

**THE EFFECT OF GAMIFICATION STRATEGIES ON PURCHASE
INTENTION: THE MEDIATING ROLE OF CUSTOMER ENGAGEMENT
(A STUDY OF KOPI KENANGAN ASLI USERS)**

(Undergraduate Thesis)

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ABSTRAK

**PENGARUH STRATEGI GAMIFIKASI TERHADAP NIAT BELI: PERAN
MEDIASI KETERLIBATAN PELANGGAN (STUDI TERHADAP
PENGGUNA KOPI KENANGAN ASLI)**

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Gamifikasi dalam konteks pemasaran digital semakin banyak digunakan untuk meningkatkan interaksi pengguna dan mendorong minat beli. Penelitian ini bertujuan untuk menganalisis pengaruh strategi gamifikasi terhadap minat beli dengan customer engagement sebagai variabel yang memediasi hubungan tersebut. Pendekatan yang digunakan adalah kuantitatif dengan analisis model struktural melalui bootstrapping untuk menguji hubungan antar variabel. Hasil analisis menunjukkan bahwa gamifikasi memiliki pengaruh signifikan terhadap customer engagement dengan koefisien jalur 0,719. Customer engagement juga berpengaruh signifikan terhadap minat beli dengan koefisien 0,345. Selain itu, gamifikasi terbukti memiliki pengaruh langsung yang signifikan terhadap minat beli dengan koefisien 0,568, yang menunjukkan bahwa pengaruh langsung lebih dominan dibandingkan pengaruh tidak langsung. Pengaruh tidak langsung melalui customer engagement juga signifikan dengan koefisien 0,249, sehingga customer engagement berperan sebagai mediator parsial. Berdasarkan teori Stimulus Organism Response (SOR), gamifikasi berperan sebagai stimulus yang membentuk customer engagement sebagai organisme, yang kemudian menghasilkan respons berupa minat beli. Dengan demikian, implementasi gamifikasi terbukti efektif dalam meningkatkan keterlibatan pengguna sekaligus mendorong niat pembelian.

Kata Kunci: Gamifikasi, Customer Engagement, Minat Beli

ABSTRACT

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Gamification in digital marketing is increasingly applied to enhance user interaction and stimulate purchase intention. This study aims to examine the effect of gamification strategies on purchase intention with customer engagement acting as a mediating variable in the relationship. A quantitative approach was employed using structural model analysis and bootstrapping to test the relationships among variables. The results reveal that gamification has a significant effect on customer engagement with a path coefficient of 0.719. Customer engagement also significantly influences purchase intention with a coefficient of 0.345. In addition, gamification shows a significant direct effect on purchase intention with a coefficient of 0.568, indicating a stronger direct influence compared to the indirect effect. The indirect effect through customer engagement is also significant with a coefficient of 0.249, confirming its role as a partial mediator. Based on the Stimulus Organism Response (SOR) theory, gamification acts as the stimulus that shapes customer engagement as the organism, which subsequently leads to purchase intention as the response. Thus, gamification implementation is proven effective in increasing user engagement and strengthening purchase intention.

Keywords: Gamification, Customer Engagement, Purchase Intention

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As One of the Requirements to Earn a Bachelor of Management Degree

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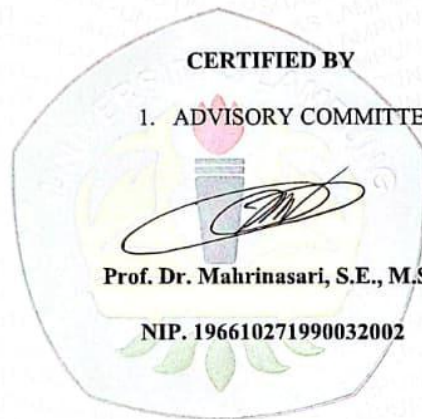
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BIOGRAPHY



The author, Rafa Nithalaida, was born on November 20, 2003, to Mr. Firdaus and Mrs. Agta. She is the eldest of four siblings. She began her education at SDN 1 Sukarama, then continued to MTsN 2 Bandar Lampung, and later attended MAN 1 Bandar Lampung, graduating in 2022. She is currently pursuing a Bachelor's degree in Management after being admitted through the SBMPTN pathway. During her studies, the author has been active in academic and professional development, including an internship at Humas Universitas Lampung as a journalist and participation in the MSIB Batch 7 program at Dinas Komunikasi, Informatika, Statistik, dan Persandian Kabupaten Pesawaran. She also participated in international academic programs, such as the International Short Course Program organized by Aoyama Gakuin University, Japan, and the Online International School organized by Saint Petersburg University of Management Technologies and Economics, Russia. Also, the author has been involved in volunteer activities, including the AIESEC Widyawiyata 13.0 Local Project 2024, M-Best HMJ Management 2022, and ESo LoveComp 2022.

MOTTO

“Do not lose hope, nor be sad.”

(QS. Ali ‘Imran [3]: 139)

“Hope is enough to make me run and fly high.”

DEDICATION

Praise and gratitude to Allah SWT, Lord of the universe and owner of all things, for his endless mercy, guidance, and compassion. Through his forgiveness, assistance, and grace, the author has been able to complete this thesis. Peace and blessings be to the Prophet Muhammad SAW, who has become a role model for all Muslims to always seek knowledge and implement it in their lives.

My Parents, Ayah & Bunda

The author dedicates this thesis with the deepest respect and gratitude for all their sacrifices, hard work, and patience. This thesis is dedicated as a form of sincere love and devotion in appreciation of their endless love and prayers.

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I. INTRODUCTION

1.1 Background

The increasingly intense competition in the food and beverage industry encourages companies to formulate effective marketing strategies that are capable of expanding market share. Along with the rapid development of digitalization, the implementation of innovative business strategies has become a necessity for companies (Kaur, 2023). One commonly used approach is digital marketing. According to Chaffey and Smith (2013), digital marketing refers to marketing activities that utilize technology to help companies understand consumer needs. Digital marketing is conducted through various electronic platforms to promote products and services to consumers (Mkwizu, 2020; Yasmin et al., 2015). Through digital marketing, companies are able to build routine communication with customers (Scharl et al., 2005).

These conditions have encouraged companies to develop branded applications as a digital marketing strategy. Chen et al. (2013) state that branded applications can play a role in building and developing brand strength. Furthermore, Alnawas and Aburub (2016) explain that applications make it easier for consumers to shop and access information flexibly. In the food and beverage sector, a number of local brands have successfully developed branded applications, such as Janji Jiwa, Kopi Kenangan, Fore, and Tomoro.

Successful digital marketing can be achieved through customer engagement that strengthens the relationship between consumers and brands (Ratnawati, 2024). One feature that can increase customer engagement is gamification, which creates a fun and entertaining experience during app use (Djohan et al., 2022). Gamification is the application of game elements, dynamics, and mechanisms in a non-game context

(Behl et al., 2022). The goal is to make applications, services, or products more attractive, enjoyable, motivating, and entertaining for users (Deterding et al., 2011). In practice, gamification can be defined as a series of activities and processes that solve problems using game characteristics (Santos et al., 2024).

Although often associated with sales promotion, gamification is different. Gamification is the application of game elements in a non-game context with the aim of increasing customer engagement, motivation, and experience in the long term (Deterding et al., 2011; Hamari et al., 2014). On the other hand, sales promotion focuses on providing short-term incentives, such as discounts, coupons, or gifts, to encourage immediate purchases. In conclusion, gamification focuses on sustained engagement, while sales promotion focuses on increasing immediate sales. Shankar (2022) shows that gamification-based incentives have a more positive impact on consumer trust, commitment, and satisfaction than non-gamification incentives.

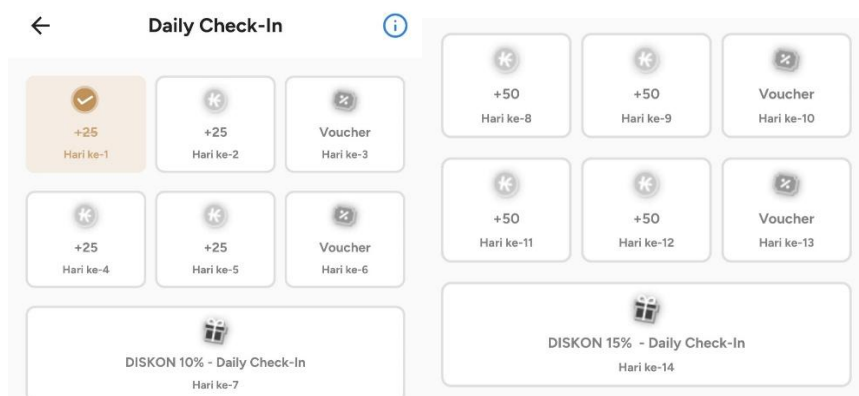
In 2020, the global gamification market reached USD 10.19 billion and is expected to grow to USD 38.42 billion by 2026 (Mordor, 2024). The growth is driven by the increasing adoption of gamification in various sectors such as healthcare, education, business, and others (Aparicio et al., 2021; Costa et al., 2017). According to Zichermann and Cunningham (2011), gamification is predicted to be a new marketing strategy for the next generation. The strategy is designed to increase interaction and motivation (Mulcahy et al., 2018).

Kopi Kenangan is one of the local coffee brands that has developed gamification as part of its digital marketing strategy. The success of the Kopi Kenangan Asli application is reflected in its achievement of more than 5 million downloads on the Play Store and its ranking as third on the App Store. According to Kopi Kenangan, the application has reached millions of customers and recorded more than 600,000 Monthly Active Users (MAU). Based on Campaign research, the cumulative number of mobile application users (all-time users) reached 8.3 million as of July 2025.

Gamification can be measured through sense of control, progress tracking, social interaction, rewards, goals, and prompts (Eisingerich et al., 2019). The Kopi Kenangan Asli application facilitates social interaction by allowing customers to share their point-collection progress with their social networks. The gamification strategy in the application is also implemented through goals and rewards mechanisms that enhance users' sense of control via the point collection feature. The daily check-in feature encourages consumers to set goals, motivating users to constantly interact with the app in order to earn rewards.

Through its daily check-in feature, the Kopi Kenangan Asli app is more accurately categorized as an implementation of gamification strategy than sales promotion because the rewards offered cannot be enjoyed in the short term. Sales promotions generally focus on increasing purchases quickly through direct incentives, such as discounts or coupons, without a progress mechanism. However, with Kopi Kenangan Asli, users need to perform structured, goal-oriented actions, including daily check-ins to collect points until they reach a certain total before they can obtain rewards. These goals create a cycle of engagement that encourages users to return to the app and interact repeatedly. In conclusion, the daily check-in feature represents progress and achievement-based gamification, rather than short-term sales promotion.

