

The Impact of Gamification on Marketing Strategy

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Abstract

Gamification, defined as the integration of game design elements into non-game contexts, has emerged as a transformative approach in marketing, capable of turning passive consumers into active participants. By incorporating mechanisms such as rewards, challenges, leaderboards, and progress tracking, gamification seeks to enhance consumer engagement, foster brand loyalty, and influence purchasing behavior. This study explores the theoretical foundations and practical applications of gamification in marketing, emphasizing its relevance in today's highly competitive landscape, where capturing consumer attention has become increasingly difficult. Adopting a dual-perspective approach and employing JASP (Jeffrey's Amazing Statistics Program) platform for statistical computing on a diverse sample of marketing professionals, this research investigates the gap between expectations and outcomes in gamification implementation. It compares the perceptions of gamification adopters and planners regarding customer engagement, brand loyalty, and purchase intention. A comparative analysis between implementing and planning organizations was conducted to examine potential expectation–reality gaps in gamification outcomes, offering evidence-based insights and contributing to more informed strategic decision-making in marketing contexts.

Keywords: Gamification, consumer engagement, brand loyalty, purchasing behavior, marketing strategies.

JEL classification: M31.

Introduction

In today's marketplace, capturing and maintaining consumer attention has become a central challenge in modern marketing. Sahni et al. (2019) demonstrate that the effectiveness of traditional marketing strategies has declined significantly, as contemporary consumers navigate an environment saturated with advertising - commonly referred to as **ad clutter** - which makes it increasingly difficult for marketers to break through and reach their target audiences (Subramanian, 2015). Not long ago, the advertising landscape was simpler, characterized by a limited number of companies promoting a relatively small variety of products and services. In contrast, the current market is marked by exponential growth in both advertising volume and consumer choice, intensifying the competition for consumer attention (Lütjens et al., 2022).

According to Jacobides et al. (2024), companies are adopting innovative strategies such as gamification, augmented reality, and influencer collaborations to differentiate themselves and build stronger consumer preferences. Deterding et al. (2011) defined gamification as "the use of game elements and game design techniques in non-game contexts", becoming a prominent engagement tool. Although the term was first introduced by programmer Nick Pelling in 2002 (Pelling, 2011), it gained mainstream attention around 2011, evolving into a strategic method for enhancing consumer engagement, motivation, and loyalty. The core idea is to transform routine interactions into more compelling, game-like experiences. This is

achieved by employing a “toolbox” of game elements that is a common design patterns found in games (Salcu & Acatrinei, 2013), including points, quests, levels, progression, and badges (Huotari & Hamari, 2017). These elements are integrated into non-game environments to create immersive experiences in which consumers become deeply engaged, allowing marketing messages to rise above external distractions (Harwood & Garry, 2015). To understand how gamification works, it is useful to break it down into its core components. A widely accepted framework for this is the pyramid proposed by Werbach and Hunter (2015), which organizes game elements into three hierarchical levels. According to them, at the base are the *components*, the most visible elements like points, badges, and leaderboards (i.e., the *PBL triad*), along with avatars, quests, and levels. Above these are the *mechanics*, the “verbs” that drive user actions, including challenges, competition, feedback, and rewards. At the top of the hierarchy are the *dynamics*, high-level conceptual elements that structure the overall experience, such as constraints, emotions, narrative, and social relationships. A successful gamified system does not merely use a collection of components; rather, it strategically integrates them to form coherent mechanics and dynamics that resonate with the target audience (Salcu & Acatrinei, 2013). The effectiveness of these elements is often explained through psychological theories. One of the most prominent is *Self-Determination Theory* (SDT), proposed by Ryan and Deci (2017). According to SDT, intrinsic motivation is fostered when three innate psychological needs are fulfilled: *competence* (the need to feel skilled and effective), *autonomy* (the need to feel in control of one’s own actions), and *relatedness* (the need to interact and connect with others). Well-designed gamification strategies can satisfy these needs: challenges and feedback foster competence, offering choices within the system supports autonomy, and social features such as leaderboards or team quests enhance relatedness. By addressing these core needs, gamification can shift motivation from transactional to intrinsic goals, which is at the heart of effective gamified design (Salcu & Acatrinei, 2013).

The principle behind gamification involves incorporating these psychological elements to create immersive brand experiences (Högberg et al., 2019a), transforming passive consumers into active participants. For example, Starbucks reshaped its loyalty program by implementing a star-based reward system that encourages repeated purchases and engagement with the mobile app, thereby creating a sense of achievement and exclusivity. Similarly, companies like Microsoft, Amazon, and Uber have successfully implemented gamified elements to transform routine interactions into engaging experiences (Milkman, 2021). However, these strategies are not exclusive to large corporations. Small businesses can also adopt cost-effective gamification techniques, such as digital scratch cards or simple loyalty programs to significantly increase customer conversion rates (Xi & Hamari, 2019).

