenomena and challenges described above, research on the effects of gamification and brand coolness on brand loyalty through brand engagement in the context of modern coffee shop brands is highly relevant and strategically important. This study is not limited to conducting a scientific examination of the causal relationships among the four variables, but also seeks to formulate effective marketing strategies for Fore Coffee in building and maintaining Generation Z consumers' loyalty to the Fore Coffee brand, thereby optimizing Fore Coffee's marketing performance. Thus, the urgency of this study is relevant not only from an academic perspective but also because it offers significant practical implications for the development of marketing strategies based on gamification and brand coolness in an increasingly competitive modern coffee shop industry. Accordingly, this study focuses on the effects of gamification and brand coolness on brand loyalty, with brand engagement serving as a mediating variable in the context of Fore Coffee.

HYPOTHESIS DEVELOPMENT

The Relationship Between Gamification and Brand Engagement

Gamification refers to the application of game elements, such as points, levels, challenges, and rewards, in non-game contexts to increase user motivation and engagement (Utami et al., 2025; Wengi et al., 2022). The application of gamification elements in a brand's marketing strategy can create enjoyable, interactive, and personalized experiences for consumers, thereby encouraging them to continue participating in the activities developed by the brand. Consumers may experience emotionally rich interactions that, in turn, can foster deeper engagement with the brand. Consumers who actively participate in gamification activities may experience a sense of satisfaction from each achievement, such as earning and accumulating points or receiving exclusive rewards. Indirectly, this experience may encourage consumers to become increasingly engaged with the brand. This argument is supported by Li and Aumeboonsuke (2025), who demonstrated a positive effect of gamification on brand engagement. The more effectively a brand implements gamification, the higher the level of consumer engagement with the brand. Based on the relationship between gamification and brand engagement described above, the first hypothesis is formulated as follows:

H1: Gamification has a significant effect on brand engagement.

The Relationship Between Brand Coolness and Brand Engagement

Brand coolness refers to consumers' perceptions of a brand as attractive, unique, authentic, and socially appealing, thereby differentiating it from other brands (Warren et al., 2019). Brands perceived as cool tend to generate strong appeal because they possess extraordinary, aesthetically appealing, and iconic characteristics. These characteristics encourage consumers to pay greater attention to and explore the activities undertaken by the brand. When consumers perceive a brand as cool, they may feel enthusiastic and proud to be associated with it, naturally encouraging deeper emotional engagement.

Liu and Teng (2023) examined the effect of brand coolness on brand engagement using signaling theory, which proposes that the credibility and meaning of information influence an individual's perception of the value of that information. Positive evaluations arising from the cool signals conveyed by a brand's products or services can encourage consumers to engage with the brand. One reason brand coolness may influence brand engagement is that cool features are associated with higher brand status and prestige (Dar-Nimrod et al., 2012). This argument is supported by Khamwon and Kularbkaew (2021), who demonstrated that brand coolness has a positive effect on brand engagement. The stronger consumers' perceptions of a brand's attractiveness, the higher their engagement with the brand. Based on the relationship between brand coolness and brand engagement described above, the second hypothesis is formulated as follows:

H2: Brand coolness has a significant effect on brand engagement.

The Relationship Between Gamification and Brand Loyalty

As previously discussed, gamification in marketing refers to the integration of game elements, such as points, badges, or leaderboards, into marketing strategies to engage customers. By combining elements of enjoyment and competition, gamification increases customer engagement with a brand and thereby encourages brand loyalty (Karyadi et al., 2023). The relationship among gamification, customer engagement, and brand loyalty is symbiotic (Tien Minh et al., 2023). Increased engagement resulting from gamification leads to stronger brand attachment, which in turn results in greater brand loyalty. This argument is supported by Wulandari et al. (2022), who demonstrated that gamification has a positive and significant effect on brand loyalty. The greater the integration of gamification elements within a brand, the higher consumers' loyalty to that brand. Based on the relationship between gamification and brand loyalty described above, the third hypothesis is formulated as follows:

H3: Gamification has a significant effect on brand loyalty.

The Relationship Between Brand Coolness and Brand Loyalty

Brands identified as cool, as a result of unique and distinctive brand associations, are expected to possess a competitive advantage that enhances and strengthens their relationships with consumers through loyalty behavior (Keller, 2003; Yoo & Donthu, 2001). Consistent with previous researchers, brand coolness should provide subjectively superior value compared with other alternatives within a particular sector (Belk et al., 2010; Dar-Nimrod et al., 2012; Tiwari et al., 2021). Consumers who interact with cool service brands may perceive that they share similar meanings in constructing their identities. The identity-

related dynamics of service brand coolness take place within experiential and social environments that consumers inevitably share with other consumers, such as restaurants, museums, coffee shops, bookstores, and physical retail stores (Belk, 2006; Belk, 2010). Consequently, the sense of belonging fostered by a cool service brand community, together with the inseparable relationship between the brand and consumers' self-presentation to others, can increase loyalty through brand exposure and tangible support from the collective, including other consumers and brand personnel (Oliver, 1999). This argument is supported by Jiménez-Barreto et al. (2022), who demonstrated that service brand coolness has a positive effect on brand loyalty. The stronger the coolness associated with a brand, the higher consumers' loyalty to that brand. Based on the relationship between brand coolness and brand loyalty described above, the fourth hypothesis is formulated as follows:

H4: Brand coolness has a significant effect on brand loyalty.