Figure 1. 1 Daily Check-in Feature



Source: Kopi Kenangan Asli App (2025)

Figure 1.1 shows gamification indicators in the Kopi Kenangan Asli application, namely goals and rewards in the form of a check-in feature. In the daily check-in feature, consumers are challenged to collect a certain number of points within a specified time limit to receive rewards in the form of 15%, 20%, and 25% discount vouchers. During the specified period, consumers are free to redeem vouchers as they wish, which is the concept of the sense of control indicator in gamification. Points earned through transactions or daily check-in serve as a goal-setting mechanism, as users must reach a certain number of points before they can redeem them for available rewards.

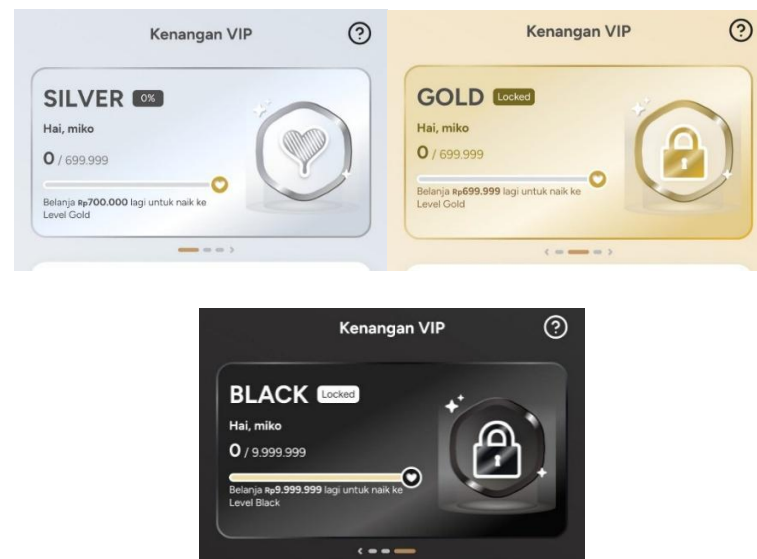
Daily check-in can be accessed by users after registering and logging into the application, without requiring them to make a purchase. Through this feature, users are encouraged to visit the application regularly to collect points and receive vouchers. The feature incorporates gamification elements such as rewards, goals, prompts, and progress tracking, which are designed to create an engaging and enjoyable user experience. Users can be exposed to the gamification system and interact with its elements before making a purchase. This element may stimulate users' interest in the products offered and encourage their intention to purchase in the future.

Apart from the daily check-in feature, gamification in the Kopi Kenangan Asli app is also applied to the membership level feature, which shows indicators of a sense of control, goals, rewards, and social interaction. The Kopi Kenangan Asli app's membership levels are divided into three categories: Silver, Gold (minimum purchase of IDR 700,000), and Black (minimum purchase of IDR 10,000,000). All three categories offer a number of benefits, such as cashback on every transaction, birthday e-vouchers, monthly exclusive promotions, the opportunity to try the latest menu items at a discount, and special programs exclusively for Black Members.

The membership level feature also supports the use of purchase intention as a variable, as its main function is to encourage future purchasing behavior among users. Through the Silver, Gold, and Black membership tiers, users are presented with clear goals, progression paths, and exclusive rewards that can be earned

through ongoing interaction with the app. Membership benefits, such as vouchers, special promotions, and exclusive privileges, can motivate users to make future purchases to obtain or maintain a higher membership status. Therefore, although advancing to a higher membership tier involves transactional activity, this feature itself is designed to stimulate users' intention to purchase in the future. This study focuses on the motivational effects generated by the membership system rather than just on users' past purchasing behavior, making purchase intention an appropriate variable for testing behavioral responses to gamification.

Figure 1. 2 Membership Level Feature



Source: Kopi Kenangan Asli App (2025)

Figure 1.2 shows the membership level feature in the Kopi Kenangan Asli app, which represents several gamification indicators in Eisingerich et al. (2019), including sense of control, goals, rewards, progress tracking, and social interaction. This feature is designed so that users can monitor their progress and find out what actions are needed to level up. From the perspective of gamification, the ability to monitor progress and influence the final outcome through one's own actions is an important element in building a sense of control for users.

The rewards indicator in the membership level feature is manifested through the benefits received by users at each membership level, such as cashback, e-vouchers,

monthly promos, discounts on the latest menus, and special programs for Black Members. In Mehrabian and Russell's (1974) Stimulus-Organism-Response theory, rewards act as stimuli that encourage users to set goals and make purchases. Moreover, the membership level feature also encourages social interaction and progress tracking, as users can monitor their progress and share their level achievements in their social environment.

The Kopi Kenangan Asli app displays prompts through notifications related to vouchers obtained through the membership level or daily check-in features. These notifications serve as reminders to redeem vouchers before they expire. This system is in line with Christopoulos' (2023) concept of prompts, which defines prompts as a gamification mechanism that aims to create a customer engagement cycle, i.e., a cycle that encourages users to reopen the app, continue their progress, or make transactions. Although gamification strategies have been implemented in the Kopi Kenangan Asli app, to date there is no empirical evidence that directly tests the effectiveness of gamification in increasing usage frequency and encouraging users to make purchases through the app.

According to Nuramalia & Tuti (2022), customer engagement is consumer participation with a brand's products or activities. Harmeling et al. (2017) also define customer engagement as voluntary contributions from customers to a company's marketing that go beyond financial support. This contribution can be made directly or indirectly, triggering an increase in customer value to the company (Pansari and Kumar, 2016). This behavior arises when customers feel connected to the brand's vision and values, which leads to purchases (Zafar et al., 2023).

According to Banik & Gao (2023), customers who show high engagement with a brand tend to be more concerned about sustainability efforts. Therefore, customer engagement can encourage sustainable consumption because consumers prefer products that are in line with their personal interests (Anwar et al., 2025). In Hsu's (2023) study, customer engagement can be measured through several indicators; the level of customer attention and focus on the brand (attention), interest in the brand (interest), enjoyment when using the brand (enjoyment), pride when using

the brand (pride), frequency and duration of use of the brand (intensity of use), and prioritizing the brand (behavioral preference).

According to Hsu (2023), the daily check-in and membership level features in the Kopi Kenangan Asli app also encourage the formation of customer engagement indicators, namely attention, interest, enjoyment, pride, intensity of use, and behavioral preference. Through a clear display of levels and progress, users can pay attention to the development of their points and membership status (attention). The difference in rewards at each level can also make users interested in learning about the features (interest).

Users who successfully level up or collect points consecutively feel happy and proud of themselves for having achieved something (enjoyment and pride). The existence of point targets and transaction requirements also encourages users to make more frequent transactions and open the Kopi Kenangan Asli app (intensity of use). When they reach the highest level, users will use the Kopi Kenangan Asli app more often than other brands (behavioral preference). However, the effectiveness of customer engagement as a response to the implementation of gamification in the Kopi Kenangan Asli app has not been proven to trigger purchase intent.

Intention is a plan or possibility for someone to behave in a certain way (Pham et al., 2023). According to Kowang et al. (2021), intention is an individual's state of mind before taking action. Paramita and Yasa (2015) in Puspitasari et al. (2018) explain that purchase intention is a mental activity that occurs before an individual uses a product or service. Purchase intention can be said to be positive if the purchase actually occurs, and conversely, purchase intention is said to be negative if the purchase does not occur (Arslan & Zaman, 2014). It can be concluded that purchase intention is a person's motivation to have plans or considerations that are likely to lead to a purchase (Komalasari et al., 2021).

Purchase intention is defined as a person's intention to make a purchase (Jonsson et al., 2019). In the Kopi Kenangan Asli application, purchase intention arises online, which Pavlou (2003) describes as a situation where customers are willing and

intend to make online transactions. Rafsandjani (2018) explains that online transactions are a series of activities involving the process of gathering information, transferring information, and purchasing products. According to Misara et al. (2025), purchase intention can be measured using several indicators, namely intention to increase purchase frequency, intention to purchase, and intention to recommend. This study aims to examine whether the gamification features in the Kopi Kenangan Asli app, including daily check-in and membership levels, are attractive and effective enough to encourage users to make transactions, make purchases in the future, and recommend the app to family or friends.

Kopi Kenangan is a local coffee brand under PT Bumi Berkah Boga, founded in 2017 in Indonesia. Based on data from the Top Brand Awards for the 2021–2025 period, Kopi Kenangan has consistently ranked in the top three in the coffee shop category for years, even ranking first with a percentage of 42.60% in 2021–2022, surpassing its main competitors such as Janji Jiwa and Fore. Kopi Kenangan has an extensive business network with more than 1,000 outlets spread across Indonesia and other countries such as Malaysia, Singapore, the Philippines, and Australia. This success has made Kopi Kenangan a unicorn company, which is a company with a valuation of more than USD 1 billion.

Table 1. 1 Top Brand Index of Local Coffee Shops in Indonesia 2021-2025

Brand Name	2022	2023	2024	2025
Janji Jiwa	38,30%	39,50%	44,80%	42,10%
Kopi Kenangan	42,60	42,60%	39%	39,20%
Fore	6,50%	7,50%	6,90%	9,50%

Source: Top Brand Award 2022-2025 (www.topbrand-award.com)

Table 1.1 shows the development of Top Brand Awards for the local coffee shop category in Indonesia during the 2022–2025 period. The Top Brand Award data demonstrates that Kopi Kenangan's performance has changed over time. Although the company maintained a Top Brand Index of 42.60% between 2022 and 2023, the score declined to 39.00% in 2024 and only slightly increased to 39.20% in 2025, trailing 2.9% behind Janji Jiwa, which ranks first with a score of 42.10%. On the

other hand, Fore shows relatively slow but stable growth, with an increase in percentage from 6.40% to 9.50% in 2025. The data indicates that competition in the food and beverage industry is becoming increasingly intense, and that it is important to evaluate digital marketing strategies, like gamification, that can strengthen customer engagement and purchase intention. The data also shows that Kopi Kenangan has not successfully maintained its dominance consistently.

Apart from Kopi Kenangan, competitors such as Fore and Janji Jiwa have also implemented app-based digital marketing equipped with gamification strategies. However, the implementation of gamification does not always have the same impact on every company. Amalgam (2019) explains that many businesses fail to implement gamification features despite having made significant investments. Therefore, this study focuses on evaluating whether the gamification strategy in the Kopi Kenangan Asli app is effective in increasing customer engagement and encouraging users' purchase intention.

