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The Impact of Gamified Marketing on Customer-Brand Fit and Engagement (Among Chinese Players)

Jieyu Wang

International Chinese College, MBA, Rangsit University, Pathum Thani, Thailand E-mail: jieyu.w66@rsu.ac.th

Abstract

This study explores the impact mechanism of gamification elements and their three dimensions (motivation, mechanics, and components) on customer engagement, emphasizing the mediating role of customer-brand fit. Grounded in the Stimulus-Organism-Response (SOR) model, the research examines how these dimensions influence customer engagement and customer-brand fit. By integrating game elements into non-game contexts, gamification enhances interactivity and social connectivity, thereby capturing customer attention and fostering engagement. To validate these relationships, an online survey was conducted, collecting responses from 392 gamers in mainland China, all of whom had participated in gamified marketing activities. The data were analyzed using multiple linear regression with SPSS 26.0. The results indicate that gamification elements, along with their three dimensions' motivation, mechanics, and components — positively affect customer engagement and customer-brand fit, with customer-brand fit playing a partial mediating role. Motivation enhances engagement through both intrinsic and extrinsic incentives, mechanics contribute by facilitating interaction and feedback; and components provide entertaining and personalized experiences. Additionally, customer-brand fit strengthens emotional bonds and social identification, further reinforcing customer engagement. This study emphasizes the importance of incorporating core brand values into gamification strategies to foster long-term customer engagement and maximize brand benefits. Future research could optimize gamification designs by considering different contexts and customer segments, offering more targeted strategic insights for brand marketing.

Keywords: Gamified Marketing, Customer Engagement, Customer Brand Fit, Self-congruity

1. Introduction

With the rapid development of the economy and technology, people's lifestyles and habits have undergone significant changes. The widespread adoption of technology and the internet has greatly expanded the scope of business activities and transformed operational models. These changes have brought new development opportunities for enterprises while also presenting new challenges. The mainstream consumer group of enterprises is gradually becoming younger, prompting businesses to adapt their strategies accordingly. This group pursues individuality and interaction, making traditional marketing methods (such as advertisements and promotional activities), which are relatively static and lack interactivity, less attractive due to their short duration. These consumers are primarily active on social media and brand apps, making online gamified marketing a key strategy for enhancing user engagement. In response, marketing practitioners have adopted game design elements as new marketing tools, applying them in marketing practices to improve marketing communication performance. This approach emphasizes the establishment of long-term relationships, using fun and a sense of achievement as bonds to create game-like experiences through interactivity, thereby encouraging user participation, enhancing user retention, and strengthening overall brand experiences. This approach is commonly referred to as "gamified marketing" (Conaway & Garay, 2014). A well-known example is Starbucks' "Starbucks Rewards" program, which uses gamification elements such as earning stars for purchases, unlocking rewards, and achieving levels. These features have significantly enhanced customer engagement and loyalty.

Compared to traditional marketing methods, online gamified marketing allows for real-time data tracking, offers a more sustained interactive experience, and inherently incorporates game attributes. Consumers tend to prioritize gaming activities over other tasks in their daily lives, making them more familiar

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with and comfortable using gamified systems (Kalinauskas, 2014). As a result, brands are able to offer consumers flexible and effective marketing strategies across different scenarios, ensuring that gamification elements exhibit high adaptability to various contexts. For example, Nike's "Nike+ Run Club" app gamifies fitness by allowing users to track their runs, set personalized goals, and compete with friends, thereby enhancing user engagement and promoting brand loyalty.