Although gamification can generate substantial benefits in marketing contexts, its effectiveness is highly dependent on thoughtful, context-sensitive implementation. When poorly designed, gamification may lead to user disengagement, superficial interactions, or even damage to brand perception (Insley & Nunan, 2014). As Werbach and Hunter (2015) emphasize, while there are relatively few ways to implement gamification successfully, there are countless ways to do it poorly. Their study underscores the importance of aligning gamification strategies with user motivation, brand identity, and ethical considerations. Furthermore, Rapp et al. (2019) warn that an over-reliance on extrinsic rewards can undermine intrinsic motivation if not carefully balanced.

This tension between the high potential of well-executed gamification and the significant risks associated with poor implementation underscores the need to investigate the gap between organizational expectations and real-world outcomes. Furthermore, although prior studies have highlighted the general benefits of gamification for engagement, loyalty, and purchase

intention (Ahmadian et al., 2023; Högberg et al., 2019b; Jang et al., 2018), most research has either focused on consumer-side perceptions or reported results from single-case implementations. What remains underexplored is the comparison between **anticipated outcomes (from organizations planning gamification)** and **actual results (from organizations with implementation experience)**. This double perspective analysis is essential because managers often design strategies based on optimistic assumptions that may not hold true in practice. By addressing this research gap, the present study contributes empirical evidence on expectation–reality discrepancies, offering both theoretical insights into gamification effectiveness and practical guidance for marketing decision-makers.

To explore these discrepancies, this study empirically compares the perspectives of two distinct groups in Romania: organizations that have already implemented gamification strategies (i.e., implementing organizations), and those that are considering adoption (i.e., planning organizations). Grounded in a quantitative analysis of Romanian companies primarily from the **Retail and E-commerce sectors**, this research investigates expectation – reality dynamics across three key pillars of business success: customer engagement, brand loyalty, and purchase intention. This dual-perspective methodology enables a comprehensive understanding of gamification's actual impact while also illuminating the expectations, perceived benefits, and strategic motivations that drive adoption. Accordingly, the study is guided by the following research question:

RQ: What are the differences between anticipated outcomes and actual results of gamification implementation in marketing, and how do these expectation-reality gaps manifest across customer engagement, brand loyalty, and purchase intention among Romanian organizations?

1. Background and Hypotheses Development

1.1. Gamification and Customer Engagement

Gamification has emerged as a powerful strategy for enhancing customer engagement with brands in the digital marketing landscape (Santos et al., 2024). Research demonstrates a positive association between gamification and various brand-related outcomes, including brand engagement (i.e., emotional, cognitive, and social dimensions) (Högberg et al., 2019b; Pour et al., 2021) as well as brand attitude (Yang et al., 2017), and brand awareness (Abou-Shouk & Soliman, 2021).

Regarding the relationship between gamification and brand engagement, Xi and Hamari (2019) found that achievement-oriented gamification elements (e.g., badges, points, and leaderboards) and socially driven features (such as team competitions and social networking components) were positively correlated with deeper brand engagement. Similarly, Bitrián et al. (2021) demonstrated that gamification enhances user engagement with mobile applications by satisfying basic psychological needs for competence, autonomy, and relatedness. Their study also revealed that increased user engagement leads to greater intention to use the app, more positive word-of-mouth, and higher user ratings. Gamification taps into fundamental human motivations such as achievement, recognition, and social connection, transforming passive consumers into active participants in brand interactions. This shift creates more meaningful and memorable brand experiences (Berger et al., 2017). Overall, the use of gamification in marketing environment contributes significantly to greater consumer engagement with brands (Bitrián et al., 2021).