The Relationship Between Brand Engagement and Brand Loyalty

In the current environment of increasingly intense business competition, maintaining consumer loyalty has become one of the greatest challenges faced by companies. Brand loyalty reflects not only consumer satisfaction but also an emotional commitment that encourages consumers to continue choosing the same brand despite the availability of alternative brands. In a competitive market, companies must continuously identify effective strategies to maintain and increase consumer loyalty as a key factor in long-term business sustainability (Atmaja & Afandi, 2024). According to Rachmanu et al. (2024), one important factor influencing brand loyalty is brand engagement, which refers to the extent to which consumers are actively involved with a brand. Such engagement can be cognitive, emotional, or behavioral. When consumers feel connected to a brand through deep engagement, they tend to develop a stronger sense of ownership and loyalty. Brand engagement also plays an important role in shaping consumer perceptions and establishing sustainable relationships with a brand. This argument is supported by Zahrayunita et al. (2025), who demonstrated that brand engagement significantly influences brand loyalty. The higher the level of consumer engagement with a brand, the greater the consumers' loyalty to that brand. Based on the relationship between brand engagement and brand loyalty described above, the fifth hypothesis is formulated as follows:

H5: Brand engagement has a significant effect on brand loyalty.

The Mediating Role of Brand Engagement in the Effect of Gamification on Brand Loyalty

Effective gamification is expected to be positively received by consumers and subsequently encourage their active engagement with the brand. This is supported by Wulandari et al. (2022) and Salsabilah (2023), who demonstrated that gamification significantly influences brand engagement. Brand engagement may then generate sustained emotional and cognitive involvement, thereby encouraging the development of brand loyalty (Sujana et al., 2023). On this basis, brand engagement can serve as an intermediary variable that connects or bridges the indirect relationship between gamification and brand loyalty. Based on the relationships among gamification, brand engagement, and brand loyalty described above, the sixth hypothesis is formulated as follows:

H6: Gamification has an indirect effect on brand loyalty through brand engagement.

The Mediating Role of Brand Engagement in the Effect of Brand Coolness on Brand Loyalty

Consumers' perceptions of brand coolness, reflected in a brand identity that is unique, modern, and different from those of competitors, can encourage active consumer engagement with the brand. This is supported by Khamwon and Kularbkaew (2021) and Attiq et al. (2022), who demonstrated that brand coolness significantly affects brand engagement. The brand engagement experienced by consumers may subsequently generate sustained emotional and cognitive involvement, thereby encouraging the development of brand loyalty (Li & Aumeboonsuke, 2025). On this basis, brand engagement can function as an intermediary variable that connects or bridges the indirect relationship between brand coolness and brand loyalty. Based on the relationships among brand coolness, brand engagement, and brand loyalty described above, the seventh hypothesis is formulated as follows:

H7: Brand coolness has an indirect effect on brand loyalty through brand engagement.

2. RESEARCH METHOD

This study employed a quantitative approach with a survey design to analyze the effects of gamification and brand coolness on brand loyalty, both directly and indirectly through brand engagement as a mediating variable. The research object was Fore Coffee, and the data were obtained from Generation Z consumers who had purchased Fore Coffee products and used the Fore Coffee application.

The population comprised Fore Coffee consumers in Indonesia who were born between 1997 and 2012. The sample was selected using non-probability sampling with a purposive sampling technique. Respondents were required to meet the following criteria: (1) being 14-29 years old; (2) having purchased Fore Coffee products at least three times during the previous six months; and (3) having used the Fore Coffee application for at least six months. The study involved 200 respondents. This sample size was considered adequate for PLS-SEM analysis and a mediation model based on the recommendation of Hair et al. (2021) and the sample size range for social research proposed by Roscoe (1975).

The study used both primary and secondary data. Primary data were obtained by distributing an online questionnaire through Google Forms, whereas secondary data were obtained from previous studies, coffee shop industry reports, and Fore Coffee's official website. The questionnaire used a five-point Likert scale ranging from 1, indicating "strongly disagree," to 5, indicating "strongly agree."

Four constructs were measured in this study. Gamification was measured using the indicators of sense of control, goals, progress tracking, and rewards adapted from Eisingerich et al. (2019). Brand coolness was measured using the indicators of extraordinary, aesthetically appealing, energetic, high status, iconic, and popular based on Warren et al. (2019). Brand engagement was measured using enthusiasm, attention, absorption, interaction, and identification, referring to So et al. (2024). Brand loyalty was measured using repeat purchase intention, self-stated retention, price insensitivity, resistance to counter-persuasion, and the likelihood of spreading positive word of mouth based on Ganesh et al. (2000).

The data were analyzed using Partial Least Squares-based Structural Equation Modeling with SmartPLS 4.0. PLS-SEM was selected because it can analyze relationships among latent variables and simultaneously examine models involving direct and indirect effects (Sholihin & Ratmono, 2021). The measurement model was evaluated using convergent validity, discriminant validity, Cronbach's alpha, and composite reliability, as explained by Ghazali and Latan (2015). The structural model was subsequently evaluated using R-square and Q-square values. Hypothesis testing was conducted through a bootstrapping procedure at a 5% significance level. A hypothesis was accepted when the t-statistic exceeded 1.96 and the p-value did not exceed 0.05 (Hussein, 2015).