In modern society, consumers are increasingly exposed to distractions; however, the gaming industry remains resilient. As the time spent on gaming increases, its unique capacity to attract and engage users becomes more evident (Zichermann & Linder, 2013). According to the latest 2023 Global Games Market Report published by the authoritative data analytics firm Newzoo, the global gaming market reached approximately \$200 billion in 2023. Notably, mobile gamification accounts for a significant portion, contributing over 50% of global gamification market revenue. This presents a tremendous opportunity for brands to integrate gamification elements into mobile devices. The report also highlights that individuals aged 18–34 form the core gaming demographic, accounting for approximately 40% of global players. These consumers actively seek interaction and personalized experiences, making gamification—through scenario-based and entertaining design—an effective tool for brand engagement. The data clearly demonstrates the unique value and growth trajectory of gamified marketing in the current digital era, leading brands and businesses to recognize its appeal. Consequently, brands are increasingly incorporating interactive and entertaining elements to stimulate consumer participation, particularly in response to younger consumers' demands for personalized and immersive experiences. By integrating entertainment economics, brand messages can seamlessly blend into consumers' entertainment experiences.

According to Statista (2023), the development of interconnected networks and the proliferation of mobile devices have resulted in over 50% of mobile applications worldwide incorporating gamification elements (such as check-ins, reward systems, and leaderboards) in 2023 to attract user participation and improve user retention. The rise of social commerce has further amplified the impact of gamified marketing. According to Statista (2023), promotional campaigns featuring gamification elements on e-commerce platforms increased user engagement by approximately 45% on average. This enables brands to strengthen their alignment with consumers through personalized and customized content, while simultaneously leveraging the growth of entertainment economics to seamlessly embed commercial information into entertainment experiences. Consequently, brands can secure a larger market share and foster greater consumer loyalty in the digital era.

The popularity of games stems from the joy and sense of achievement they provide. The gamified marketing model leverages the inherent advantages of games to attract consumer participation, integrating game scenarios into online marketing while continuously updating game mechanics to strengthen user engagement. As gamification's market share expands, businesses' marketing mindsets are also evolving, shifting from a product-dominant logic to a service-dominant logic. Consumers are gradually moving away from passive information reception, opting instead to choose to filter and process information autonomously. They are no longer perceived as mere value consumers but as co-creators of value. According to Conaway and Garay (2014) argue that incorporating gamification elements into business management and service marketing provides enterprises with a tool to enhance their competitive advantage. As the "player" demographic grows, the appeal of gamification strategies lies in core elements such as instant feedback, reward mechanisms, and continuous challenges. The relationship between businesses and consumers has evolved from a simple transactional exchange into an interactive, symbiotic connection. Brand fit is chosen as a mediating variable because it reflects how well customers perceive the alignment between their values and the brand, which can enhance their engagement and loyalty through gamified experiences.

2. Objectives

Therefore, this study constructs a research model based on the Gamification Pyramid Theory, categorizing gamification elements into three levels: Dynamics, Mechanics, and Components. By engaging customers and fostering effective interactions, consumers can experience gamification and derive emotional

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value. Throughout this process, brands can build close and lasting connections with consumers, ultimately enhancing brand alignment and influencing consumer behavior transformation. Based on these considerations, the following research objectives are proposed.

- RO 1: To explore the impact of gamification elements on customer engagement.
- RO 2: To analyze the influence of gamification elements on customer-brand fit.
- RO 3: To examine the effect of customer-brand fit on customer engagement.
- RO 4: To verify the mediating role of customer-brand fit in the relationship between gamification elements and customer engagement.

3. Literature Review and Hypotheses S-O-R Model

Mehrabian and Russell (1974) developed the Stimulus-Organism-Response (S-O-R) model based on psychological principles, proposing the "Stimulus-Individual Physiology & Psychology-Response" framework to explain how external environments influence human behavior. Their research demonstrated that during users' participation in marketing activities, individual emotions and behavioral responses are, to some extent, influenced by environmental stimuli. This theoretical model was established on the foundation of their research in environmental psychology, aiming to investigate how environmental factors affect consumer behavior. The S-O-R model posits that the environment, as a stimulus, triggers an individual's emotional or perceptual response, which in turn leads to either approach or avoidance behavior. The fundamental process of this model follows the sequence: Stimulus (environment) \rightarrow Organism (emotion or cognition) \rightarrow Response (approach or avoidance behavior).