The gamification strategy implemented by the Kopi Kenangan Asli app is rewards and vouchers packaged in the form of membership levels and daily check-in. The membership level feature on the Kopi Kenangan Asli app is offered in a membership system consisting of Silver, Gold, and Black levels. Each level offers different rewards. The following are the reward offered by the Kopi Kenangan app for the membership level feature:

Table 1. 2 Kopi Kenangan Asli Membership Level Rewards

Membership Level	Minimum Purchase	Rewards
Silver	No minimum transaction amounts.	2.1 Membership Voucher Discount
Gold	Minimum accumulated transaction amount of IDR 700,000 per period (yearly) to achieve or maintain Gold level.	1. Membership Voucher Discount 2. Regular Cashback 10% up to 20,000 IDR 3. One Birthday Treats Voucher

Black	Minimum accumulated transaction amount of IDR 10,000,000 per period (yearly) to achieve or maintain Black level.	1 Regular Cashback 10% up to 20,000 IDR 2 Every Monday - 50% discount max 13,000 IDR (certain menu items) 3 Every Friday to Sunday - Cashback 30% max 20,000 IDR min transaction 50,000 IDR 4 Birthday Vouchers Cashback 40% Max 50,000 IDR min 50,000 IDR 5 Birthday Vouchers 100% Discount up to 19,000 IDR no minimum transaction 6 3 Birthday Treats Vouchers 7 Exclusive Gathering, opportunity to be invited to special Black member events 8 Exclusive Early Access, try unreleased products 9 Spin the Wheels, 1x/month/user 10 Special Promotion: New menu with 100% cashback, max IDR 18,000, no minimum transaction
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Source: Kopi Kenangan Asli App (2025)

Table 1.2 shows the rewards given by the membership level feature based on membership levels, namely Silver, Gold (minimum purchase of IDR 700,000), and Black (minimum purchase of IDR 10,000,000). This feature applies a gamification strategy in the form of goals and rewards that can trigger pride and enjoyment in users. However, the effect of the membership level feature on users' purchase intent has not been proven. Therefore, this study aims to see whether the gamification

strategy applied to the Kopi Kenangan Asli application can trigger customer engagement, which then drives purchase intention.

In conclusion, the gamification strategy implemented by Kopi Kenangan Asli consists of several game-based elements, including rewards, goals, progress tracking, notifications, and a sense of control. These elements are applied to the daily check-in feature and membership tiers. Through the daily check-in feature, users are encouraged to interact with the app regularly to collect points, vouchers, and rewards without having to make a purchase. This allows users to experience gamification elements and receive incentives simply by interacting with the app. Meanwhile, the membership tier system provides clear goals through membership levels, allowing users to track their progress. Kopi Kenangan Asli allows users to participate in gamification strategies and earn rewards even before making a transaction through features such as daily check-ins. This strategy gives Kopi Kenangan Asli a unique gamification approach.

Previous research on gamification and customer engagement has been conducted by Eisingerich et al. (2019). The results of this study show that gamification has a strong influence on customer engagement through game elements such as sense of control, progress tracking, social interaction, rewards, goals, and prompts. According to Servick (2015), this engagement is beneficial for companies to understand customers more deeply. However, the results of research conducted by Xi & Hamari (2020) show that the influence of gamification on customer engagement is often weak and depends on the context of implementation and the type of elements used. These differing findings indicate a theoretical gap that causes inconsistency in research results.

Research on customer engagement and purchase intention has also been conducted by Prentice et al. (2019) and Zheng et al. (2022), which shows that customer engagement influences purchase intention, especially when it acts as a mediating variable (Aziz & Ahmed, 2023). Brodie et al. (2011) and Hollebeek (2013) also confirm that customer engagement is one of the main triggers of purchase intention. It can be concluded that the higher the level of customer engagement, the greater

the tendency for customers to make purchases. However, different findings were reported by Hapsari et al. (2017), who showed that customer engagement did not have a significant effect as a mediating variable. These differing results indicate a research gap regarding the effectiveness of customer engagement in mediating the relationship between variables.

Research on the effect of gamification on purchase intention has also been conducted by Punwatkarn and Verghese (2025), which shows that gamification can directly influence purchase intention. However, Kaur et al. (2023) found that gamification does not have a direct effect on purchase intention, but requires an intermediary factor. These differing findings indicate that the effect of gamification on purchase intention does not always occur directly, but depends on several factors. Based on this gap, this study sets gamification as the independent variable, purchase intention as the dependent variable, and customer engagement as the mediating variable to explain how gamification increases customer engagement and triggers purchase intention.

Although research on the influence of gamification on customer engagement has been conducted, studies discussing the direct influence of gamification on consumer purchase intention, particularly in the context of mobile applications such as *Kopi Kenangan Asli*, are still limited. Several studies have also discussed the relationship between gamification and customer engagement and purchase intention separately. However, there are still gaps in the literature regarding the mediation test of customer engagement in the relationship between gamification and purchase intention.

Furthermore, research on gamification in various types of applications has developed, but specific literature highlighting its application in the *Kopi Kenangan Asli* application in Indonesia has not yet been found. On the other hand, the use of gamification strategies in digital marketing to increase customer engagement is relatively new and has been minimally researched in Indonesia (Taruli et al., 2021). Based on these conditions, this study focuses on analyzing the extent to which gamification strategies in the *Kopi Kenangan Asli* application influence purchase

intent through customer engagement, with the title: “The Influence of Gamification Strategies on Purchase Intention: The Mediating Role of Customer Engagement (A Study of Kopi Kenangan Asli Users).”

1.2 Research Formulation

Based on the background described above, the problems identified are:

1. Does the gamification strategy have an effect on customer engagement in the Kopi Kenangan Asli application?
2. Does customer engagement have an effect on purchase intention for the Kopi Kenangan Asli application?
3. Does gamification have an effect on purchase intention in the Kopi Kenangan Asli application?
4. Does gamification have an effect on purchase intention in the Kopi Kenangan Asli gamification application mediated by customer engagement?

1.3 Research Objectives

Based on the research formulation, the objectives to be achieved by the researcher are:

1. To examine the effect of gamification strategies on customer engagement in the Kopi Kenangan Asli application.
2. To analyze the effect of customer engagement on purchase intention in the Kopi Kenangan Asli application.
3. To examine the effect of gamification on purchase intention in the Kopi Kenangan Asli application.
4. To analyze the effect of gamification strategies on customer purchase intention in the Kopi Kenangan Asli application, mediated by customer engagement.

1.4 Research Benefits

This research is expected to provide both theoretical and practical benefits. These benefits are as follows:

1. Theoretical

This research can increase insight and understanding of gamification, add to knowledge about customer engagement, and contribute to the development of literature on gamification in business, especially in Indonesia.

2. Managerial

This research provides insights for companies regarding the effectiveness of gamification in influencing purchase intention through customer engagement. Companies can use the results of this research as a reference in designing or developing more effective gamification programs to retain users.

II. LITERATURE REVIEW

1.1 Stimulus–Organism–Response (SOR) Theory

The Stimulus–Organism–Response (SOR) theory proposed by Mehrabian and Russell (1974) explains that external environmental stimuli can influence an individual's internal state and ultimately trigger behavioral changes (Bai et al., 2024). Zhang et al. (2024) used the SOR theory to describe how stimuli originating from serious games can shape user experiences and influence their intentions. In this study, the stimulus (S) factor is understood as external stimuli that influence users' behavioral intentions and are represented through elements of serious game experiences. The organism (O) factor refers to the emotional state formed as a result of these stimuli. On the other hand, the response factor (R) describes users' behavioral intentions, meaning actions that arise after cognitive and emotional changes in response to internal and external stimuli, and is summarized as participation.

Further research conducted by Nibu (2023) explains that the Stimulus–Organism–Response (SOR) theory states that stimuli from the environment will affect the emotional and cognitive state of consumers (organism), which then encourages the formation of certain behavioral responses (response). The concepts proposed by Nibu (2023) and Zhang et al. (2024) are consistent with gamification research on the Kopi Kenangan Asli gamification app, where features such as points, rewards, prompts, sense of control, goals, and progress tracking act as stimuli that influence users' psychology and trigger cognitive, affective, and activation responses as organisms. This internal evaluation then leads to a response in the form of users'

purchase intention toward the products offered in the application. Therefore, the SOR concept provides a suitable theoretical basis for explaining how gamification (as stimulus) can influence customer engagement (as organism) and ultimately shape purchase intention (as response).

2.2 Gamification

2.2.1 Definition of Gamification

Gamification is the application of game elements in a non-game context to increase user motivation and engagement (Oliveira, 2024). The elements used include badges, leaderboards, missions, points, avatars, and certificates (Zainuddin et al., 2020), which can create added value for users (Hamari, 2016). From a marketing perspective, gamification aims to improve user experience, loyalty, brand awareness, and encourage motivation in purchasing and selling (Kardianawati et al., 2016).

According to Deterding et al. (2011), gamification is an effort to make non-game products and services have characteristics similar to games. Hofacker et al. (2016) explain that the use of game elements in non-game products or services can increase usage and the value perceived by customers. Furthermore, Huotari and Hamari (2011) explain that gamification as a service is also reinforced by feedback and interaction systems that aim to create overall value.

According to Chou (2019), gamification is a combination of game design, game dynamics, motivational psychology, behavioral economics, and user experience on a platform or business system that aims to drive return on investment. In recent years, gamification strategies have been applied in various industries, including customer engagement, health, finance, marketing, advertising, and education (Dicheva et al., 2015).

According to Zeng et al. (2024), gamification is the application of game elements to non-game activities that can create immersive and interactive experiences by utilizing individuals' intrinsic motivations, such as competition, achievement, recognition, and self-expression. Therefore, gamification has become a popular strategy, marked by the proliferation of organizations adopting game technology

and rewards systems to motivate employees and customers. Based on expert opinions, it can be concluded that gamification is a strategy of applying game elements and mechanisms to non-game activities to create interactive experiences, increase customer engagement, and encourage certain behaviors, including purchase intent and purchasing decisions.

2.2.2 Indicators of Gamification

Through research conducted by Eisingerich et al., (2019), gamification can be measured through several indicators, such as:

1. Social Interaction

Social interaction is the relationship between users and a platform. Through this interaction, users can share their progress, achievements, and experiences with the community. Through social interaction, companies can encourage users to be more motivated in achieving their goals.

2. Sense of Control

A sense of control refers to a person's belief or feeling about the ability to influence the results obtained. In gamification, this indicator appears when users feel they have control over an application. The stronger the sense of control, the greater the confidence and motivation to continue striving for success.

3. Goals

Goals are target that individuals or groups want to achieve. Goals are considered important because it makes it easier for users to determine consistent steps. With clear goals, users will be more focused and motivated to complete all stages.

4. Progress Tracking

Progress tracking is the ability of a system to record, display, and document the progress made by users. Through this feature, users can monitor their progress, which motivates them to continue their activities.

5. Rewards

Rewards are a form of appreciation given to users when they successfully achieve certain targets. Rewards can be in the form of gifts, points, or vouchers. This indicator can make users feel appreciated, thereby motivating them to achieve higher levels.

6. Prompts

A prompt is a reminder given by the system to users to trigger certain actions, such as interacting with the application again. Prompts take the form of notifications that serve as mission reminders, point rewards, or voucher redeems, as in the Kopi Kenangan Asli application.

2.3 Customer Engagement

2.3.1 Definition of Customer Engagement

Customer engagement is a marketing concept that refers to the way customers interact with a brand, which can trigger loyalty and purchase intent. According to Oliveira (2024), customer engagement is the level of cognitive, emotional, and behavioral activity that arises when customers interact with a brand to build loyalty and business performance. More broadly, customer engagement is how consumers actively engage with companies in value creation (Kaveh et al., 2021).