3. RESULTS AND DISCUSSION

3.1 Measurement Model or Outer Model Evaluation

3.1.1 Convergent Validity

Table 1. Outer Loading Values

Latent Variable	Indicator	Outer Loading	Description
Gamification	X1.1	0.937	Valid
	X1.2	0.982	Valid
	X1.3	0.980	Valid
	X1.4	0.963	Valid
Brand Coolness	X2.1	0.924	Valid
	X2.2	0.944	Valid
	X2.3	0.951	Valid
	X2.4	0.964	Valid
	X2.5	0.917	Valid
	X2.6	0.941	Valid
Brand Engagement	Y1.1	0.964	Valid
	Y1.2	0.954	Valid
	Y1.3	0.966	Valid
	Y1.4	0.954	Valid
	Y1.5	0.967	Valid
Brand Loyalty	Y2.1	0.938	Valid
	Y2.2	0.954	Valid
	Y2.3	0.971	Valid
	Y2.4	0.977	Valid
	Y2.5	0.971	Valid

Source: Primary data processed using SmartPLS 4, 2026.

As shown in Table 1, all indicators had outer loading values ranging from 0.917 to 0.982. All values exceeded the minimum threshold of 0.70. Therefore, indicators X1.1-X1.4, X2.1-X2.6, Y1.1-Y1.5, and Y2.1-Y2.5 met the convergent validity criterion based on their outer loading values.

The highest outer loading value was recorded for indicator X1.2 at 0.982, whereas the lowest was recorded for indicator X2.5 at 0.917. Although it was the lowest value, it remained substantially above the minimum threshold of 0.70. These results indicate that all indicators had a very strong ability to represent their respective constructs.

In addition to outer loading values, convergent validity was evaluated based on the Average Variance Extracted (AVE), as presented in Table 2.

Table 2. Average Variance Extracted (AVE) Values

Latent Variable	AVE	Description
Gamification	0.932	Meets the criterion
Brand Coolness	0.884	Meets the criterion
Brand Engagement	0.923	Meets the criterion
Brand Loyalty	0.926	Meets the criterion

Source: Primary data processed using SmartPLS 4, 2026.

As presented in Table 2, all constructs had AVE values greater than 0.50. Gamification had an AVE value of 0.932, brand coolness had an AVE value of 0.884, brand engagement had an AVE value of 0.923, and brand loyalty had an AVE value of 0.926. These values indicate that each construct explained more than 50% of the variance in its indicators. Therefore, all constructs met the convergent validity criteria based on both outer loading and AVE values.

3.1.2 Discriminant Validity

Discriminant validity was used to ensure that each construct possessed empirical characteristics that distinguished it from the other constructs. In this study, discriminant validity was evaluated using cross-loading values and the Fornell-Larcker criterion. Under the cross-loading assessment, an indicator meets the discriminant validity criterion when its loading on its intended construct is higher than its loading on the other constructs. The cross-loading results are presented in Table 3.

Table 3. Cross-Loading Values

Indicator	Gamification	Brand Coolness	Brand Engagement	Brand Loyalty
X1.1	0.937	0.854	0.463	0.332
X1.2	0.982	0.892	0.504	0.344
X1.3	0.980	0.891	0.487	0.352
X1.4	0.963	0.912	0.433	0.338
X2.1	0.828	0.924	0.562	0.414
X2.2	0.823	0.944	0.578	0.439
X2.3	0.928	0.951	0.445	0.337
X2.4	0.923	0.964	0.474	0.358
X2.5	0.799	0.917	0.586	0.426
X2.6	0.913	0.941	0.427	0.325
Y1.1	0.483	0.539	0.964	0.622
Y1.2	0.435	0.505	0.954	0.614

Indicator	Gamification	Brand Coolness	Brand Engagement	Brand Loyalty
Y1.3	0.487	0.553	0.966	0.624
Y1.4	0.484	0.540	0.954	0.589
Y1.5	0.463	0.522	0.967	0.584
Y2.1	0.363	0.414	0.644	0.938
Y2.2	0.328	0.400	0.578	0.954
Y2.3	0.306	0.373	0.568	0.971
Y2.4	0.342	0.393	0.623	0.977
Y2.5	0.359	0.409	0.618	0.971

Source: Primary data processed using SmartPLS 4, 2026.

As shown in Table 3, each indicator had its highest loading on the construct it was intended to measure. Indicators X1.1-X1.4 had their highest loadings on gamification, indicators X2.1-X2.6 on brand coolness, indicators Y1.1-Y1.5 on brand engagement, and indicators Y2.1-Y2.5 on brand loyalty. These results indicate that each indicator represented its intended construct more strongly than the other constructs. Therefore, all indicators met the discriminant validity criterion based on cross-loading values.

Discriminant validity was subsequently evaluated using the Fornell-Larcker criterion. This criterion compares the square root of the AVE of each construct with its correlations with the other constructs. The results are presented in Table 4.

Table 4. Fornell-Larcker Criterion Values

Latent Variable	Gamification	Brand Coolness	Brand Engagement	Brand Loyalty
Gamification	0.965			
Brand Coolness	0.919	0.940		
Brand Engagement	0.490	0.554	0.961	
Brand Loyalty	0.354	0.414	0.632	0.962

Source: Primary data processed using SmartPLS 4, 2026.