Hypotheses on the Impact of Gamification Elements on Customer Engagement

Customer engagement refers to the active investment of time, effort, and emotions by customers in virtual communities, where they interact with brands and other members, forming deep connections beyond mere purchasing behavior. Gamification design effectively enhances customer engagement, thereby promoting economic activity in local commercial districts (Betzing, 2020). A multi-level gamification design significantly strengthens customer interaction and engagement. When customers actively participate in the regulation and delivery of services, their satisfaction and loyalty increase significantly. Interaction not only enhances the customer service experience but also strengthens brand trust and customer relationships (Cermak, 1994). In online retail, integrating gamification elements into sales models can stimulate consumer engagement and improve shopping experiences (Insley & Nunan, 2014). Aw, E. C. X., Chuah, S. H. W., Sabri, M. F., & Basha, N. K. (2021) applied pyramid theory to analyze Starbucks' membership system, demonstrating how various gamification elements incentivize customer participation. The membership system not only fosters a highly active consumer environment for Starbucks but also enhances brand identification and loyalty through tier-based membership differentiation and emotional connections. Xi and Hamari (2020) conducted an empirical analysis of online brand community data, revealing that brands can effectively promote consumer brand engagement by incorporating gamification mechanisms. Based on these findings, this study hypothesizes that gamified marketing has a significant positive impact on customer engagement:

- H1: Gamified marketing has a significant positive impact on customer engagement.
- H1a: Dynamics in gamified marketing have a significant positive impact on customer engagement.
- H1b: Mechanics in gamified marketing have a significant positive impact on customer engagement.
- H1c: Components in gamified marketing have a significant positive impact on customer engagement.

Hypotheses on the Impact of Gamified Marketing on Customer-Brand Fit

Numerous studies have validated the positive impact of gamified marketing on customer-brand fit. In the pyramid model, dynamics are at the highest level, aiming to enhance consumer cognition and emotional

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experience; mechanics serve as the fundamental processes that drive gamification and user participation; components are the specific implementations of dynamics and mechanics. Aw, E. C. X., Chuah, S. H. W., Sabri, M. F., & Basha, N. K. (2021) examined the relationships between dynamics, mechanics, and components with cognition, emotion, and behavior, respectively, and confirmed that gamified marketing effectively enhances customer-brand fit and thereby drives business growth. The integration of gamification elements allows consumers to experience fun and immersion during interactions, thereby strengthening their emotional connection and loyalty to the brand (Bittner & Shipper, 2014). Lucassen and Jansen (2014) suggested that gamification embeds brand values into the user experience, fostering emotional bonds between customers and brands, thereby improving brand fit. Brodie (2013) analyzed the multi-dimensional structure of brand fit, highlighting that: The cognitive dimension involves how consumers understand and process brand-related information. The emotional dimension reflects consumers' attachment and sense of belonging to a brand. Different gamification elements can enhance customer-brand fit, ultimately leading to greater brand loyalty. Therefore, the following hypotheses are proposed:

H2: Gamification elements have a significant positive impact on customer-brand fit.

H2a: Dynamics in gamification elements have a significant positive impact on customer-brand fit.

H2b: Mechanics in gamification elements have a significant positive impact on customer-brand fit.

H2c: Components in gamification elements have a significant positive impact on customer-brand fit.