Despite its advantages, gamification also presents potential limitations. Xi and Hamari (2019) noted that immersion-related gamification elements were positively associated only with social brand engagement, while showing no significant impact on emotional or cognitive engagement. This finding suggests that not all gamification features are equally effective across the different dimensions of engagement. Therefore, marketers should carefully select

gamification elements aligned with their specific engagement objectives, rather than treating gamification as a universal solution (Mitchell et al., 2017). Moreover, perceptions of the relationship between gamification and customer engagement may differ depending on whether organizations are gamification adopters - those who have already implemented gamification - or gamification planners - those who intend to do so (Hammedi et al., 2019). This distinction is shaped by the following factors: a) direct experience versus aspirational expectations; b) customer-centric feedback versus lack of customer validation, and c) a focus on optimization versus reliance on market trends. Based on these findings, we propose the following hypothesis:

H1: *There is a significant difference between gamification adopters and gamification planners in their perception of the impact of gamification on customer/brand engagement.*

1.2. Gamification and Brand Loyalty

The transformation of transactional relationships into emotionally engaging experiences has emerged as a pivotal strategy for fostering long-term brand loyalty - a process increasingly shaped by the strategic implementation of gamification. Putra et al. (2024) demonstrate that gamified systems fulfill intrinsic psychological needs such as autonomy, competence, and relatedness, which are essential for building emotional bonds between consumers and brands. Tiered reward structures, like Starbucks' star-based loyalty program, foster a sense of exclusivity and progression, leading to a 27% increase in customer retention compared to non-gamified alternatives (Chen, 2023). This finding aligns with Hofacker et al. (2016), who argue that game mechanics such as badges and leaderboards enhance social engagement and status recognition - both crucial elements in the development of brand loyalty. Research by Xi and Hamari (2019) reveals that gamified interactions activate reward-related neural pathways, linking brand engagement to intrinsic motivators such as achievement and social validation. However, excessive reliance on extrinsic rewards may result in transactional rather than emotional loyalty, as seen in poorly designed gamified applications where users disengage once incentives are withdrawn (Putra et al. (2024). Successful implementations, such as Nike's SNKRS app, strike a balance between competition and community-building by leveraging geolocation challenges to strengthen brand attachment while preserving perceived fairness (Ahmadian et al., 2023). Notably, perceptions of the relationship between gamification and brand loyalty often differ, particularly when expectations held by gamification planners diverge from the real-world outcomes experienced by adopters. Research suggests that gamification planners typically anticipate brand loyalty as a natural consequence of increased engagement and repeated interaction with gamified systems. They argue that enhancing emotional engagement strengthens long-term brand affinity (Hamari et al., 2014), and that fostering intrinsic motivation through meaningful challenges, progression, and social recognition leads to greater customer loyalty (Deterding et al., 2011). In contrast, gamification adopters report that while initial spikes in brand engagement are common, sustaining long-term loyalty proves difficult unless the gamified experience is continuously updated or closely aligned with value creation (Huotari & Hamari, 2017). Moreover, adopters observe that user interest often declines once the novelty effect wears off, suggesting a gap between anticipated and actual loyalty outcomes (Zichermann & Linder, 2010). Based on this analysis, the following hypothesis is proposed:

H2: *There is a significant gap between the expectations of gamification planners and the perceived outcomes reported by adopters regarding brand loyalty.*

1.3. Gamification and Purchase Intention

Purchase intention, defined as consumers' likelihood to acquire products or services in the near future, has become increasingly influenced by gamification strategies in the digital era (Ishaq et al., 2023). As digital environments grow more interactive and immersive, gamification has emerged as a key strategic tool in shaping consumer behavior. Studies have demonstrated that interactive, game-like experiences can increase decision-making confidence by up to 29% compared to traditional marketing methods (Hsu & Chen, 2018), highlighting gamification's potential to reduce uncertainty and enhance perceived value during the evaluation phase of the purchase process. Several studies have explored the psychological mechanisms through which gamification influences purchasing decisions. Elements such as challenges, progress indicators, and reward systems contribute to a consumer's sense of achievement, fostering emotional attachment to the brand and increasing willingness to pay (Koivisto & Hamari, 2019). Moreover, gamification has been shown to positively affect brand attitude, co-creation experiences, brand awareness, and brand equity. These dimensions work synergistically to strengthen purchase intention and drive higher conversion rates (Yang et al., 2017). Active engagement with gamified platforms also fosters brand familiarity and consistent interaction. This repeated exposure reinforces brand loyalty over time, and when both engagement and loyalty are achieved, the likelihood of future purchases increases significantly (Hwang & Choi, 2019). Beyond short-term behavioral triggers, gamification strategies designed to stimulate both intrinsic motivations (e.g., enjoyment, mastery) and extrinsic rewards (e.g., points, incentives) have shown long-term effects. For example, Jang et al. (2018) found that mobile applications incorporating tiered challenge systems achieved 26% higher purchase rates six months after initial engagement, compared to non-gamified alternatives - demonstrating the sustainable impact of gamification on consumer behavior.