As shown in Table 4, the square roots of the AVE on the main diagonal were 0.965 for gamification, 0.940 for brand coolness, 0.961 for brand engagement, and 0.962 for brand loyalty. The square root of the AVE for each construct was higher than its correlations with the other constructs. Therefore, based on the Fornell-Larcker criterion, each construct had a stronger ability to explain its own indicators than those of the other constructs.

Nevertheless, the correlation between gamification and brand coolness was 0.919, which is very high and close to the square roots of the AVE of both constructs. This condition indicates a strong empirical similarity between gamification and brand coolness. Therefore, discriminant validity was not assessed solely through the Fornell-Larcker criterion, but was also strengthened through the Heterotrait-Monotrait Ratio (HTMT) assessment.

HTMT was used to evaluate the degree of empirical distinction among the constructs in the research model. A pair of constructs is considered to meet the discriminant validity criterion when the HTMT value is below 0.90. The HTMT results are presented in Table 5.

Table 5. Heterotrait-Monotrait Ratio (HTMT) Values

Latent Variable	Gamification	Brand Coolness	Brand Engagement	Brand Loyalty
Gamification	-			
Brand Coolness	0.948	-		
Brand Engagement	0.500	0.557	-	
Brand Loyalty	0.361	0.416	0.643	-

Source: Primary data processed using SmartPLS 4, 2026.

As shown in Table 5, the HTMT values among the constructs ranged from 0.361 to 0.948. This study used a more liberal acceptance threshold of 0.95, as applied by Liana et al. (2023). Based on this criterion, all HTMT values remained below 0.95. Therefore, all pairs of constructs in the research model were considered to meet the discriminant validity criterion based on the HTMT assessment.

The highest HTMT value was found between gamification and brand coolness, at 0.948. Although this value remained within the acceptance threshold used in this study, it was very close to the threshold of 0.95 and indicated a strong empirical proximity between the two constructs. Therefore, the structural analysis results involving gamification and brand coolness should be interpreted cautiously.

Despite their high empirical proximity, gamification and brand coolness were retained as distinct constructs because they have different conceptual definitions and measurement indicators. This conclusion was also supported by the cross-loading results, which showed that each indicator had its highest loading on its intended construct, as well as by the Fornell-Larcker criterion, which showed that the square root of the AVE of each construct exceeded its correlations with the other constructs. Based on the overall results of these assessments, the measurement model was considered to have met the discriminant validity requirements.

3.1.3 Construct Reliability

Construct reliability was used to assess the internal consistency of the indicators in measuring their respective latent constructs. A construct is considered reliable when its Cronbach's alpha and composite reliability values exceed 0.70. The rho_A value was also used as an additional measure of the internal consistency of the constructs. The reliability assessment results are presented in Table 6.

Table 6. Construct Reliability Values

Latent Variable	Cronbach's Alpha	rho_A	Composite Reliability (rho_C)	AVE
Gamification	0.976	0.978	0.982	0.932
Brand Coolness	0.974	0.981	0.979	0.884
Brand Engagement	0.979	0.980	0.984	0.923

Latent Variable	Cronbach's Alpha	rho_A	Composite Reliability (rho_C)	AVE
Brand Loyalty	0.980	0.981	0.984	0.926

Source: Primary data processed using SmartPLS 4, 2026.

As shown in Table 6, all constructs had Cronbach's alpha, rho_A, and composite reliability values greater than 0.70. The Cronbach's alpha values ranged from 0.974 to 0.980, while the composite reliability values ranged from 0.979 to 0.984. Therefore, all constructs demonstrated very high internal consistency and met the reliability criteria.

Nevertheless, reliability values exceeding 0.95 may also indicate an extremely high degree of similarity among the indicators. Therefore, the content of each indicator should still be examined to ensure that the indicators are not conceptually repetitive.

Overall, the measurement model evaluation showed that all indicators and constructs met the convergent validity, discriminant validity, and reliability criteria. Therefore, the analysis proceeded to the structural model evaluation.

3.2 Structural Model or Inner Model Evaluation

3.2.1 Coefficient of Determination (R-Square)

The coefficient of determination indicates the proportion of variance in an endogenous construct that can be explained by the exogenous constructs in the research model. The endogenous constructs in this study were brand engagement and brand loyalty. The R-square results are presented in Table 7.

Table 7. Coefficient of Determination Values

Endogenous Variable	R-Square	Adjusted R-Square
Brand Engagement	0.309	0.302
Brand Loyalty	0.406	0.397

Source: Primary data processed using SmartPLS 4, 2026.

As shown in Table 7, the R-square value for brand engagement was 0.309. This result indicates that gamification and brand coolness jointly explained 30.90% of the variance in brand engagement, while the remaining 69.10% was explained by factors outside the research model. The adjusted R-square value of 0.302 indicates that, after accounting for the number of predictors, the proportion of variance explained by the model was 30.20%.

The R-square value for brand loyalty was 0.406, indicating that gamification, brand coolness, and brand engagement jointly explained 40.60% of the variance in brand loyalty. The remaining 59.40% was explained by other factors not included in the research model. The adjusted R-square value for brand loyalty was 0.397.

Overall, the research model had a meaningful explanatory ability with respect to brand engagement and brand loyalty. However, other factors outside the model may also influence both constructs.

3.2.2 Direct Effects

Direct effects were examined through a bootstrapping procedure. A relationship was considered significant when the p-value was below 0.05, which is equivalent to a t-statistic greater than 1.96 in a two-tailed test at the 5% significance level. The direct effect results are presented in Table 8.