Hypothesis on the Impact of Customer-Brand Fit on Customer Engagement

Customer engagement refers to the time customers invest in a service, which can be categorized into high-contact services and low-contact services. In high-contact services, customer involvement plays a crucial role in enhancing service quality. Chase (2010) defines customer engagement as the time, effort, and emotions a customer invests in a service. Homburg et al. (2013) found that in CSR activities, brand fit increases customers' willingness to exert behavioral effort (e.g., participating in events, creating content), thereby enhancing customer engagement and loyalty. Algesheimer (2005) suggested that brand fit within brand communities reinforces social identity—the more consumers identify with the community, the more likely they are to participate in activities and contribute content, fostering customer engagement. Vander Schee, B. A., Peltier, J., & Dahl, A. J. (2020) demonstrated that customer-brand fit is a key driver of customer engagement. The higher the level of brand fit, the more likely customers are to actively participate in brand interactions and activities. Brand fit fosters customer identification and emotional connection, further increasing engagement on a psychological level. Van Doorn et al. (2010) emphasized the core role of brand fit as a psychological variable in driving customer engagement behavior. By strengthening the emotional bond between customers and the brand, brand fit encourages customers to actively engage in brand-related activities. Therefore, the following hypothesis is proposed:

H3: Customer-brand fit has a significant positive impact on customer engagement.

Hypothesis on the Mediating Role of Customer-Brand Fit Between Gamification Elements and Customer Engagement

A substantial body of literature underscores the positive marketing effects of gamification, indicating that well-designed gamification marketing strategies can significantly enhance brand-consumer interactions, thereby fostering brand loyalty and driving consumer behavior. According to Bhattacharya (2003), customerbrand fit is defined as customers' sense of identification and psychological belonging to a brand, which serves as a core element in the relationship between consumers and brands. External stimuli from gamification strategies influence customer behavior through psychological identification. Lucassen & Jansen (2014) argue that brand fit acts as the crucial bridge between gamification strategies and customer behavior. By fulfilling customers' psychological needs and enhancing interactive experiences, gamification strategies significantly improve brand fit, which, in turn, drives customer engagement and brand loyalty. Hamari (2015) found that gamified activities enhance brand fit by fulfilling users' psychological needs (e.g., achievement and belonging). This fit, in turn, stimulates emotional connections and social identification, leading to long-term

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engagement. Similarly, Deterding (2011) suggested that gamification elements create more engaging and interactive user experiences, thereby enhancing customer-brand fit and motivating participation. Therefore, the following hypotheses are proposed:

H4: Customer-brand fit mediates the relationship between gamification elements and customer engagement.

H4a: Customer-brand fit mediates the relationship between gamification dynamics and customer engagement.

H4b: Customer-brand fit mediates the relationship between gamification mechanics and customer engagement.

H4c: Customer-brand fit mediates the relationship between gamification components and customer engagement.

Conceptual Model Construction

Based on the literature review and synthesis, a preliminary model has been constructed using the S-O-R model as its theoretical foundation. In this model, gamification elements serve as the independent variable, while customer-brand fit functions as the mediating variable to explore the impact of gamification elements on customer engagement.

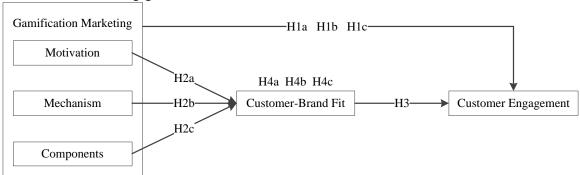


Figure 1 Research Framework

4. Methodology

Methods

This study will adopt a quantitative research approach to explore the mechanisms by which gamified marketing influences customer engagement behavior. It does so by categorizing game elements into three levels: Dynamics, Mechanics, and Components. The study aims to analyze how gamification elements at each level impact customers' psychological alignment and behavioral engagement. Hypothesis H1 focuses on examining the overall impact of gamification elements, while H1a, H1b, and H1c further refine the analysis by investigating the distinct effects of Dynamics, Mechanics, and Components on customer engagement. This design ensures a balance between overall impact and layered influence, allowing for a comprehensive assessment of each dimension's unique contribution to customer engagement behavior. By employing a hierarchical analysis, this study aims to clearly reveal the specific roles of different gamification elements in driving customer behavior, thereby avoiding the limitations of a single-dimensional approach and providing a more detailed and comprehensive perspective on gamified marketing theory.