However, the influence of gamification on purchase intention is perceived differently by those who adopt gamification strategies and those who design and plan them. Gamification adopters - typically practitioners and marketers - often report mixed results. For instance, they observe positive effects on purchase intention when gamified content is closely tied to product benefits or limited-time offers (Lopes et al., 2023), and short-term increases in purchase intention due to heightened attention and novelty. Yet, they also note that these effects are not always sustained over time, and that users may engage with the game mechanics without transferring that engagement to the product or service itself (Seaborn & Fels, 2015). As Sailer et al. (2017) argue, while gamification can effectively capture consumer attention and temporarily enhance purchase intention, converting that attention into consistent purchasing behavior remains uncertain. In contrast, gamification planners - typically strategists or designers - tend to view gamification as a behavioral catalyst designed to generate micro-motivations that lead to impulse purchases (Xu et al., 2012), or to promote repeat purchases through mechanisms such as point systems, badges, and progress levels (Huotari & Hamari, 2017). According to Werbach and Hunter (2015), planners often assume a direct, proportional relationship between gamified engagement and increased purchase intention, particularly when extrinsic motivators are well-designed and effectively implemented. Based on this literature review, the following hypothesis is proposed:

H3. There is a significant gap between the expectations of gamification planners and the perceived outcomes reported by adopters regarding purchase intention.

2. Methodology

2.1. Research Design

This study adopts a **quantitative exploratory pilot design**, aiming to identify emerging trends in perceptions of gamification within the Romanian marketing context, with a particular

focus on its influence on **customer engagement, brand loyalty, and purchase intention**. The research is structured as a *dual-perspective comparative design*, simultaneously examining two distinct respondent groups: *gamification adopters* - typically practitioners and marketers actively involved in implementation - and *gamification planners* - generally strategists or designers engaged in the planning or pre-adoption phases.

2.2. Data Collection and Participants

The target population includes Romanian companies primarily from the **Retail and E-commerce sectors** (81%), supplemented by organizations operating in **Hospitality, Education, Sports/Wellness, Tourism, Media, and Banking** (19%). Analysis of company size indicates the following distribution: **52% small enterprises** (10–49 employees), **24% micro-enterprises** (1–9 employees), **17% medium-sized enterprises** (50–249 employees), and **7% undisclosed**. A **stratified purposeful sampling** technique was employed, focusing on professionals in relevant strategic roles: **Marketing Specialists** (58%), **Marketing Managers** (17%), **Sales Specialists** (17%), **General Directors** (1%), and other decision-making positions (7%). In total, **83 valid responses** were collected: **40 implementers** (48.2%) representing organizations with active gamification experience, and **43 planners** (51.8%) from organizations in the pre-implementation phase. Data collection was conducted online via *Google Forms*, between **May 10 and June 17, 2025**. Responses were anonymous, and participation was entirely voluntary.

Although the study collected 83 valid responses, which falls slightly below the conventional baseline for quantitative generalization, the sample is consistent with exploratory pilot research designs in marketing. Moreover, the predominance of respondents from the e-commerce and retail sectors introduces a degree of sector bias that should be acknowledged. These limitations do not undermine the internal validity of the statistical analysis, but they may restrict the extent to which findings can be generalized to other industries or larger populations. Consequently, the results should be interpreted as indicative trends that provide a foundation for broader studies with more diverse and larger samples.

2.3. Data Measurement

The study employed a structured questionnaire, developed based on the existing literature on gamification strategies. It consisted of three sections, designed with conditional branching logic and administered through the *Google Forms* platform. Section 1 gathered demographic information and included a classification item regarding the organization's current gamification status. Respondents indicating "*Yes, we already use gamification strategies*" proceeded to Section 2, which explored their implementation experiences. Those selecting "*No, but we plan to implement within the next 12 months*" were directed to Section 3, which assessed expectations related to planned gamification initiatives. The questionnaire measured three key constructs: Engagement, Loyalty, and Purchase Intention. Each construct included six items that captured different dimensions of gamification's perceived or experienced impact. The sections were designed in parallel structure to allow direct comparison between the two groups: adopter items reflected empirical experiences, while planner items suggested anticipated outcomes for the same phenomena. All items were rated using 5-point Likert scales to ensure statistical consistency.

Data analysis was performed using **JASP** (*Jeffrey's Amazing Statistics Program is a free and open-source program for statistical analysis supported by the University of Amsterdam <https://jasp-stats.org>*), an open-source platform for statistical computing. JASP provided tools for assumption testing, effect size calculation, and graphical diagnostics, supporting a comprehensive and integrated analytical approach. This made it particularly suitable for the

study's comparative framework. The analytical procedure followed three sequential steps: 1) descriptive analysis, to characterize the sample and variable distributions; 2) assumption testing, using the *Shapiro-Wilk test* for normality and *Levene's test* for homogeneity of variances; 3) independent samples *t-tests*, to identify statistically significant differences between implementers and planners across the three gamification constructs. This approach ensures a robust comparison of expectations versus realities, while maintaining the statistical rigor appropriate for the exploratory nature and scope of the pilot study.