According to Hsu (2023), customer engagement is a person's psychological and behavioral involvement with a brand. Customer engagement is considered important for maintaining an emotional connection between the brand and the customer. In today's digital age, relationships between brands and companies can be formed through the use of technology, such as social media or branded applications.

According to Xu & Wang (2020), customer engagement is repeated communication and interaction between customers and companies that results in psychological and emotional bonds. Customers who maintain strong relationships with companies can provide feedback and suggestions regarding product or service improvements. Therefore, customer engagement can help companies achieve sustainable development (Xu & Wang, 2020).

According to Harmeling et al. (2016), customer involvement is a motivational condition that encourages consumers to actively engage in brand activities as a result of their perceived experiences. Hollebeek et al. (2016) explain that customer involvement also takes the form of psychological intent, which is when customers voluntarily invest resources to interact with a brand. This engagement is related to the process of information search, evaluation, and purchase decision-making (Vivek et al., 2012). Therefore, customer engagement is considered an effort to motivate, empower, and measure customer behavioral and psychological tendencies in marketing activities (Hollebeek, 2011).

Based on experts' opinions, it can be concluded that customer engagement is a condition where customers consciously and actively interact with a brand, which encourages the formation of a strong relationship with the company. This interaction can create value and provide feedback that supports the company's performance.

2.3.2 Indicators of Customer Engagement

Through research conducted by Hsu (2023), customer engagement is measured through six indicators that show how customers pay attention to, feel about, and act towards the brands they use, such as:

1. Attention

Attention refers to the extent to which customers focus on and pay attention to a brand. Customers who have a high level of attention will consciously pay attention to information, promotions, social media content, and the latest developments from the brand. Customers are not passive, but show interest by following the brand's activities.

2. Interest

Interest is the feeling that arises after customers pay attention to a brand. This interest indicates a desire to know more about the company's products, services, or activities. Customers who have interest usually seek additional information, read reviews, compare products, or follow the brand's official accounts.

3. Enjoyment

Enjoyment describes the feeling of pleasure or satisfaction when customers interact with a brand. This feeling of pleasure can arise when using a product or service, viewing social media content, or participating in a brand campaign. When customers enjoy the experience, their relationship with the brand becomes more positive and memorable.

4. Pride

Pride refers to the feeling of pride that customers feel when using or associating with a brand. This pride usually arises when the brand has a positive image, good quality, or values that align with the customer's identity. Customers who feel proud tend to be more confident when using products or services and do not hesitate to recommend them to others. Pride strengthens the emotional bond between customers and brands.

5. Intensity of Use

Intensity of Use indicates how actively customers use a brand's products or services. The higher the frequency and duration of use, the higher the level of customer engagement. This indicator describes a tangible behavioral aspect, as customers are not only interested or happy, but actually use the brand's products or services consistently in their daily lives.

6. Behavioral Preference

Behavioral Preference refers to the tendency of customers to choose one brand over another. This can be seen from repeat purchase decisions, brand loyalty, and the tendency to continue choosing that brand even when there are other alternatives. Behavioral preference indicates that customer engagement has reached the commitment stage, where customers have clear and consistent choices regarding brands.

2.4 Purchase Intention

2.4.1 Definition of Purchase Intention

Intention is a plan or possibility for someone to perform an action in a certain situation (Pham et al., 2023). According to Kowang et al., (2021), intention is a

thought or consideration that arises before someone actually makes a decision. In the context of marketing, purchase intention is defined as the extent of a person's desire and effort to buy a product after being influenced by various factors (Pham et al., 2023).

Laz aroiu et al. (2020) explain that purchase intention is a decision that is formed after consumers evaluate a product. This means that before the intention to buy arises, consumers first assess aspects such as the quality, price, and benefits of the product. Torlak et al. (2019) add that purchase intention is also related to consumers' readiness to buy, which is influenced by internal and external factors, such as cost, quality, and perceived value. Moreover, purchase intention can be influenced by various other factors, such as the level of consumer knowledge, perceptions of the product, design or packaging, and the influence of influencers (Pham et al., 2023).

According to Pektas & Hassan (2020), purchase intention is an individual's action to buy something to fulfill their desires, and in the process, there are influences that trigger future purchases. An action can be considered a purchase intention if consumers have plans to buy a particular product and determine the amount to be purchased within a certain period of time (Purbohastuti & Hidayah, 2020). Based on expert opinions, it can be concluded that purchase intention is the possibility or readiness of a person to buy a product that arises after going through a process of consideration and evaluation, and is influenced by various internal and external factors. Purchase intention is characterized by a clear plan to make a purchase, including determining the product to be purchased, the quantity, and the time of purchase. The purchase intention is a stage before the purchase decision that indicates the consumer's desire, seriousness, and likelihood of making a purchase in the future.

2.4.2 Indicators of Purchase Intention

Research conducted by Misara (2025) measured purchase intention through three main indicators that describe consumers' desire to buy and recommend to others.

1. Intention to Increase Purchase Frequency

Intention to increase purchase frequency is the consumer's intention or plan to buy a product or use a service more often than before in the future. These intentions are

still at the psychological stage, meaning that what is measured is not behavior that has already occurred, but the consumer's readiness and commitment to increase the intensity of future purchases. This intention usually arises due to an interesting experience, satisfaction, or a certain appeal, such as gamification features that encourage consumers to make more frequent purchases.

2. Intention to Purchase

Intention to Purchase is the extent to which consumers have clear plans or desires to purchase a product in the future. These indicators emphasize the psychological aspect, namely the readiness and sincerity to make a purchase. Consumers who have a high purchase intention usually express statements such as wanting to try, planning to buy again, or considering the product as their first choice. Intention to Purchase is at the core of the purchase intention concept because it indicates a strong possibility of a purchase occurring.

3. Intention to Recommend

Intention to Recommend refers to consumers' willingness to recommend a brand's products or services to others, such as friends, family, or coworkers. This indicator shows the level of consumer confidence and trust in a brand's products or services. When someone is willing to recommend a product or service, it means they have a positive opinion and good experience with that brand.

2.5 Previous Research

Table 2. 1 Previous Research

No.	Research Data	Research Title	Research Result	Research Connection
1.	1. Andreas B. Eisingerich 2. André Marchand 3. Martin P. Fritze 4. Lin Dong <i>International Journal of Research in</i>	<i>Hook vs. Hope: How to Enhance Customer Engagement through Gamification</i>	The results show that gamification elements, such as social interaction, sense of control, goals, progress tracking, rewards, and prompts, have a positive effect on customer engagement	Have the same variable X, gamification, having the same gamification elements, including goals, progress tracking, rewards, and prompts, then having the same variable Z (mediation), customer engagement with positive

	Marketing, Vol. 36, No. 2, pp. 200–215. Q1 2019		and digital sales mediated by hope, while compulsion has a negative impact on customer engagement. The research method used was a mix of qualitative and quantitative methods.	motivation such as hope as a trigger.
2.	1. Catherine Prentice 2. Xiao Yun Han 3. Lian-Lian Hua 4. Lin Hu <i>Journal of Retailing and Consumer Services</i>, Vol. 47, pp. 339–347. Q1 2019	<i>The Influence of Identity-Driven Customer Engagement on Purchase Intention</i>	The results show that customer engagement divided into two main dimensions, namely attitudinal engagement and behavioral engagement, has a positive influence on purchase intention. Attitudinal engagement forms the psychological basis for behavioral engagement, which then drives purchase intention and action. The results of the analysis were examined using SEM (Structural Equation Modeling).	Have the same variable Z (intervening), customer engagement, and the same variable Y, purchase intention. This study reinforces the role of customer engagement as a mediator of motivational factors that trigger purchase intention. The research method used is the same, quantitative.
3.	1. Jaspreet Kaur 2. Rambabu Lavuri 3. Ratri Parida 4. Sujay Vikram Singh	<i>Exploring the Impact of Gamification Elements in Brand Apps on the</i>	The results show that gamification elements (fun, storytelling, mechanics, dynamics, rewards, and	Have the same variable X, gamification, and the same variable Y, purchase intention, but are mediated by perceived enjoyment and social interaction. The

	<i>Journal of Global Information Management, Vol. 31, Issue 1.</i> Q2 2023	<i>Purchase Intention of Consumers</i>	aesthetics) have a positive influence on purchase intention, but through the mediators of perceived enjoyment and social interaction.	research method used is the same, quantitative.
4.	1. S. Punwatkar 2. M. Verghese <i>Journal of Applied Research and Technology Vol. 23 (2025), hal. 94-102.</i> Q4 2025	<i>Investigating the impact of gamification on customer engagement, brand loyalty and purchase intent in marketing</i>	The results show that gamification has a positive effect on customer engagement and purchase intent, but the effect is not direct; rather, it needs to be mediated by engagement and loyalty.	Have the same variable X, gamification, then have the same variable Y, purchase intention. Have the same variable Z (mediation/intervening), customer engagement. The research method used is the same, quantitative.
5.	1. Chia-Lin Hsu <i>Decision Support Systems Vol. 174 (2023) 114020</i> Q1 2023	<i>Enhancing brand love, customer engagement, brand experience, and repurchase intention: Focusing on the role of gamification in mobile apps</i>	The results show that gamification has a positive influence on customer engagement and repurchase intention. The study also shows that customer engagement acts as the mediation that triggers repurchase intention.	Have the same variable X, gamification, and the same variable Z (mediation), customer engagement. The study was conducted on a mobile application similar to the Kopi Kenangan application using quantitative methods.

Source: Data Processed by Researchers (2025)

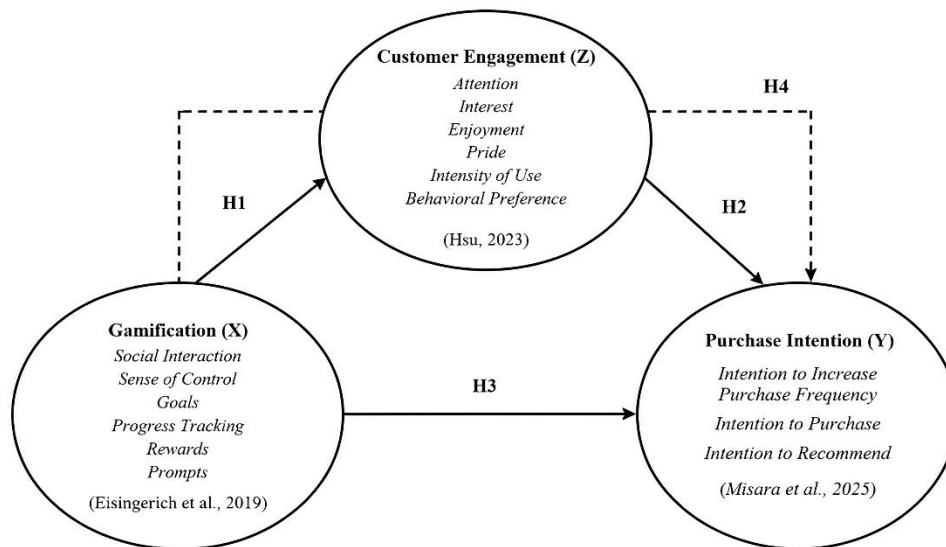
Based on five previous studies, it can be concluded that gamification has the potential to increase user engagement and encourage behavior that leads to purchase

intent. Most studies show that gamification elements such as points, rewards, levels can serve as stimuli that increase user motivation to interact with the platform. However, findings across studies are not entirely consistent; some studies find that the effect of gamification on purchase intention is indirect and requires a mediator, such as customer engagement.