Research Tools

The measurement of gamification marketing is based on the scale developed by Werbach and Hunter (2012), which consists of three dimensions: dynamics, mechanics, and components. Each dimension contains four measurement items, totaling 12 items. The measurement of customer engagement is based on the scale developed by Brodie (2013). It is a unidimensional scale consisting of six measurement items. The measurement of customer-brand fit is based on the scale studies conducted by Gogoi and Kumar (2014),

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Hollebeek et al. (2014), and others. It is a unidimensional scale consisting of eight measurement items. The measurement scales for the three variables are shown in Table 1.

Table 1 Measurement Scale

Variable	Items	Reference		
Dynamics	1. The reward system and the tasks in the system make me feel satisfied and			
	accomplished.			
	2. In the game system, I can experience emotions such as curiosity, competitiveness,			
	frustration, and happiness.			
	3. I feel that I can grow and develop within the gaming system.			
	4. The game system promotes friendships, a sense of status, or altruistic connections			
	among players.			
Mechanics	5. I clearly understand the rules of the reward mechanism and hope to gain more			
	rewards through these rules.			
	6. The random elements in the game system surprise me.			
	7. The game system provides appropriate challenges for different users.			
	8. I believe that the fairness and transparency of the reward mechanism can enhance			
	my interest in participation.			
Components	9. I can obtain collectible items through the game system to showcase my sense of			
	achievement.			
	10. After completing tasks in the game system, I receive feedback on player			
	performance and leaderboard information.			
	11. The task design within the game system gives me a sense of accomplishment and			
	satisfaction.			
	12. The virtual rewards or honors gained through the game system make me feel			
	valuable.			
Customer	1. I am willing to participate in this activity multiple times and feel that my	Brodie		
Engagement	participation is highly valuable.	(2013)		
	2. I am willing to spend more time participating due to the sense of achievement			
	gained from the activity.			
	3. I will post content related to discussions about this game activity.			
	4. I will collect content related to this gaming activity.			
	5. I am willing to share content related to this activity.			
	6. I will engage in discussions related to this activity on social media.			
Customer-	1. The brand's philosophy is highly consistent with my personal values.	Gogoi and		
Brand Fit	2. The game activities launched by this brand align well with my personality.	Kumar		
	3. I often follow the brand's news and latest updates.	(2014),		
	4. I pay close attention to understanding the brand's products or services.	Hollebeek		
	5. I am willing to recommend this brand to others.	et al.		
	6. I actively participate in the brand's customer surveys and proactively provide	(2014)		
	feedback.			
	7. The game activities have created a sense of attachment to the brand.			
	8. I can easily recognize the brand's logo or products.			

Research Design

This study targets users from mainland China who have participated in gamified marketing activities, with the core group of players aged 18–34. An online survey was conducted using a questionnaire created on Wenjuanxing. The survey was distributed through social media platforms such as WeChat and Weibo, which have a large user base and allow access to potential target groups who have participated in gamified marketing

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activities. Moreover, brands also promote their activities on these platforms, and the users on these platforms overlap significantly with the research participants. Publishing the questionnaire on these platforms helps to obtain more relevant data. The combination of Wenjuanxing and social media platforms allows for real-time collection of survey data and immediate tracking of responses, facilitating subsequent data cleaning and analysis.

Data Analysis Methods

Descriptive statistics were used to analyze the mean and standard deviation of each variable to understand their current status. A reliability analysis was conducted to test the reliability of the scale. Pearson correlation analysis was applied to examine the pairwise relationships between variables and verify the significance of these relationships. A maximum of multiple linear regression analysis was used to test the direct effects of the variables, as well as their mediating and moderating effects.