3. Results and Discussion

3.1. Descriptive Statistical Analysis

This section presents the systematic empirical analysis conducted to examine expectation-reality gaps in gamification implementation across the three marketing constructs. Table 1 provides the descriptive statistics for the key constructs: *Engagement* (ENG), *Loyalty* (LOY), and *Purchase Intention* (PUR).

Table 1. Descriptive Statistics

| | ENG_Composite | | LOY_Composite | | PUR_Composite | |
|----------------|---------------|----------|---------------|----------|---------------|----------|
| | Implementers | Planners | Implementers | Planners | Implementers | Planners |
| Valid | 40 | 43 | 40 | 43 | 39 | 43 |
| Missing | 0 | 0 | 0 | 0 | 1 | 0 |
| Mean | 3.353 | 3.672 | 2.978 | 3.484 | 2.592 | 3.114 |
| Std. Deviation | 0.865 | 1.031 | 0.800 | 0.868 | 0.958 | 0.855 |
| Minimum | 1.500 | 1.000 | 1.300 | 1.000 | 1.200 | 1.000 |
| Maximum | 4.800 | 5.000 | 4.500 | 4.800 | 4.700 | 5.000 |

Source: Processed data (2025)

Customer Engagement (ENG_Composite) demonstrated moderate-positive perceptions across both groups, with implementers reporting a mean of 3.353 (SD = 0.865) and planners showing higher expectations at 3.672 (SD = 1.031). The standard deviations indicate moderate variability in responses, reflecting diverse experiences and expectations within the Romanian marketing context.

Brand Loyalty (LOY_Composite) revealed more conservative assessments, with implementers recording a mean of 2.978 (SD = 0.800) compared to planners' expectations of 3.484 (SD = 0.868). This preliminary observation suggests potential gaps between anticipated and realized loyalty outcomes, consistent with literature indicating that loyalty development requires sustained engagement over extended periods.

Purchase Intention (PUR_Composite) exhibited the most cautious evaluations, with implementers reporting the lowest mean scores at 2.592 (SD = 0.958) while planners maintained moderate expectations at 3.114 (SD = 0.855). The substantial difference in means provides initial evidence of expectation-reality discrepancies in conversion outcomes.

3.2. Distributional Properties and Normality Assessment

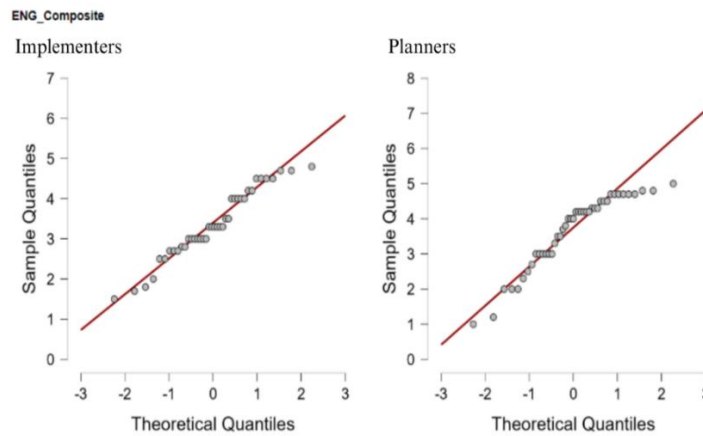
Prior to conducting parametric analysis, comprehensive distributional assessment was performed to validate the appropriateness of independent samples *t-tests* for the comparative analysis. *Shapiro-Wilk* normality testing was selected as the primary method for evaluating distributional assumptions due to its superior power in detecting deviations from normality in small-to-moderate sample sizes ($n < 100$) (Table 2).