2.6 Conceptual Framework

According to Sekaran and Bougie (2019), a conceptual framework is a conceptual structure that systematically describes the relationships between research variables based on relevant theoretical foundations. This framework reflects the researcher's views or beliefs regarding the patterns of relationships between variables and the theoretical reasons underlying these relationships in the research. Based on the research problem above, supported by theoretical foundations and previous research, the researcher formulates the conceptual framework as follows:

Figure 2. 1 Conceptual Framework



Sources: Based on Research Before (2025)

2.7 Hypotesis

A hypothesis is a temporary answer to a question that needs to be tested for accuracy with more complete and supporting data. This study was conducted to determine whether the gamification system can influence Kopi Kenangan consumers to

encourage sustainable consumption. Based on the issues raised in this study, the hypotheses proposed in this study are as follows:

2.7.1 The Effect of Gamification on Customer Engagement

Gamification is the application of game elements, dynamics, and mechanisms in a non-game context (Behl et al., 2022). The goal is to make applications, services, or products more attractive, enjoyable, motivating, and entertaining for users (Deterding, 2011). Several previous studies, including Buhalis (2019), Alsawaier (2018), and Hassan et al. (2019), agree that adopting gamification can effectively increase customer engagement. According to Hwang and Choi (2020), the main objective of various companies in implementing gamification is to motivate and engage customers with the brand. The presence of gamification elements such as rewards, points, levels, and leaderboards has been proven to increase consumer interaction and the duration of time spent in the system (Putri, 2022).

Eisengerich et al. (2019) also explain that gamification is an important medium in facilitating customer engagement. The study shows that the application of gamification can help companies increase customer engagement through elements such as rewards, social interaction, and behavioral change. Based on previous theories and research, the following hypothesis can be formulated:

H1: Gamification has a significant effect on customer engagement

2.7.2 The Effect of Customer Engagement on Purchase Intention

Previous studies, Algharabat (2018) states that customer engagement has a positive and significant effect on customer purchase intention. Prentice et al. (2019) explain that the more actively customers interact with a brand, the more likely they are to purchase products or services from that brand. In conclusion, customer engagement is defined as an emotional connection between customers and the company, which ultimately triggers purchase intention (Moliner et al., 2018). Based on previous theories and research, the following hypothesis can be formulated:

H2: Customer engagement has a significant effect on purchase intention through the Kopi Kenangan app.

2.7.3 The Effect of Gamification on Purchase Intention

Gamification is defined as the application of game elements in a non-game context with the aim of increasing user enjoyment and engagement. Gamification mechanisms generally involve various elements such as points, levels, leaderboards, badges, and challenges. These elements create an interactive and challenging experience (Mulcahy et al., 2018; Poncin et al., 2017). The positive experiences and feelings of enjoyment generated through gamification elements have been shown to increase the effectiveness of marketing activities, influencing engagement, attitudes, purchase intent, repeat purchases, and customer retention (Sotos-Martínez et al., 2023; Robson et al., 2016).

Research conducted by Wu et al., (2019); Jang et al., (2018) shows that gamification has a positive impact on consumer purchase intent. Müller-Stewens et al., (2017) also confirms that gamification can entertain customers and attract them to make purchases. Based on previous theories and research, the following hypothesis can be formulated:

H3: Gamification has a significant effect on purchase intention

2.7.4 The Effect of Gamification on Purchase Intention Mediated by Customer Engagement

Game elements such as points, achievements, leaderboards, virtual rewards, virtual goods, and virtual badges are commonly used components in gamification systems because they can increase user motivation (Bitrián et al., 2021; Zhao et al., 2021). Their application in a business context has proven effective in encouraging customer engagement. Schaffarczyk and Ilhan (2019) explain that elements of challenge and competition also play an important role in increasing customer enthusiasm and engagement, and ultimately driving purchase intent for products or services.

Research conducted by De Canio et al. (2021) shows that gamification functions as an intrinsic motivator designed to increase interaction and user experience in an application. The application of game elements such as points and challenges has been proven to increase user engagement in shopping activities, which ultimately triggers purchase intent. These findings are consistent with Punwatkarn (2025)

research, which states that gamification has a positive effect on customer engagement, leading to purchase intentions.

H4: Gamification has a significant effect on purchase intention, mediated by customer engagement

III. RESEARCH METHODOLOGY

3.1 Type of Research

This study uses a survey method, in which the researcher distributes questionnaires to respondents for data collection. The approach used is a quantitative approach. According to Creswell (2023), quantitative research is a method that emphasizes objective measurement of social phenomena using numeric data analyzed statistically. This approach seeks to test theories by examining the relationship between variables, usually expressed in the form of hypotheses.

This study has independent variables, dependent variables, and mediating variables (intervening). The variables in this study consist of an independent variable, gamification (X), a dependent variable in the form of purchase intention (Y), and an intervening variable in the form of customer engagement (Z).

3.2 Types and Sources of Data

3.2.1 Primary Data

The type of data used is quantitative data. The data source in this study is primary data distributed to respondents regarding the effect of gamification on purchase intention with customer engagement as a mediator on the Kopi Kenangan Asli app. Primary data in this study was obtained directly from respondents through the distribution of questionnaires. According to Sekaran and Bougie (2016), primary data is data collected directly by researchers from original sources for specific research purposes, usually through interviews, surveys, observations, or experiments. This data differs from secondary data that is already available from other parties, such as reports, publications, or archives. The instrument used is a questionnaire with a Likert scale.

3.2.2 Secondary Data

According to Creswell (2023), secondary data is data that has been collected by previous researchers and reused in new research as a source of supporting information. Secondary data is collected from various indirect sources such as books, scientific journals, articles, and other relevant documents. This data is used to support analysis and discussion.

Secondary data can also be evidence, records, or historical reports that have been compiled in archives or published or unpublished document data. Secondary data in this study was obtained from journals, articles, books, and internet sources related to the study.

3.3 Population and Sample

3.3.1 Population

According to Sekaran and Bougie (2016), a population is the entire group of people, events, or things that are the focus of a researcher's attention because they have certain characteristics that are relevant to the research problem. The population used in this study was Kopi Kenangan Asli app users who interested in trying the gamification feature.

3.3.2 Sample Size

According to Creswell (2023), a sample is defined as a population selected by researchers to represent the characteristics of the study. This study had limitations in terms of time, energy, and cost, so the researchers only took a sample by distributing questionnaires online to Kopi Kenangan Asli app users who interested in trying the gamification feature. Based on Hair et al. (2010), the minimum sample size is 5–10 observations for each parameter estimated.

The analysis technique chosen by the researcher is Structural Equation Model (SEM), therefore the recommended minimum sample size ranges from 100 to 300 in SEM parameter estimation. This study has 3 variables with 15 indicators, so the sample size set is $15 \times 10 = 150$ respondents. The sample selection was made because the researcher understood that the required information could be obtained

from one specific target group, individual who has downloaded and used the Kopi Kenangan Asli app.

Table 3. 1 Sample Size Per Region

No.	Indonesia Region	Population (2024)	Sample Size
1	West Region	220.000.000	$\frac{220}{282.48} \times 150$ $= 116.82 = 117$
2	Central Region	45.000.000	$\frac{45}{282.48} \times 150 = 23.89$ $= 24$
3	East Region	17.480.000	$\frac{17.48}{282.48} \times 150 = 9.28$ $= 9$
Total		282.480.000	150

Source: Badan Pusat Statistik (2024) (<https://www.bps.go.id/>)

Based on calculation above, the sample size of this study is set at 150 respondents, proportionally allocated across the western, central, and east region.

3.3.3 Sampling Technique

The sampling technique used was non-probability sampling using a purposive sampling approach. Through this technique, researchers can select respondents who are relevant to the research context. According to Creswell (2023), purposive sampling is a sampling technique that is deliberately chosen by researchers because it is considered informative and relevant to the phenomenon being studied. The researcher did not select respondents randomly, but focused on respondents who understood the issue or had experience relevant to the research objectives. The sample criteria determined by the researcher in this research are relevant to the problem and objectives of this research as follows.

1. Respondents had downloaded and used the Kopi Kenangan Asli app.
1. Respondents already have an account on the Kopi Kenangan Asli app.
2. Respondents use features of the Kopi Kenangan Asli app that implement gamification strategies such as membership levels and daily check-in.

3.4 Measurement of Operational Variables

Variable measurement is the process of determining the amount or intensity of information about people, events, ideas, and specific objects and their relationship to business problems or opportunities. The measurement process can be carried out by assigning numbers or tables to the characteristics of an object, phenomenon, and event. To measure the variables being studied, researchers need a measurement scale.

Creswell (2023) explains that a measurement scale is the process of converting research variables into numbers so that they can be analyzed statistically. Meanwhile, Sugiyono (2017) defines a variable measurement scale as a reference for determining the length of the intervals in a measuring instrument, so that the measuring instrument can produce more accurate, efficient, and communicative quantitative data. This study uses an online questionnaire with a Likert scale. The Likert scale is a technique for measuring attitudes that indicates the level of agreement or disagreement of respondents to questions, with options that respondents can choose from, as shown in Table 3.2.

Table 3. 2 Likert Scale

Likert Scale Research	Values
Strongly Agree	5
Agree	4
Neutral	3
Disagree	2
Strongly Disagree	1

Source: Sugiyono (2017)

According to Sugiyono (2016), variables are anything that is determined to be researched in order to obtain information that can be concluded. This study consists of three types of variables:

3.4.1 Gamification (X)

The research used gamification as an independent variable. According to Eisingerich et al. (2019), Gamification is the application of game elements designed to increase user motivation and experience. This concept refers to the gamification theory proposed by Deterding (2012), which defines gamification as

the use of game design elements in a non-game context to motivate user behavior. Developing the framework, Eisingerich et al. (2019) grouped gamification into several main elements, such as social interaction, sense of control, goals, progress tracking, rewards, and prompts. These elements are game design elements that were chosen because they have been proven to be the main triggers for increasing user engagement. These elements are operationalized into research indicators as shown in Table 3.3.