5. Results and Discussion

Sample

This study targeted users who had participated in gamification marketing activities, distributing 450 online questionnaires through a convenience sampling method, with 407 responses collected and 392 valid responses, resulting in an effective response rate of 96.31%. The sample consisted of 65.31% males, 31.89% females, and 2.81% other genders, with most respondents being aged between 19 and 34 years (68.12%), aligning with the target audience for gamification marketing. In terms of education, 44.13% held college diplomas, 26.02% had completed high school education, and 22.96% held bachelor's degrees, while postgraduate respondents accounted for only 6.89%. Occupationally, students made up the largest group (45.66%), followed by corporate employees (25.77%) and freelancers (17.35%). The income distribution showed that the majority belonged to low- to middle-income groups, with 36.73% earning 3,000 RMB or less, 34.95% earning 3,001-8,000 RMB, and only 8.16% earning above 15,001 RMB. The sample was primarily urban, with 36.99% from first-tier cities, 28.83% from new first-tier cities, and 27.30% from second-tier cities, while third-tier and lower-tier cities accounted for only 6.89%, and no respondents were from rural areas. Regarding participation frequency, 35.97% engaged in gamification marketing activities 2-3 times per week, 29.34% participated a few times per month, and 22.70% engaged daily, with only 11.99% participating occasionally and none reporting very rare participation, indicating a high level of consumer engagement that aligns well with the study's focus.

Descriptive, Correlation, and Reliability Analyses

Table 2 presents the correlation matrix among the variables and dimensions. The correlation coefficients between the three dimensions of gamification marketing—motivation, mechanism, and component—are 0.556** (motivation and mechanism), 0.557** (motivation and component), and 0.495** (mechanism and component), all reaching significant levels. Gamification marketing is significantly positively correlated with customer-brand fit (r = 0.504, p < 0.01), reaching a significant level. Similarly, gamification marketing is significantly positively correlated with customer engagement (r = 0.597, p < 0.01), also reaching a significant level. Regarding the relationship between customer-brand fit and customer engagement, the correlation coefficient is 0.558** (p < 0.01), indicating a significant positive relationship. Each of the three dimensions—motivation, mechanism, and component—shows a significant positive correlation with both customer-brand fit and customer engagement, with motivation exhibiting relatively higher correlations (0.404 and 0.492, respectively). Overall, all variables demonstrate significant positive correlations, particularly among the three dimensions and the overall variable of gamification marketing, customer-brand fit, and customer engagement. Meanwhile, the Cronbach's α values for all variables are above 0.7, indicating that these variables have good reliability.

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Table 2 Descriptive, Correlation, and Reliability Analyses

Variables	M	SD	1	2	3	4	5	Cronbach's α
Motivation	3.788	0.838	-					0.832
Mechanism	3.814	0.851	.556**	-				0.833
Components	3.857	0.855	.557**	.495**	-			0.933
Gamification Marketing	3.820	0.594	.716**	.692**	.694**	-		0.868
Variables	\mathbf{M}	SD	1	2	3	4	5	Cronbach's α
Customer-Brand Fit	3.872	0.734	.404**	.405**	.389**	.504**	-	0.915
Customer Engagement	3.763	0.949	.492**	.420**	.412**	.597**	.558**	0.857

Note: **p<0.01

Table 3, Model 1 presents the regression analysis of gamification marketing on customer engagement. The results indicate that gamification marketing positively influences customer engagement ($\beta = 0.597$, p < 0.001), thereby supporting hypothesis H1.

Model 2 examines the regression analysis of three dimensions of gamification marketing—motivation, mechanism, and component—on customer engagement. The results show that motivation positively affects customer engagement ($\beta = 0.311, p < 0.001$), supporting hypothesis H1a; mechanism also positively affects customer engagement ($\beta = 0.262, p < 0.001$), supporting hypothesis H1b; and component positively affects customer engagement ($\beta = 0.252, p < 0.001$), supporting hypothesis H1c.

Model 3 presents the regression analysis of gamification marketing on customer-brand fit, showing that gamification marketing positively influences customer-brand fit ($\beta = 0.504$, p < 0.001), thereby supporting hypothesis H2.