Table 8. Direct Effect Testing Results

Hypothesis	Variable Relationship	Path Coefficient	t-Statistic	P-Value	Decision
H1	Gamification → Brand Engagement	-0.123	0.555	0.579	Rejected
H2	Brand Coolness → Brand Engagement	0.666	3.354	0.001	Accepted
H3	Gamification → Brand Loyalty	-0.097	0.644	0.520	Rejected
H4	Brand Coolness → Brand Loyalty	0.184	1.150	0.250	Rejected
H5	Brand Engagement → Brand Loyalty	0.578	8.672	0.000	Accepted

Source: Primary data processed using SmartPLS 4, 2026.

As shown in Table 8, gamification had a path coefficient of -0.123 for brand engagement, with a t-statistic of 0.555 and a p-value of 0.579. The p-value exceeded 0.05 and the t-statistic was below 1.96. Therefore, gamification did not have a significant effect on brand engagement, and H1 was rejected.

Brand coolness had a path coefficient of 0.666 for brand engagement, with a t-statistic of 3.354 and a p-value of 0.001. The p-value was below 0.05 and the t-statistic exceeded 1.96. Therefore, brand coolness had a positive and significant effect on brand engagement, and H2 was accepted. The positive coefficient indicates that the stronger consumers' perceptions of Fore Coffee's brand coolness, the higher their engagement with the brand.

Gamification had a path coefficient of -0.097 for brand loyalty, with a t-statistic of 0.644 and a p-value of 0.520. The p-value exceeded 0.05 and the t-statistic was below 1.96. Therefore, gamification did not have a significant effect on brand loyalty, and H3 was rejected.

Brand coolness had a path coefficient of 0.184 for brand loyalty, with a t-statistic of 1.150 and a p-value of 0.250. The p-value exceeded 0.05 and the t-statistic was below 1.96. Therefore, brand coolness did not have a significant direct effect on brand loyalty, and H4 was rejected.

Brand engagement had a path coefficient of 0.578 for brand loyalty, with a t-statistic of 8.672 and a p-value of 0.000. The p-value was below 0.05 and the t-statistic exceeded 1.96. Therefore, brand engagement had a positive and significant effect on brand loyalty, and H5 was accepted.

The t-statistic of 8.672 for the relationship between brand engagement and brand loyalty was the highest among all direct relationships. This result indicates that brand engagement was the strongest direct predictor of brand loyalty in the research model.

3.2.3 Specific Indirect Effects

Indirect effects were tested to determine the mediating role of brand engagement in the relationships between gamification and brand loyalty and between brand coolness and

brand loyalty. Mediation was considered to occur when the indirect effect had a p-value below 0.05. The results are presented in Table 9.

Table 9. Mediation Test Results (Indirect Effect)

Hypothesis	Indirect Relationship	Coefficient	t-Statistic	p-Value	Decision
H6	Gamification → Brand Engagement → Brand Loyalty	-0.071	0.556	0.578	Rejected
H7	Brand Coolness → Brand Engagement → Brand Loyalty	0.385	3.171	0.002	Accepted

Source: Primary data processed using SmartPLS 4, 2026.

As shown in Table 9, the indirect effect of gamification on brand loyalty through brand engagement had a coefficient of -0.071, a t-statistic of 0.556, and a p-value of 0.578. Because this indirect effect was not significant, brand engagement did not mediate the effect of gamification on brand loyalty. Therefore, H6 was rejected.

The indirect effect of brand coolness on brand loyalty through brand engagement had a coefficient of 0.385, a t-statistic of 3.171, and a p-value of 0.002. This indirect effect was positive and significant; therefore, H7 was accepted.

Because the direct effect of brand coolness on brand loyalty was not significant, whereas its indirect effect through brand engagement was significant, this relationship pattern indicates that brand engagement acts as a full mediator, or represents indirect-only mediation, in the effect of brand coolness on brand loyalty.

These results indicate that consumers' perceptions of Fore Coffee as an attractive, aesthetically appealing, energetic, high-status, iconic, and popular brand do not directly establish loyalty. Perceptions of brand coolness first increase consumers' attention, enthusiasm, interaction, absorption, and identification with Fore Coffee. Once consumer engagement has been established, consumers' tendency to continue choosing and remaining loyal to Fore Coffee increases.

3.2.4 Total Effects

The total effect is the sum of the direct and indirect effects. Total effect analysis was used to describe the overall effect of one construct on another. The results are presented in Table 10. Based on Table 10, the total effect of brand coolness on brand loyalty had a coefficient of 0.568, a t-statistic of 2.707, and a p-value of 0.007. These results indicate that, overall, brand coolness had a positive and significant effect on brand loyalty.

Table 10. Total Effect Testing Results

Variable Relationship	Total Coefficient	t-Statistic	p-Value	Description
Gamification → Brand Engagement	-0.123	0.555	0.579	Not significant

The Effect of Gamification and Brand Coolness on Brand Loyalty With Brand Engagement as A Mediating Variable

Bekti et al, 2026

Variable Relationship	Total Coefficient	t-Statistic	p-Value	Description
Brand Coolness → Brand Engagement	0.666	3.354	0.001	Significant
Gamification → Brand Loyalty	-0.168	0.734	0.463	Not significant
Brand Coolness → Brand Loyalty	0.568	2.707	0.007	Significant
Brand Engagement → Brand Loyalty	0.578	8.672	0.000	Significant

Source: Processed using SmartPLS.