Table 2. Shapiro-Wilk normality test*Descriptive Statistics*

| | ENG_Composite | | LOY_Composite | | PUR_Composite | |
|-------------------------|---------------|----------|---------------|----------|---------------|----------|
| | Implementers | Planners | Implementers | Planners | Implementers | Planners |
| Shapiro-Wilk | 0.957 | 0.900 | 0.971 | 0.912 | 0.941 | 0.943 |
| P-value of Shapiro-Wilk | 0.133 | 0.001 | 0.388 | 0.003 | 0.041 | 0.033 |

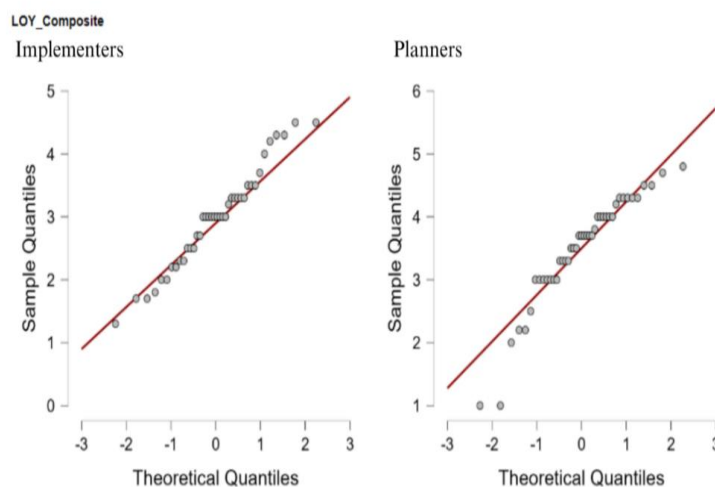
Source: Processed data (2025)

The Shapiro-Wilk test showed normal distributions for Engagement construct: implementers ($W = 0.957$, $p = 0.133$) and planners ($W = 0.900$, $p = 0.001$). Although some p -values were marginally significant (0.03–0.04), these small deviations do not affect the validity of parametric tests, especially with samples over 30. The Q-Q plot for Engagement further illustrates these distribution patterns (Figure 1).

**Figure 1. Q-Q Plots for Engagement construct**

Source: Processed data (2025)

For Loyalty construct, implementers had robust normality ($W = 0.971$, $p = 0.388$), while planners showed marginal deviation ($W = 0.912$, $p = 0.003$). Minor deviations in p -values (0.03–0.04) remain acceptable for parametric analysis. The Q-Q plot for Loyalty provides a visual check of these results (Figure 2).

**Figure 2. Q-Q Plots for Loyalty construct**

Source: Processed data (2025)

Purchase Intention construct showed acceptable normality for both implementers ($W = 0.941$, $p = 0.041$) and planners ($W = 0.943$, $p = 0.033$). Again, marginal p -values do not compromise analysis validity. The Q-Q plot for Purchase Intention confirms these findings and highlights outlier patterns (Figure 3).

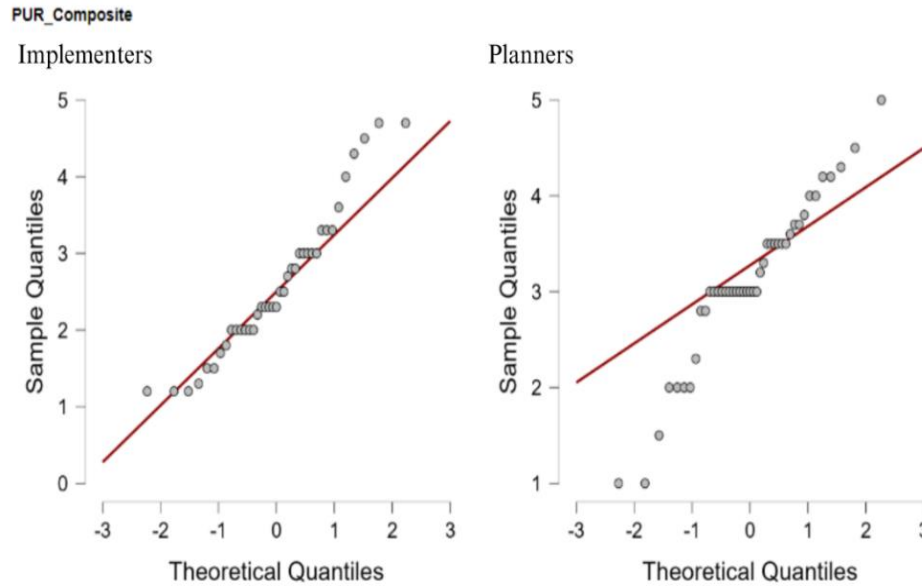


Figure 3. Q-Q Plots for Purchase construct

Source: Processed data (2025)

The Q-Q plots visually support the statistical normality results, showing that most data points align with the theoretical diagonal, with only slight deviations in the tails - common in social science research. Outlier analysis indicates a few extreme values, particularly in the upper and lower quantiles. For *ENG_Composite*, both groups exhibit 2–3 such values, possibly reflecting highly enthusiastic or skeptical respondents. *LOY_Composite* shows a more conservative pattern, while *PUR_Composite* displays the most pronounced deviations, suggesting greater variability in perceived purchase intentions. These outliers appear to reflect authentic opinion differences rather than measurement errors and do not significantly distort the overall distribution - consistent with the exploratory context of gamification adoption in Romania.