The original instrument adapted from Eisingerich et al.'s (2019) study has passed the validity test through Confirmatory Factor Analysis (CFA), with factor loading values > 0.70 and Average Variance Extracted (AVE) > 0.50 . The reliability test also showed Composite Reliability (CR) and Cronbach's Alpha values > 0.70 , so all indicators were declared valid and reliable. Therefore, the gamification instrument used in the study is suitable for application because it has been proven to meet the validity and reliability requirements in previous studies.

Table 3. 3 Measurement of Gamification

Variable	Indicators (Eisingerich et al., 2019)	Original Instrument (Eisingerich et al., 2019)	Modified Instrument	Scale
Gamification (X) Deterding (2012), as cited in Eisingerich (2019), defines gamification as the use of game design elements	• Social Interaction • Sense of Control • Goals • Progress Tracking • Rewards • Prompts	Social Interaction 1. Most of my friends and colleagues used it. Everyone keeps talking about it. So, I downloaded it too. Social Interaction 2. My work colleagues use it and we make fun of each other and each other's scores. It is nothing serious just good fun. But it can get competitive.	1. Many of my friends use the Kopi Kenangan Asli app, and because they frequently talk about it, I felt encouraged to download and use the app as well. 2. My friends and I use the Kopi Kenangan Asli app, and we tease each other about our Kopi Kenangan Asli levels. It's just for fun, but it can also be competitive.	Likert 1-5

Continued from Tabel 3.3 Measurement of Gamification

Variable	Indicators (Eisingerich et al., 2019)	Original Instrument (Eisingerich et al., 2019)	Modified Instrument	Scale
Gamification (X)	1. Social Interaction 2. Sense of Control 3. Goals 4. Progress Tracking 5. Rewards 6. Prompts	Sense of Control 3. It makes me feel good about myself if I manage one level and can progress to the next. I guess that's just how our brains work. We always want to achieve one thing and move on to the next. Goals 4. It gives me a certain goal. I want to achieve it. Otherwise I kind of feel bad about it. Having a clear goal helps me a lot. It really does motivate me. Rewards 5. I like the feeling of achieving something. If there are different levels to unlock along the way, it keeps me engaged and wanted to come back and use the app more often.	3. I feel satisfied when I successfully complete a level in the Kopi Kenangan Asli app, and it motivates me to continue to the next level. 4. The challenges in the Kopi Kenangan Asli app give me clear goals to achieve. Otherwise, I feel less motivated. Having clear goals really helps me. It truly motivates me. 5. I love the feeling of achievement, and the levels in the Kopi Kenangan Asli app keep me engaged and motivated to use the app more often.	Likert 1-5

Continued from Tabel 3.3 Measurement of Gamification

Variable	Indicators (Eisingerich et al., 2019)	Original Instrument (Eisingerich et al., 2019)	Modified Instrument	Scale
Gamification (X)	1. Social Interaction 2. Sense of Control 3. Goals 4. Progress Tracking 5. Rewards 6. Prompts	Progress Tracking 6. If it is too hard to get from one level to the next it can be frustrating. But if it is too easy then it gets boring really quickly. It needs to be balanced to be fun. Prompts 7. One of its strengths is the timely updates and reminders. It helps me make it a routine. (Eisingerich, 2019)	6. If the process of achieving goals in the Kopi Kenangan Asli app is too difficult, I feel frustrated, but if it's too easy, I get bored. It needs to be balanced to be fun. 7. One of its strengths is the timely updates and reminders. It helps me make it a routine. (Eisingerich, 2019)	Likert 1-5

3.4.2 Customer Engagement (Z)

An intervening variable is a variable that connects the independent variable and the dependent variable. This research uses one mediating variable, Customer engagement, referred to the basic concept developed by Hollebeek et al. (2014), customer engagement as cognitive, affective, and behavioral responses of consumers when interacting with brands. Based on this framework, Hsu (2023) operationalizes customer engagement into three dimensions; cognitive processing, affection, and activation.

The indicators in Hsu's study were adapted from the instrument developed by Hollebeek et al. (2014). The instrument has been proven valid through Confirmatory Factor Analysis (CFA), which shows that all factor loadings are

above 0.70 and the Average Variance Extracted (AVE) exceeds 0.50. Moreover, the reliability test showed that the Composite Reliability (CR) and Cronbach's Alpha values were greater than 0.70, so all indicators were declared reliable. Thus, the customer engagement instrument used in this study is feasible to apply because it has met the validity and reliability criteria in previous studies.

Table 3. 4 Measurement of Customer Engagement

Variable	Indicators (Hsu, 2023)	Original Instrument (Hsu, 2023)	Modified Instrument	Scale
Customer Engagement (Z) Customer engagement is defined as a psychological and behavioural involvement of customers with a brand (Hsu, 2023).	A. Attention B. Interest C. Enjoyment D. Pride E. Intensity of Use F. Behavioral Preference	Attention 1. Using [products/services of the sports brand] makes me think about it. Interest 2. Using [the sports brand] stimulates my interest to learn more about the brand. Enjoyment 3. Using [products/services of the sports brand] makes me happy. Pride 4. I am proud to use [products/ services of the sports brand]. Intensity of Use 5. I spend significantly more time using [this sports brand] than other brands. Behavioral Preference 6. This is one of [the sports brands] I generally purchase from when I want to engage in sports activities. (Hsu, 2023)	1. Using the Kopi Kenangan Asli app makes me think about the product. 2. Using the Kopi Kenangan Asli app stimulates my interest to learn more about the product. 3. Using Kopi Kenangan Asli app makes me happy. 4. I am proud to use the Kopi Kenangan Asli app. 5. I spend more time using Kopi Kenangan Asli app than other coffee brands. 6. Kopi Kenangan is one of the coffee brands I generally purchase from when I want to drink coffee.	Likert 1-5

3.4.3 Purchase Intention (Y)

The dependent variable in this research is Purchase Intention, which is the consumer's intention to make a purchase through the Kopi Kenangan Asli gamification application in the future. The basic concept of purchase intention in Misara et al.'s (2025) study refers to several previous definitions, as explained by Moon and Kim (2001), Suh and Han (2002), and Huang et al. (2017), that purchase intention is the consumer's psychological desire to make a transaction after having a positive experience using a service. This definition was developed by Misara et al. (2025) that reflect consumers' tendency to increase purchasing activity, maintain purchasing behavior, and recommend the platform to others.

The purchase intention instrument used in the research by Misara et al. (2025) has been tested using Partial Least Squares (PLS-SEM), and all indicators show factor loadings above 0.80 and an Average Variance Extracted (AVE) of 0.797. The reliability test also showed a Composite Reliability (CR) value of 0.951 and Cronbach's Alpha of 0.936, all of which were above the minimum limit of 0.70. These results indicate that the purchase intention instrument has been proven to be valid and reliable. Therefore, the indicators adapted from Misara et al. (2025) research are suitable for use as a purchase intention measurement instrument in the context of the Kopi Kenangan Asli gamification application.

Table 3. 5 Measurement of Purchase Intention

Variable	Indicators (Misara et al., 2025)	Original Instrument (Misara et al., 2025)	Modified Instrument	Scale
Purchase Intention (Y1) Moon and Kim (2001), Sun and Han (2002), and Huang et al. (2017), as cited in Misara et al. (2025), defines purchase intention is the consumer's psychological	1. Intention to Increase Purchase Frequency 2. Intention to Purchase 3. Intention to Recommend	Intention to Increase Purchase Frequency 1. I plan to increase my shopping activities on this online platform because of its engaging gamified features. Intention to Purchase 2. This gamified element of this website or app make me intend to continue buying online here in the future.	1. I plan to increase my purchase frequency through the Kopi Kenangan Asli app because of its attractive gamification features. 2. The gamification elements in the Kopi Kenangan Asli app have made me plan to make	

desire to make a transaction after having a positive experience using a service.		Intention to Recommend 3. Because of the enjoyable gamified shopping experience, I will encourage my friends and family to-shop on this online platform.	online purchases in the future. 3. Because of the enjoyable gamified shopping experience, I will encourage my friends and family to make purchases-through Kopi Kenangan Asli gamification app.	
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3.5 Data Collection Techniques

The data collection techniques used in this thesis are as follows:

1. Questionnaire

A questionnaire is a technique used in research to collect data from respondents through a series of structured questions (Creswell, 2023). Questionnaires are designed to measure attitudes, behaviors, and individual characteristics through a series of questions. The questionnaire in this study is in the form of a Google form that will be distributed online to 150 users of the Kopi Kenangan Asli gamification app users. The data collection process will be carried out for 1-2 weeks.

2. Literature Study

A literature study is the collection of data or information through books related to research and aims to find theories, concepts, and other variables relevant to the research. In the literature study method, researchers search for data through references, journals, and articles from the internet.

3.6 Data Analysis Techniques

3.6.1 Descriptive Statistical Analysis

According to Sugiyono (2017), descriptive statistics is a statistical technique used to analyze data by describing or illustrating the collected data without drawing

general conclusions or generalizations. This analysis method aims to provide an overview of the characteristics of the data so that researchers can understand the patterns, trends, or variations that emerge from the respondents' answers. Tomar et al. (2019) add that descriptive analysis also serves as a first step in obtaining important information that can be used to identify potential relationships with other variables.

Through descriptive statistics, researchers can process data to obtain the average value, frequency, and percentage of each respondent's answer. The information helps provide an overview of the criteria of Kopi Kenangan Asli gamification app users, such as the frequency of app usage, how often they use gamification features, and the distribution of users based on gender, age, occupation, and education level. Descriptive analysis is also used to describe the length of time respondents have been using the internet, thereby providing additional context for understanding user behavior.

Each statement in the questionnaire was presented using a Likert scale with five response options, namely strongly agree, agree, neutral, disagree, and strongly disagree. All respondents' answers were then processed and placed on a continuum to facilitate the process of classifying and interpreting the level of agreement with each research variable indicator. This descriptive statistical analysis uses score interpretation guidelines based on Sugiyono (2017:93–94), which serve as a reference in determining the categories of respondents' assessments of the research variables.

Likert Scale Assessment	Score
Strongly Agree	5
Agree	4
Neutral	3
Disagree	2
Strongly Disagree	1

3.6.2 Quantitative Analysis

Quantitative analysis is the process of processing and examining numerical data using statistical techniques to answer research questions and test hypotheses (Creswell, 2023). Meanwhile, Sugiyono (2018) explains that quantitative analysis includes the process of grouping data based on the type and variables of respondents, tabulating data according to research variables, presenting data for each variable studied, and performing statistical calculations to answer the research questions and test the hypotheses that have been formulated.

In this research, construct measurements and relationships between variables were analyzed using *Partial Least Squares* (PLS)-based *Structural Equation Modeling* (SEM) multivariate techniques. Bollen (2011) explains that SEM are sets of equations that encapsulate the relationships among latent variables, observed variables, and error variables. Therefore, SEM can be used in a series of analyses to answer various research questions. SEM is an appropriate approach for modeling relationships between constructs, both direct relationships and relationships involving mediating variables.