The total effect results differed from the direct effect of brand coolness on brand loyalty, which was not significant. This difference indicates that the effect of brand coolness on brand loyalty was primarily established through brand engagement. Thus, consumers' perceptions of Fore Coffee as an attractive, modern, and relevant brand did not directly establish loyalty, but first encouraged their engagement with the brand, which subsequently contributed to increased brand loyalty.

The total effect of brand engagement on brand loyalty had a coefficient of 0.578, a t-statistic of 8.672, and a p-value below 0.001. These results indicate that brand engagement had a positive and significant effect on brand loyalty. The higher consumers' engagement with Fore Coffee, the greater their tendency to maintain their choice, make repeat purchases, and recommend the brand.

Meanwhile, the total effect of gamification on brand engagement had a coefficient of -0.123, a t-statistic of 0.555, and a p-value of 0.579. The total effect of gamification on brand loyalty had a coefficient of -0.168, a t-statistic of 0.734, and a p-value of 0.463. Because both p-values exceeded 0.05, gamification did not have a significant overall effect on either brand engagement or brand loyalty. Therefore, the implementation of gamification elements in the Fore Coffee application was not shown to make a significant contribution to brand engagement or brand loyalty in the research model.

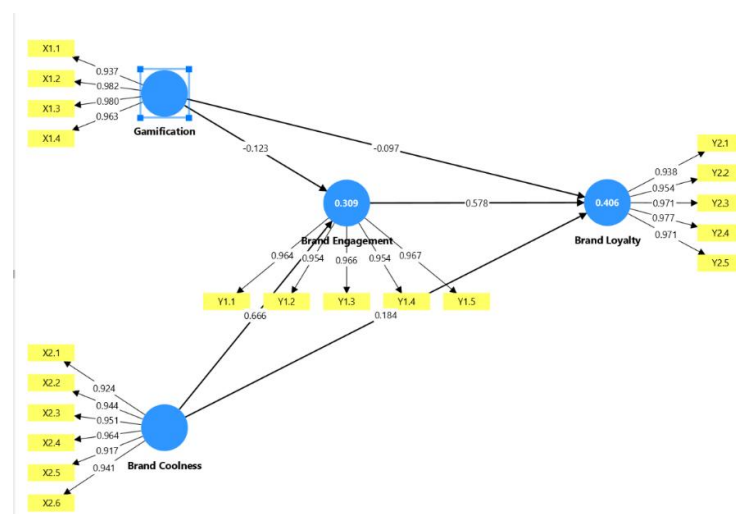


Figure 1. PLS-SEM Structural Model Estimation Results

3.3 DISCUSSION

The Effect of Gamification on Brand Engagement

Fore Coffee's gamification features, such as points, vouchers, and rewards, were not shown to increase brand engagement among Generation Z consumers. The negative direction of the coefficient cannot be interpreted as a decreasing effect because the relationship was not statistically significant. This finding differs from those of Xi and Hamari (2020) and Bitrián et al. (2021), who found that gamification can increase engagement by fulfilling the psychological needs for competence, autonomy, and social relatedness. This difference indicates that Fore Coffee's gamification features may still be perceived primarily as transactional incentives or promotions rather than as game-like experiences capable of building an emotional relationship with the brand.

The Effect of Brand Coolness on Brand Engagement

Brand coolness had a positive and relatively strong effect on brand engagement. The more Fore Coffee was perceived as modern, aesthetically appealing, energetic, high-status, iconic, and popular, the higher consumers' engagement with the brand. This finding is consistent with Attiq et al. (2022), who showed that perceptions of brand attractiveness, authenticity, and status can trigger positive psychological responses in the form of engagement, particularly among young consumers. The effect of brand coolness also appeared stronger than that of gamification, indicating that Generation Z consumers were more engaged because of a brand image that was relevant to their lifestyles rather than merely because of points or voucher incentives.

The Effect of Gamification on Brand Loyalty

The point, voucher, reward, and referral code systems in the Fore Coffee application did not directly increase consumers' commitment to continue choosing the brand. This finding differs from those of Xi and Hamari (2020) and Kaur et al. (2020), who found that gamification and rewards can increase loyalty in virtual brand community contexts. This difference indicates that incentives may encourage short-term transactions but may not necessarily prevent consumers from switching to other coffee shops offering similar promotions.

The Effect of Brand Coolness on Brand Loyalty

The positive but non-significant coefficient indicates that a cool brand image did not automatically generate brand loyalty directly. This finding differs from that of Jiménez-Barreto et al. (2022), although the underlying mechanism remains consistent: brand coolness must first be transmitted through a consumer relationship or engagement process, represented in this study by brand engagement. The dynamic nature of brand coolness and the ease with which competitors can imitate it may help explain why this image can attract attention but is not yet sufficient to create differentiation that binds consumers to the brand.

The Effect of Brand Engagement on Brand Loyalty

This relationship represented the strongest direct effect in the overall research model, as indicated by the highest t-statistic, thereby confirming brand engagement as the primary predictor of brand loyalty. Consumers who were enthusiastic, interested, able to access services easily, frequently interacted with the brand, and experienced a personalized relationship with Fore Coffee were more likely to make repeat purchases, remain committed to their choice, and recommend the brand. This finding is consistent with Kaur et al. (2020), Bazi et al. (2023), Tuti and Sulistia (2022), and Sujana et al. (2023), all of whom confirmed consumer engagement as an important pathway toward brand loyalty.