3.3. Independent Samples T-Test Analysis

Based on the validated assumptions, independent samples t -tests were performed to examine differences between implementers and planners across the three gamification constructs (Table 3).

Table 3. Independent Samples T-Test results

| Independent Samples T-Test | | | | | |
|----------------------------|--------|----|-------|-----------|--------------|
| | t | df | p | Cohen's d | SE Cohen's d |
| ENG_Composite | -1.524 | 81 | 0.131 | -0.335 | 0.223 |
| LOY_Composite | -2.757 | 81 | 0.007 | -0.606 | 0.230 |
| PUR_Composite | -2.606 | 80 | 0.011 | -0.576 | 0.231 |

| Group Descriptives | | | | | |
|--------------------|--------------|----|-------|-------|-------|
| | Group | N | Mean | SD | SE |
| ENG_Composite | Implementers | 40 | 3.353 | 0.885 | 0.137 |
| | Planners | 43 | 3.672 | 1.031 | 0.157 |
| LOY_Composite | Implementers | 40 | 2.978 | 0.800 | 0.126 |
| | Planners | 43 | 3.484 | 0.868 | 0.132 |
| PUR_Composite | Implementers | 39 | 2.592 | 0.958 | 0.153 |
| | Planners | 43 | 3.114 | 0.855 | 0.130 |

Source: Processed data (2025)

Customer Engagement Results. The *t*-test analysis for customer engagement revealed no statistically significant difference between implementers ($M = 3.353$, $SD = 0.865$) and planners ($M = 3.672$, $SD = 1.031$), with $t(81) = -1.524$, $p = 0.131$. *Cohen's d* = -0.335 indicated a small-to-medium effect size, suggesting practical convergence between anticipated and realized engagement benefits. This convergence aligns with recent meta-analytical evidence showing that engagement is the most consistently attainable outcome of gamification initiatives. Marketing professionals appear to have developed accurate expectations regarding engagement effects, possibly due to the immediate and observable nature of customer interaction metrics.

Brand Loyalty Results. A statistically significant difference emerged for brand loyalty between implementers ($M = 2.978$, $SD = 0.800$) and planners ($M = 3.484$, $SD = 0.868$), $t(81) = -2.757$, $p = 0.007$. *Cohen's d* = -0.606 indicated a medium-to-large effect size, suggesting substantial practical relevance beyond statistical significance. The 0.506-point difference on the Likert scale represents approximately 17% higher expectations among planners. This gap reflects the difficulty of translating gamified interactions into genuine emotional brand attachment, a challenge frequently cited in recent gamification research (Jang et al., 2018). The finding supports the view that loyalty development requires sustained, long-term engagement, often exceeding initial implementation horizons.

Purchase Intention Results. Purchase intention showed a statistically significant difference between implementers ($M = 2.592$, $SD = 0.958$) and planners ($M = 3.114$, $SD = 0.855$), $t(81) = -2.606$, $p = 0.011$. *Cohen's d* = -0.576 indicated a medium effect size, confirming the practical relevance of the observed differences. This considerable gap suggests that converting gamified engagement into actual purchasing behavior is more challenging than anticipated during the planning phase. The result is aligned with behavioral economics research (Hassan et al., 2014) indicating that intention–action gaps are particularly salient in commercial contexts, where a range of external factors influence final purchasing decisions.

3.4. Hypotheses test

The examination of Hypothesis 1 (H1) indicates that the hypothesis is not supported ($p = 0.131 > 0.05$). Statistical analysis reveals no significant difference between gamification adopters and planners in their perceptions of customer engagement. This alignment suggests that engagement is the most predictable outcome of gamification, likely due to its immediate, observable nature and the accumulated professional experience that enables planners to form realistic expectations in this area. Hypothesis 2 (H2) is supported by statistical evidence ($p = 0.007 < 0.05$). A significant discrepancy is observed between planners' expectations and adopters' reported outcomes regarding brand loyalty, with planners estimating outcomes approximately 17% higher. This gap highlights the difficulty of fostering emotional attachment through gamification alone, suggesting that loyalty requires sustained interaction and long-term strategies beyond initial implementation. Hypothesis 3 (H3) is also confirmed ($p = 0.011 < 0.05$), showing a significant difference between expectations and perceived outcomes in terms of purchase intention. The confirmation of H2 and H3 carries important implications for both theory and practice. The significant discrepancies identified between planners' expectations and adopters' reported outcomes for brand loyalty and purchase intention suggest that gamification's effectiveness cannot be assumed to extend automatically from engagement to deeper behavioral outcomes. This extends prior research by moving beyond replication of gamification's positive effects on engagement and instead highlighting the **fragility of loyalty and conversion outcomes when gamification is applied in isolation**. From a theoretical standpoint, these results reinforce the view that gamification operates best as a trigger for short-term attention, but requires integration with relational and value-based strategies to foster sustainable loyalty and purchasing behavior.