PLS (*Partial Least Squares*) was chosen in this study because it is a variance-based SEM method that can test measurement models (outer models) and structural models (inner models) simultaneously. Measurement models are used to test the validity and reliability of indicators against latent constructs, while structural models are used to test causal relationships between latent constructs. In addition, PLS is flexible for use in studies with medium-sized samples or non-probability samples such as purposive sampling.

SEM allows researchers to evaluate complex relationships between variables, including testing mediation effects and simultaneous relationships between several independent and dependent constructs in a single structural model. PLS also has the ability to measure and describe latent variables, which are variables that cannot be measured directly, through indicators that represent them (Ghozali, 2015). Due to these advantages, PLS-SEM is the appropriate method for data analysis in this study.

3.7 Structural Equation Model (SEM) and Partial Least Square (PLS)

Analysis

This study uses the Partial Least Squares (PLS)-based Structural Equation Modeling (SEM) method. Ghazali (2014) explains that SEM is a multivariate analysis technique that combines factor analysis with regression analysis to evaluate the relationships between variables in a model, both the relationships between indicators and constructs and between latent constructs. Furthermore, Ghazali (2014) adds that the PLS method has the ability to measure and visualize latent variables, which are variables that cannot be measured directly and must be represented through their indicators.

In implementation, PLS model evaluation consists of two main stages, including outer model and inner model. Outer model is used to assess the quality of research instruments through testing the validity and reliability of indicators, while inner model is used to analyze the causal relationship between constructs and test research hypotheses.

3.7.1 Measurement Model (Outer Model)

The evaluation of the measurement model, or outer model, is conducted to assess the validity and reliability of the indicators that form each latent construct. For reflective measurement models, the assessment includes convergent validity, discriminant validity, composite reliability, and Cronbach's Alpha (Ghozali, 2015). This evaluation ensures that the indicators used adequately represent their respective latent constructs. The following tests are carried out in assessing the outer model:

1. Convergent Validity (Outer Loading)

Convergent validity is examined through the correlation between an indicator and the construct it measures. An indicator is considered to have good validity if its loading value is above 0.70. However, for studies in the scale development phase, loading values between 0.50 and 0.60 may still be accepted (Ghozali, 2015; Hair et al., 2019). Higher loading values indicate a stronger contribution of the indicator in explaining the latent construct.

2. Construct Reliability & Validity

Construct validity and reliability are concepts used to assess the quality of research instruments. Construct reliability refers to the degree of consistency with which an instrument measures a variable, meaning that the results obtained are stable and reliable when measurements are repeated. In contrast, construct validity indicates the extent to which the indicators used are truly capable of accurately representing and measuring the concept under study. Construct validity and reliability can be measured with the following methods:

1. Cronbach's Alpha

Cronbach's Alpha is a statistical method used to measure the reliability or internal consistency of a research instrument, such as a questionnaire. The Cronbach's Alpha value indicates the extent to which items within a single variable are interrelated in measuring the same construct. Generally, a value above 0.70 is considered to indicate good reliability, a value between 0.60 and 0.69 is still acceptable, while a value below 0.60 indicates low reliability, meaning the instrument needs to be revised.

2. Average Variance Extracted (AVE)

AVE measures the proportion of variance in the indicators that is captured by the construct. An AVE value above 0.50 indicates that more than 50% of the indicator variance is explained by the latent construct, thus meeting the requirement for convergent validity (Ghozali, 2015).

3. Composite Reliability (ρ_a & ρ_c)

Composite reliability evaluates the internal consistency of a construct. A CR value above 0.70 indicates good reliability for confirmatory research, while values between 0.60 and 0.70 are still acceptable for exploratory research (Ghozali, 2015:75). Higher CR values reflect stronger consistency among indicators in measuring the same latent construct.

3.7.2 Evaluation of the Structural Model (Inner Model)

The structural model, or inner model, is evaluated to examine the relationships among latent variables in the research framework. This analysis aims to assess the

predictive relationships between constructs according to the theoretical model (Ghozali, 2015). The inner model is evaluated through several components, as follows:

1. Path Coefficient

Path coefficient is a statistical technique used to analyze causal relationships among variables in a research model. Through path coefficient, researchers can determine whether there is an influence between variables, as well as the role of mediating variables in explaining the observed relationships.

2. R-square

R-square measures the extent to which exogenous variables explain the variance in endogenous variables. An r-square value of 0.75 is considered strong, 0.50 moderate, and 0.25 weak (Ghozali, 2015). Higher r-square values indicate stronger explanatory power of the model.

3.8 Hypothesis Testing

Hypothesis testing is conducted using the bootstrapping procedure in SmartPLS. This method assesses the significance of path coefficients and evaluates the direction and strength of relationships among latent variables. Bootstrapping produces *t-statistics* and *p-values*, which are then compared to critical values. A hypothesis is supported when the *t-statistic* exceeds 1.65 for a one-tailed test at the 5% significance level, or when the *p-value* is less than 0.05 (Hair et al., 2017:320).

V. CONCLUSION AND SUGGESTIONS

5.1 Conclusion

The findings of this study indicate that gamification has a significant effect on purchase intention, both directly and indirectly through customer engagement as a mediating variable. Based on the descriptive analysis, it can be concluded that the overall research model has been positively received by users. This is reflected in the relatively high mean scores across all variables, suggesting that the gamification strategies implemented in the Kopi Kenangan Asli application have successfully created an engaging user experience.

Based on the bootstrapping results, all hypotheses were supported, as indicated by p-values below 0.05. Gamification has a significant effect on customer engagement with a path coefficient of 0.719, which implies that gamification contributes approximately 71.9% to customer engagement. This indicates a strong and positive relationship, meaning that the more effectively gamification strategies are implemented, the higher the level of customer engagement achieved. Furthermore, customer engagement has a significant effect on purchase intention with a path coefficient of 0.345, indicating a contribution of 34.5% to purchase intention.

In addition, gamification has a significant direct effect on purchase intention with a path coefficient of 0.568, which implies a contribution of 56.8%. This effect is stronger than that of customer engagement on purchase intention, suggesting that gamification has a more direct impact on users' intention to purchase rather than engagement.

Moreover, the indirect effect of gamification on purchase intention through customer engagement is also significant, with a path coefficient of 0.249.

This indicates that the indirect contribution of gamification to purchase intention through customer engagement is approximately 24.9%, reflecting a positive but relatively limited mediating effect. Therefore, customer engagement functions as a partial mediator in the relationship between gamification and purchase intention.

Based on Stimulus–Organism–Response (SOR) theory, gamification acts as the stimulus (S) through elements such as rewards, goals, prompts, progress tracking, social interaction, and sense of control. This stimulus influences the organism (O) in the form of customer engagement, then leads to a response (R), purchase intention, reflected in users' plans to make future purchases. Thus, the results confirm that gamification-driven experiences shape user engagement, which in turn contributes to the formation of purchase intention.

5.2 Suggestion

5.2.1 Theoretical

This study is expected to broaden insights and understanding of gamification and customer engagement as a mediating factor in the business world, particularly in Indonesia. Furthermore, this study enriches the existing literature by providing empirical evidence regarding the relationship between gamification, customer engagement, and purchase intention in the context of digital applications.

However, the relatively weak indirect effect of gamification on purchase intention through customer engagement indicates that the mediating role of customer engagement is limited in this context. Although significant, its influence is smaller than the direct effect of gamification, suggesting that engagement alone does not fully explain users' purchase intentions. Therefore, future research is recommended to examine other potential mediating variables, such as perceived enjoyment or brand trust, to provide a more comprehensive understanding of the relationship between gamification and purchase intention.

Further research is also recommended to examine various industrial sectors, platforms, or demographic segments in order to enhance our understanding of gamification and to understand the long-term impact of gamification strategies.

5.2.2 Managerial

Based on the research findings, the implementation of gamification strategies requires more attention to the aspects of goals, progress tracking, and prompts, as these three indicators received relatively lower ratings compared to other indicators in this research. These findings indicate that users still need clear goals with detailed information regarding the stages that need to be achieved. This study also found that progress tracking mechanisms need to be improved, for example, by providing clear information on the remaining target to earn a reward, or through milestone tracking so users can see achievements they have not yet reached. The gamification experience also has the potential to be more engaging if each level is designed with a balanced level of challenge, thereby encouraging sustained user participation. On the other hand, delivering relevant notifications or reminders without overdoing it also needs to be considered to maintain user engagement without causing boredom. By paying attention to these aspects, the implementation of gamification is expected to create a more engaging experience for users, increase customer engagement, and support the formation of stronger purchase intention.

REFERENCES

- Algharabat, R. S. (2018). The role of telepresence and user engagement in co-creation value and purchase intention: Online retail context. *Journal of Internet Commerce*, 17(1), 1–25.
<https://doi.org/10.1080/15332861.2017.1422667>
- Alnawas, I., & Aburub, F. (2016). The effect of benefits generated from interacting with branded mobile apps on consumer satisfaction and purchase intentions. *Journal of Retailing and Consumer Services*, 31, 313–322.
<https://doi.org/10.1016/j.jretconser.2016.04.004>
- Alsawaier, R. (2018). The effect of gamification on motivation and engagement. *The International Journal of Information and Learning Technology*, 35(1), 56–79.
- Amalgam, I. (2019). Industry analyst: Failed gamification projects costing U.S. businesses more than \$700 million can be fixed. *GlobeNewswire*.
- Anwar, R. S., Ahmed, R. R., Streimikiene, D., Strielkowski, W., & Streimikis, J. (2025). Customer engagement, innovation, and sustainable consumption: Analyzing personalized, innovative, sustainable phygital products. *Journal of Innovation & Knowledge*, 10(1), 100642.
- Aparicio, M., Costa, C. J., & Moises, R. (2021). Gamification and reputation: Key determinants of e-commerce usage and repurchase intention. *Heliyon*, 7(3), e06383.

- Arslan, M., & Zaman, R. (2014). Impact of brand image and service quality on consumer purchase intention: A study of retail store in Pakistan. *Research on Humanities and Social Sciences*, 4(22), 98–106.
- Bai, Y., Wu, S., Liu, R., & Zheng, F. (2024). Understanding users' behavior intention of serious games for intangible cultural heritage based on the stimulus–organism–response model. *International Journal of Human–Computer Interaction*.
- Banik, S., & Gao, Y. (2023). Exploring the hedonic factors affecting customer experiences in phygital retailing. *Journal of Retailing and Consumer Services*, 70, 103147.
- Behl, A., Jayawardena, N., Pereira, V., Islam, N., Del Giudice, M., & Choudrie, J. (2022). Gamification and e-learning for young learners: A systematic literature review. *Technological Forecasting and Social Change*, 176, 121445.
- Buhalis, D. (2019). Technology in tourism—from ICT to smart tourism. *Tourism Review*, 75(1), 267–272.
- Campaign Indonesia. (2025). *Pandangan CMO: Meracik strategi digital dan mengembangkan brand IP Kopi Kenangan*. <https://www.campaignindonesia.id/article/pandangan-cmo-meracik-strategi-digital-dan-mengembangkan-brand-ip-kopi-kenangan/1928333>
- Chaffey, D., & Smith, P. R. (2013). *Digital marketing excellence: Planning, optimizing and integrating online marketing*. Routledge.
- Christopoulos, A. (2023). Gamification in education. *Encyclopedia*, 3(4), 1223–1243.