The Mediating Role of Brand Engagement in the Effect of Gamification on Brand Loyalty

No mediation occurred in this relationship because the initial relationship between gamification and brand engagement was already non-significant; therefore, there was no effect that could be transmitted to brand loyalty. This finding differs from that of Kaur et al. (2020), who identified partial mediation in the context of virtual communities. One possible explanation is that Fore Coffee's gamification features are more transactional and individual in nature, whereas rewards in virtual communities are more social and communal.

The Mediating Role of Brand Engagement in the Effect of Brand Coolness on Brand Loyalty

Brand engagement was shown to fully mediate, representing indirect-only mediation, the effect of brand coolness on brand loyalty because the direct effect in H4 was not significant, whereas the indirect effect was significant. This means that perceptions of Fore Coffee as a cool brand must first generate consumer interest and engagement before developing into loyalty. This finding is consistent with Attiq et al. (2022) and Jiménez-Barreto et al. (2022), both of whom emphasized the role of consumer relationships or engagement as a mechanism through which brand image affects loyalty.

In summary, brand engagement was a central mechanism in the research model. Brand coolness contributed to loyalty primarily through consumer engagement, whereas gamification, in its current form within the Fore Coffee application, was not shown to play a significant role in either engagement or loyalty, directly or through mediation.

CONCLUSION

This study concludes that brand engagement plays a central role in developing brand loyalty among Generation Z consumers of Fore Coffee. The perception of Fore Coffee as a cool brand does not directly lead to loyalty but must first be transformed into stronger consumer engagement. In contrast, gamification features focused on points, vouchers, and rewards were not found to have a significant effect on either brand engagement or brand loyalty. Therefore, the development of brand loyalty among Fore Coffee consumers should primarily focus on strengthening meaningful and continuous consumer engagement while converting brand coolness into relevant brand experiences and long-term relationships.

Based on these findings, Fore Coffee should prioritize the development of brand engagement through two-way communication, participatory content, personalized services, and community-based programs. Gamification should be expanded beyond transactional benefits by incorporating personalized challenges, membership levels, special achievements, and social interaction features, such as collaborative challenges and more interactive referral

programs. Fore Coffee should also maintain its brand coolness through relevant menu innovation, visual design, and collaborations that remain authentic to Generation Z, while ensuring that such brand appeal is translated into actual consumer involvement rather than remaining solely at the image level. Product quality, service quality, product availability, and application experience should also be consistently maintained as the fundamental basis of consumer loyalty.

Future studies are recommended to include other relevant variables, such as product quality, customer satisfaction, and brand trust, to provide a more comprehensive explanation of brand loyalty. Subsequent research should also use a broader and more structured sample to improve national representativeness, apply longitudinal or experimental designs to examine changes in engagement and loyalty over time, and incorporate actual purchasing behavior alongside perceptual measures. In addition, future studies should reassess the indicators of gamification and brand coolness because of the high empirical similarity between the two constructs, as indicated by an HTMT value of 0.948. Comparative studies involving Fore Coffee and other coffee shop brands may also provide a clearer understanding of differences in the relationships among gamification, brand coolness, brand engagement, and brand loyalty across brands.

REFERENCES

- Attig, S., Abdul Hamid, A. B., Khokhar, M. N., Shah, H. J., & Shahzad, A. (2022). “Wow! It’s cool”: How brand coolness affects customer psychological well-being through brand love and brand engagement. *Frontiers in Psychology*, 13, Article 923870. <https://doi.org/10.3389/fpsyg.2022.923870>
- Atmaja, D. R., & Afandi, R. K. (2024). Pengaruh orientasi pelanggan, kepuasan pelanggan yang dimediasi oleh kualitas layanan terhadap kepuasan pelanggan. *Jurnal Lentera Bisnis*, 13(3), 1607–1626. <https://doi.org/10.34127/jrlab.v13i3.1208>
- Bazi, S., Filieri, R., & Gorton, M. (2023). Social media content aesthetic quality and customer engagement: The mediating role of entertainment and impacts on brand love and loyalty. *Journal of Business Research*, 160, Article 113778. <https://doi.org/10.1016/j.jbusres.2023.113778>
- Belk, R. W. (2006). Cool shoes, cool self. In A. M. Dahlberg (Ed.), *Eyes just for shoes* (pp. 77–90). Swedish Royal Armoury.
- Belk, R. W., Tian, K., & Paavola, H. (2010). Consuming cool: Behind the unemotional mask. In R. W. Belk (Ed.), *Research in consumer behavior* (Vol. 12, pp. 183–208). Emerald Group Publishing. [https://doi.org/10.1108/S0885-2111\(2010\)0000012010](https://doi.org/10.1108/S0885-2111(2010)0000012010)
- Bitrián, P., Buil, I., & Catalán, S. (2021). Enhancing user engagement: The role of gamification in mobile apps. *Journal of Business Research*, 132, 170–185. <https://doi.org/10.1016/j.jbusres.2021.04.028>
- Dar-Nimrod, I., Hansen, I. G., Proulx, T., Lehman, D. R., Chapman, B. P., & Duberstein, P. R. (2012). Coolness: An empirical investigation. *Journal of Individual Differences*, 33(3), 175–185. <https://doi.org/10.1027/1614-0001/a000088>
- Eisingerich, A. B., Marchand, A., Fritze, M. P., & Dong, L. (2019). Hook vs. hope: How to enhance customer engagement through gamification. *International Journal of Research in Marketing*, 36(2), 200–215. <https://doi.org/10.1016/j.ijresmar.2019.02.003>
- Firdaus, R. (2022). The aesthetics of coffee shops and the commodification of lifestyle. *Indonesian Journal of Cultural Studies*, 10(1), 77–90.
- Ganesh, J., Arnold, M. J., & Reynolds, K. E. (2000). Understanding the customer base of service providers: An examination of the differences between switchers and stayers. *Journal of Marketing*, 64(3), 65–87. <https://doi.org/10.1509/jmkg.64.3.65.18028>
- Jiménez-Barreto, J., Correia Loureiro, S. M., Rubio, N., & Romero, J. (2022). Service brand coolness in the construction of brand loyalty: A self-presentation theory approach. *Journal of Retailing and Consumer Services*, 65, Article 102876. <https://doi.org/10.1016/j.jretconser.2021.102876>