Model 4 examines the regression analysis of three dimensions of gamification marketing on customer-brand fit. The results indicate that motivation positively influences customer-brand fit (β = 0.244, p < 0.01), supporting hypothesis H2a; mechanism positively influences customer-brand fit (β = 0.220, p < 0.01), supporting hypothesis H2b; and component positively influences customer-brand fit (β = 0.170, p < 0.01), supporting hypothesis H2c.

Model 5 presents the regression analysis of customer-brand fit on customer engagement, showing that customer-brand fit positively influences customer engagement ($\beta = 0.558, p < 0.001$), thereby supporting hypothesis H3.

The mediation effect was tested using Baron and Kenny (1986). In Model 6, after adding the mediating variable of customer-brand fit, the direct effect of gamification marketing on customer engagement decreased from 0.597 in Model 1 to 0.274, indicating that customer-brand fit partially mediates the relationship between gamification marketing and customer engagement, thereby supporting hypothesis H4.

In Model 7, after including customer-brand fit as a mediating variable, the direct effect of motivation on customer engagement decreased from 0.311 in Model 2 to 0.102, thereby supporting hypothesis H4a. The direct effect of the mechanism on customer engagement decreased from 0.262 in Model 2 to 0.151, supporting hypothesis H4b. The direct effect of the component on customer engagement decreased from 0.252 in Model 2 to 0.139, further supporting hypothesis H4c.

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Table 3 Multiple Linear Regression

Model	Independent Variable	Dependent Variable	β	F	Adj R ²	Results
Model 1	Gamification Marketing	Customer Engagement	0.597***	37.695***	0.348	H1 is supported
	Motivation		0.311***			H1a is supported
Model 2	Mechanism	Customer Engagement	0.262***	12.646***	0.237	H1b is supported
	Components		0.252***			H1c is supported
Model 3	Gamification Marketing	Custome-Brand Fit	0.504***	39.666***	0.252	H2 is supported
	Motivation		0.244**			H2a is supported
Model 4	Mechanism	Custome-Brand Fit	0.220**	13.267***	0.138	H2b is supported
	Components		0.170*			H2c is supported
Model 5	Customer-Brand Fit	Customer Engagement	0.558***	9.998**	0.309	H3 is supported
Model 6	Gamification Marketing	Customer Engagement	0.274***	39.994***	0.089	H4 is supported
	Customer-Brand Fit		0.095*			-
Model 7	Customer-Brand Fit	Customer Engagement	0.091*	14.048***	0.085	-
	Motivation		102*			H4a is supported
	Mechanism		151**			H4b is supported
	Components		139**			H4c is supported

Notes: *p<0.05, **p<0.01, ***p<0.001

6. Discussion

This empirical study demonstrates that gamification marketing and its three dimensions—motivation, mechanism, and component—positively influence customer engagement. These findings are consistent with the conclusions of Betzing (2020), Cermak (1994), Insley and Nunan (2014), Xi and Hamari (2020), and Aw et al. (2021). Gamification marketing integrates game elements into non-game contexts, creating engaging, interactive, and social experiences that attract customer attention and encourage active participation. Drawing from Self-Determination Theory (Deci & Ryan, 1985), this study highlights that motivation, both intrinsic and extrinsic, plays a critical role in enhancing customer engagement. Intrinsic motivation is stimulated through enjoyable challenges, instant feedback, and task completion, while extrinsic incentives, such as points, coupons, and leaderboard rankings, further reinforce engagement. The synergistic effect of these motivational drivers encourages customers to immerse themselves more deeply in brand-related activities, significantly boosting their level of engagement.

Moreover, this study reveals that gamification marketing, along with its dimensions—motivation, mechanism, and component—positively impacts customer-brand fit. These findings align with the work of Brodie (2013), Lucassen & Jansen (2014), and Aw et al. (2021).