- Creswell, J. W., & Creswell, J. D. (2023). *Research design: Qualitative, quantitative, and mixed methods approaches* (6th ed.). SAGE.
- De Canio, F., Fuentes-Blasco, M., & Martinelli, E. (2021). Engaging shoppers through mobile apps: The role of gamification. *International Journal of Retail & Distribution Management*, 49(7), 919–940.
- Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness: Defining “gamification.” *Proceedings of the 15th International Academic MindTrek Conference*, 9–15.
- Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness: Defining gamification. In *Proceedings of the 15th International Academic MindTrek Conference* (pp. 9–15).
- Dicheva, D., Dichev, C., Agre, G., & Angelova, G. (2015). Gamification in education: A systematic mapping study. *Educational Technology & Society*, 18(3), 75–88. http://www.ifets.info/journals/18_3/6.pdf
- Djohan, S. A., Handhana, D., Castafiore, V. B., & Hendriana, E. (2022). Can gamification stimulate customers to repurchase in the e-marketplace? *BIRCI-Journal*, 5(1), 4781–4796.
- 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.
- Ghozali, I. (2014). *Structural equation modeling: Metode alternatif dengan partial least square (PLS)* (4th ed.). Badan Penerbit Universitas Diponegoro.
- Ghozali, I., & Latan, H. (2015). *Partial least squares: Konsep, teknik dan aplikasi menggunakan SmartPLS 3.0*. Badan Penerbit UNDIP.
- Hair, J. F., Ortinau, D. J., & Harrison, D. E. (2010). *Essentials of marketing research*. McGraw-Hill.

- Hapsari, R., Clemes, M. D., & Dean, D. (2017). The impact of service quality and customer engagement on loyalty. *International Journal of Quality and Service Sciences*, 9(1), 21–40.
- Harmeling, C. M., Moffett, J. W., Arnold, M. J., & Carlson, B. D. (2017). Toward a theory of customer engagement marketing. *Journal of the Academy of Marketing Science*, 45(3), 312–335.
- Hassan, L., Dias, A., & Hamari, J. (2019). How motivational feedback increases users' continued use. *International Journal of Information Management*, 46, 151–162.
- Hollebeek, L. D. (2011). Exploring customer brand engagement: Definition and themes. *Journal of Strategic Marketing*, 19(7), 555–573.
- Hollebeek, L. D., Conduit, J., Sweeney, J., Soutar, G., Karpen, I. O., Jarvis, W., & Chen, T. (2016). Epilogue to the special issue and reflections on the future of engagement research. *Journal of Marketing Management*, 32(5–6), 586–594.
- Hollebeek, L. D., Glynn, M. S., & Brodie, R. J. (2014). Consumer brand engagement in social media. *Journal of Interactive Marketing*, 28(2), 149–165.
- Hsu, C. L. (2023). Enhancing brand love, customer engagement, and repurchase intention. *Decision Support Systems*, 174, 114020.
- Huotari, K., & Hamari, J. (2011). Gamification from the perspective of service marketing. In *Proceedings of the CHI 2011 Workshop on Gamification*.
- Hwang, J., & Choi, L. (2020). Having fun while receiving rewards? *Journal of Business Research*, 106, 365–376.
- Jonsson, E., Källström, P., & Wallander, E. (2019). *Why do we purchase from e-retailers? An explanatory study of the e-loyalty antecedents' impact on*

consumers' purchase intentions on the e-commerce market (Bachelor's thesis, Linnaeus University, Växjö, Sweden). <http://lnu.diva-portal.org/smash/record.jsf?pid=diva2%3A1324871>

Kaur, J., Lavuri, R., Parida, R., & Singh, S. V. (2023). Exploring the impact of gamification elements in brand apps. *Journal of Global Information Management*, 31(1), 1–30.

Kaveh, A., Nazari, M., van der Rest, J. P., & Mira, S. A. (2021). Customer engagement in sales promotion. *Marketing Intelligence & Planning*, 39(3), 424–437.

Komalasari, F., Christianto, A., & Ganiarto, E. (2021). Factors influencing purchase intention in affecting purchase decision: A study of e-commerce customers in Greater Jakarta. *Bisnis & Birokrasi: Jurnal Ilmu Administrasi dan Organisasi*, 28(1), 1–12.

Kumar, V., & Pansari, A. (2016). Competitive advantage through engagement. *Journal of Marketing Research*, 53(4), 497–514.

Laato, S., Islam, A. K. M. N., Farooq, A., & Dhir, A. (2020). Unusual purchasing behavior during COVID-19. *Journal of Retailing and Consumer Services*, 57, 102224.

Lazăroiu, G., Neguriță, O., Grecu, I., Grecu, G., & Mitran, P. C. (2020). Consumers' decision-making process on social commerce platforms. *Frontiers in Psychology*, 11, 890.

Mehrabian, A., & Russell, J. A. (1974). *An approach to environmental psychology*. MIT Press.

Misara, R., Verma, D., & Mishra, S. (2025). Gamification and personality: Impact on customer engagement and purchase intention. *Entertainment Computing*.

- Moliner, M. Á., Monferrer-Tirado, D., & Estrada-Guillén, M. (2018). Consequences of customer engagement and self-brand connection. *Journal of Services Marketing*, 32(4), 387–399.
- Mordor Intelligence. (2024). *Gamification market report*.
- Mulcahy, R. F., Russell-Bennett, R., Zainuddin, N., & Kuhn, K. A. (2018). Designing gamified transformative marketing services. *Journal of Services Theory and Practice*, 28(1), 26–51.
- Nuramalia, L., & Tuti, M. (2022). Pengaruh kualitas produk dan keterlibatan pelanggan terhadap repurchase intention. *Culinaria*, 4(2).
- Oliveira, M., Abelha, A., Sousa, R., & Peixoto, H. (2024). Gamification in mobile applications: Techniques, benefits and challenges. *Procedia Computer Science*, 251, 678–683.
- Pektas, S. Y., & Hassan, A. (2020). The effect of digital content marketing on tourists' purchase intention. *Journal of Tourismology*, 6(1), 79–98.
- Pham, M., Vo, N. K. T., Tran, S. S. T., To, H. H. T., & Lam, B. Q. (2023). Herd behaviour impact on purchase intention. *Acta Psychologica*, 241, 104096.
- Prentice, C., Han, X. Y., Hua, L. L., & Hu, L. (2019). The influence of identity-driven customer engagement on purchase intention. *Journal of Retailing and Consumer Services*, 47, 339–347.
- Punwatkar, S., & Verghese, M. (2025). Investigating the impact of gamification. *Journal of Applied Research and Technology*, 23(1), 94–102.
- Purbohastuti, A. W., & Hidayah, A. A. (2020). Meningkatkan minat beli produk Shopee melalui celebrity endorser. *Jurnal Bisnis Terapan*, 4(1), 37–46.
- Puspitasari, N. B., Nugroho, W. P. S., Amyhorsea, D. N., & Aries, S. (2018). Consumer's buying decision-making process in e-commerce. *E3S Web of Conferences*, 31, 11003. <https://doi.org/10.1051/e3sconf/20183111003>

- Rafsandjani, R. F. (2018). Analyzing the effect of trust and perceived value on purchase intention. *Management and Economics Journal*, 2(1), 71–84.
- Ratnawati, L. S., & Sanaji, S. (2024). Pengaruh customer engagement terhadap online purchase intention. *Jurnal Maksipreneur*, 14(1), 45–64.
- Santos, P. M., Dias, J. M., & Bairrada, C. M. (2024). Gamification in marketing. *Heliyon*, 10(11), e32047.
- Schaffarczyk, L., & Ilhan, A. (2019). Users' motivations to apply activity tracking technology. *International Conference on Human-Computer Interaction*, 124–136.
- Scharl, A., Dickinger, A., & Murphy, J. (2005). Diffusion and success factors of mobile marketing. *Electronic Commerce Research and Applications*, 4(2), 159–173.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business* (8th ed.). Wiley.
- Shankar, A. (2022). Does rewards gamification drive brand relationship quality? An experimental approach. *Journal of Promotion Management*, 28(4), 443–466.
- Sotos-Martínez, V. J., Tortosa-Martínez, J., Baena-Morales, S., & Ferriz-Valero, A. (2023). Boosting students' motivation through gamification. *Behavioral Sciences*, 13(2), 165.
- Sugiyono. (2017). *Metode penelitian pendidikan pendekatan kuantitatif, kualitatif, dan R&D*. Alfabeta.
- Taruli, A. E., Chan, A., & Tresna, P. W. (2020). The effect of gamification “Shopee Tanam” version. *Jurnal Administrasi Bisnis dan Kewirausahaan*, 5(3), 283–295.

- Tomar, M., Pandey, A. K., Ahuja, V., & Bansal, S. (2019). How does e-marketing influence consumer decision? *Journal of Advanced Research in Dynamical and Control Systems*, 11, 2665–2680.
- Torlak, N. G., Demir, A., & Budur, T. (2019). Impact of operations management strategies. *International Journal of Productivity and Performance Management*, 69(9), 1903–1924.
- Vivek, S. D., Beatty, S. E., & Morgan, R. M. (2012). Customer engagement: Exploring customer relationships beyond purchase. *Journal of Marketing Theory and Practice*, 20(2), 122–146.
- Xu, F. Z., & Wang, Y. (2020). Enhancing employee innovation through customer engagement: The role of customer interactivity, employee affect, and motivations. *Journal of Hospitality & Tourism Research*, 44(3), 351–376.
- Yasmin, A., Tasneem, S., & Fatem, K. (2015). Effectiveness of digital marketing. *International Journal of Management Science and Business Administration*, 1(5), 69–80.
- Zafar, S., Badghish, S., Yaqub, R. M. S., & Yaqub, M. Z. (2023). Consumer value and behavioral reasoning. *Sustainability*, 15(20), 14852.
- Zeng, J., Sun, D., Looi, C. K., & Fan, A. C. W. (2024). Exploring the impact of gamification on students' academic performance: A comprehensive meta-analysis of studies from 2008 to 2023. *British Journal of Educational Technology*, 55(6), 2478–2502.
- Zhang, R., Huang, Q., Luo, J., Xu, J., & Pan, Y. (2024). Enhancing user participation in cultural heritage through serious games. *Sustainability*, 16(17).
- Zheng, R., Li, Z., & Na, S. (2022). How customer engagement in live-streaming affects purchase intention. *Journal of Retailing and Consumer Services*, 68, 103015.

Zichermann, G., & Cunningham, C. (2011). *Gamification by design*. O'Reilly Media.