- Kaur, H., Paruthi, M., Islam, J. U., & Hollebeek, L. D. (2020). The role of brand community identification and reward on consumer brand engagement and brand loyalty in virtual brand communities. *Telematics and Informatics*, 46, Article 101321. <https://doi.org/10.1016/j.tele.2019.101321>
- Li, N., & Aumeboonsuke, V. (2025). How gamification features drive brand loyalty: The mediating roles of consumer experience and brand engagement. *Journal of Theoretical and Applied Electronic Commerce Research*, 20(2), Article 113. <https://doi.org/10.3390/jtaer20020113>
- Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63(Special Issue), 33–44. <https://doi.org/10.1177/00222429990634S105>
- Putra, R. (2021). Budaya ngopi dan konstruksi identitas anak muda. *Jurnal Komunikasi*, 9(1), 88–101.
- Rachmanu, E. D., Purnomo, F., & Hartini, S. (2024). Peran social brand engagement dan product quality terhadap peningkatan brand awareness, brand association, dan purchase intention. *Jurnal Ilmu Manajemen*, 12(1), 198–210. <https://doi.org/10.26740/jim.v12n1.p198-210>
- RCTI+. (2024). Ngopi sebagai kebutuhan sosial Gen Z. <https://www.rctiplus.com>
- Salsabilah, J. (2023). *Pengaruh gamification untuk membentuk brand loyalty melalui brand engagement: Studi pada konsumen pengguna aplikasi Shopee di Kota Malang* [Disertasi, Universitas Muhammadiyah Malang].
- Sholihin, M., & Ratmono, D. (2021). *Analisis SEM-PLS dengan WarpPLS 7.0 untuk hubungan nonlinier dalam penelitian sosial dan bisnis*. Penerbit Andi.
- Sujana, E. R., Verinita, & Sari, D. K. (2023). Pengaruh brand experience dan brand engagement terhadap brand loyalty dengan brand trust sebagai variabel mediasi. *Jurnal Informatika Ekonomi Bisnis*, 5(2), 554–558. <https://doi.org/10.37034/infeb.v5i2.567>
- Tien Minh, D., Vu Lan Oanh, L., & Diem Quynh, N. (2023). How gamification affects online shopping behavior: An approach with youngsters aged 16–30. *Cogent Business & Management*, 10(3), Article 2256076. <https://doi.org/10.1080/23311975.2023.2256076>
- Tiwari, A. A., Chakraborty, A., & Maity, M. (2021). Technology product coolness and its implication for brand love. *Journal of Retailing and Consumer Services*, 58, Article 102258. <https://doi.org/10.1016/j.jretconser.2020.102258>

- Tuti, M., & Sulistia, V. (2022). The customer engagement effect on customer satisfaction and brand trust and its impact on brand loyalty. *Jurnal Manajemen Bisnis*, 13(1), 1–15. <https://doi.org/10.18196/mb.v13i1.12518>
- Utami, R., Prasetyo, A., & Lestari, D. (2025). Gamification in digital marketing: Enhancing customer engagement. *Journal of Marketing Innovation*, 12(1), 1–10.
- Warren, C., Batra, R., Loureiro, S. M. C., & Bagozzi, R. P. (2019). Brand coolness. *Journal of Marketing*, 83(5), 36–56. <https://doi.org/10.1177/0022242919857698>
- Wengi, S., Pratama, I., & Sari, R. (2022). Gamification as a tool to increase customer loyalty. *Jurnal Manajemen Pemasaran*, 18(2), 40–52.
- Wulandari, N. A., Saidani, B., & Rivai, A. K. (2022). Pengaruh gamification dalam membentuk brand loyalty melalui brand engagement. *Jurnal Bisnis, Manajemen, dan Keuangan*, 3(1), 228–236. <https://doi.org/10.21009/jbmk.0301.17>
- Yoo, B., & Donthu, N. (2001). Developing and validating a multidimensional consumer-based brand equity scale. *Journal of Business Research*, 52(1), 1–14. [https://doi.org/10.1016/S0148-2963\(99\)00098-3](https://doi.org/10.1016/S0148-2963(99)00098-3)
- Xi, N., & Hamari, J. (2020). Does gamification affect brand engagement and equity? A study in online brand communities. *Journal of Business Research*, 109, 449–460. <https://doi.org/10.1016/j.jbusres.2019.11.058>