Gamification enhances the brand experience by allowing consumers to engage in brand-themed activities that reflect their personal values and identities. According to Self-Congruity Theory, when consumers perceive alignment between a brand's image and their self-concept, they develop a stronger sense of brand identification and loyalty. Gamification marketing facilitates this process by integrating brand values into interactive tasks and challenges, enabling consumers to internalize these values while participating in enjoyable and rewarding activities. For instance, brand-themed challenges that promote sustainability may appeal to environmentally conscious consumers, reinforcing their perception of brand alignment and deepening their emotional connection.

Additionally, the study confirms that customer-brand fit significantly influences customer engagement, consistent with the conclusions of Homburg et al. (2013), Algesheimer (2005), Vander Schee et al. (2020), and Van Doorn et al. (2010). A strong sense of brand fit strengthens the emotional bond between consumers and brands, serving as a key driver of customer engagement. When consumers perceive a high degree of brand congruence, they are more likely to develop a psychological attachment and perceive the brand as part of their self-expression. This heightened sense of attachment motivates customers to invest more

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time and effort in brand-related activities. For example, health-conscious consumers may actively engage with a fitness brand that aligns with their lifestyle goals, as such participation validates and reinforces their personal identity and beliefs.

Finally, this study identifies that customer-brand fit partially mediates the relationship between gamification marketing and customer engagement, as well as the relationships among motivation, mechanism, and component with customer engagement. These findings corroborate the conclusions of Bhattacharya (2003), Lucassen and Jansen (2014), Hamari (2015), and Deterding (2011). Customer-brand fit establishes a positive feedback loop that strengthens the relationship between gamification marketing and customer engagement. When consumers perceive a strong brand fit through gamified activities, they exhibit a higher willingness to engage, which, in turn, reinforces their brand identification and encourages sustained participation. For instance, when customers earn brand-specific rewards or recognition through gamified interactions, their loyalty and emotional connection deepen over time, fostering a stable and mutually reinforcing engagement pattern.

7. Conclusions

This empirical study explores the impact mechanism of gamification elements on customer engagement and reveals the crucial role of brand fit in this process. The findings indicate that gamification elements—including motivation, mechanism, and components—significantly and positively influence customer engagement and customer-brand fit. Moreover, brand fit further strengthens the impact of gamification elements on customer engagement through a partial mediating effect. The positive effects of motivation, mechanism, and components enhance customer engagement by stimulating intrinsic and extrinsic motivation, increasing interactivity and feedback, and providing enjoyable and personalized experiences.

As a mediating variable, brand fit connects the design logic of gamification elements to customer engagement behavior through three pathways: emotional connection, social identity, and behavioral reinforcement. Customers gradually internalize brand values and develop psychological resonance and emotional bonds while participating in gamified activities. Additionally, the social dissemination functions of components such as leaderboards and virtual badges further reinforce the relationship between the brand and its customers. This mechanism not only enhances customer brand loyalty but also promotes the sustainability and frequency of engagement behaviors through a positive feedback effect.

The conclusions of this study provide valuable insights into brand marketing practices. When designing gamification activities, businesses should not only focus on entertainment and reward mechanisms but also integrate core brand values to cultivate a sense of brand fit among customers. This approach can lead to long-term improvements in customer engagement and maximize brand benefits.

Despite the theoretical and practical contributions of this study in exploring the relationship between gamification elements, customer-brand fit, and customer engagement, some limitations remain that provide directions for future research. Although the sample size of 392 valid responses, while meeting minimum statistical requirements, may limit the external validity of the findings, especially in diverse customer groups. Future studies could expand the sample size using stratified random sampling to ensure balanced representation across various dimensions like gender, age, income, and region, and increase reliability by collecting data across multiple time points. Additionally, this study relies solely on surveys, which may be influenced by social desirability bias and response bias. Future research could incorporate qualitative methods, such as interviews or focus groups, to gain deeper insights into customer motivations and experiences. Finally, this study uses cross-sectional data, which reveals correlations but not dynamic changes or causal relationships. Future research could adopt longitudinal data analysis methods to track the dynamic changes of variables over time, using techniques like time-series analysis or multi-level modeling to explore the lasting effects of gamified marketing activities.

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