These empirical findings indicate that translating gamified engagement into purchasing behavior is more complex than anticipated, aligning with behavioral economics literature that emphasizes the persistent gap between intention and action, particularly in commercial contexts influenced by numerous external variables. The results of the study address the research question by find out a clear pattern of expectation–reality alignment. While customer engagement expectations are largely accurate, significant gaps exist for brand loyalty and purchase intention. This pattern reflects a hierarchy of outcome predictability, whereby gamification appears more effective for immediate, measurable engagement, and less so for long-term relationship building or influencing complex purchasing decisions.

From a managerial perspective, the findings generate actionable guidelines for companies considering gamification adoption. First, managers should avoid overestimating gamification as a self-sufficient driver of loyalty, embedding it into **long-term customer relationship programs** that evolve over time. Second, purchase-related outcomes can be enhanced if gamified mechanics are directly linked to **tangible product or service benefits** rather than abstract point systems, thereby ensuring that engagement translates into actual buying behavior. Third, organizations should adopt an **adaptive approach**, using analytics to monitor user responses and refine gamification strategies to prevent novelty effects and disengagement.

Collectively, these guidelines highlight how expectation–reality gaps can be reduced, enabling gamification to move from an experimental marketing tool toward a structured strategic asset.

Conclusions

Key Findings

This study investigated the impact of gamification on marketing strategy by comparing the perceptions and experiences of adopters and planners within Romanian organizations. Through this dual-perspective comparative approach, the research aimed to uncover perceptual gaps and validate expectations regarding gamification’s influence on customer engagement, brand loyalty, and purchase intention. The results show that customer engagement is perceived consistently across both groups, suggesting a shared consensus about gamification’s immediate effect on attracting and retaining attention. Engagement appears to be the most tangible and universally acknowledged benefit, likely because its outcomes are observable early in the process and are relatively easy to measure. In contrast, significant expectation–reality gaps were identified in brand loyalty and purchase intention, highlighting that while engagement can be generated quickly, sustaining emotional attachment and translating it into purchasing behavior remain complex and uncertain. To facilitate a clear understanding of the study’s outcomes, Table 4 provides a synthesis of the three tested hypotheses (H1–H3). This overview allows to understand the alignment between expected and realized outcomes of gamification across customer engagement, brand loyalty, and purchase intention.

Table 4. Synthesis of the tested hypotheses

| Hypothesis | Result | Key Insight |
|------------|---------------|---|
| H1 | Not supported | Engagement outcomes are accurately anticipated by both adopters and planners. |
| H2 | Supported | Planners overestimate gamification’s ability to build long-term brand loyalty |
| H3 | Supported | Significant gap between expected and actual effects on purchase intention |

Source: Authors

Managerial Implications

From a managerial perspective, these findings suggest that gamification should be integrated into broader marketing strategies rather than treated as a stand-alone tool. Companies can enhance customer interaction by: a) combining gamification with **customer relationship management (CRM) systems** to ensure personalized follow-up and continuity beyond initial engagement; b) using **AI-driven analytics** to adapt challenges, rewards, and content to consumer profiles, thus preventing novelty effects and disengagement; c) linking gamified rewards to **sustainability or Corporate Social Responsibility (CSR) initiatives**, thereby deepening brand attachment through shared values, not only transactional incentives.

Limitations

This research was based on a relatively small, cross-sectional sample, concentrated mainly in the Romanian e-commerce sector. The results therefore reflect a specific market and may not fully capture the dynamics of gamification in other industries or cultural contexts.

Future Research

Future studies should explore gamification across diverse industries and geographic markets, with larger and more heterogeneous samples. Longitudinal designs would help track how engagement evolves into loyalty or purchasing behavior over time. Additionally, examining generational differences in consumer responses to gamification could provide further strategic insights for marketers.

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