

# Gamification in Marketing: Analyses of the Impact Beyond Play and Fun

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## ABSTRACT

As marketers increasingly face the challenge of capturing and maintaining consumer attention in a saturated digital environment, gamification has emerged as a promising solution. Gamification has emerged as a transformative strategy in marketing, extending its influence far beyond play and entertainment. This conceptual paper employs a meta-analysis methodology, systematically synthesizing findings from academic, experimental, and applied research to uncover consistent patterns, theoretical developments, and evolving applications of gamification in marketing contexts. The choice of meta-analysis is particularly relevant as it allows for the integration of diverse empirical and conceptual studies, offering a comprehensive and evidence-based understanding of the field's development over time. In addressing the first research question, the study explores how gamification has been conceptualized and applied, highlighting key elements such as points, leaderboards, challenges, and rewards, and examining their effects on consumer engagement, loyalty, and behavior through psychological mechanisms like intrinsic and extrinsic motivation. The second research question identifies existing gaps in literature, including the need for longitudinal research, greater cultural diversity, and ethical scrutiny in the deployment of gamified systems. By integrating theoretical frameworks such as Self-Determination Theory, Flow Theory, and the Technology Acceptance Model, the paper not only clarifies how gamification works but also guides future research toward more responsible, inclusive, and effective applications. The findings offer valuable insights for scholars and marketing practitioners seeking to design gamified strategies that are not only engaging but also sustainable and ethically sound.

## 1. Introduction

Gamification has increasingly become a powerful strategy in marketing, blending psychological principles and game elements to foster stronger consumer-brand interactions. Moving beyond mere entertainment, gamification has been shown to drive key marketing outcomes such as brand recognition, sales enhancement, customer loyalty, and engagement. This review explores these impacts through an in-depth synthesis of current research.

In recent years, gamification has emerged as a rapidly expanding area of study within marketing research. However, despite growing academic interest, the current body of

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knowledge remains fragmented and lacks cohesive theoretical integration. Numerous studies have investigated the role of gamification, but their findings are dispersed across domains, methodologies, and theoretical frameworks, making it difficult to draw clear conclusions or actionable insights for marketers.

While some reviews and bibliometric analyses exist, they often take a broad, cross-disciplinary perspective—focusing on gamification across education, healthcare, or general management—rather than honing in on the distinct dynamics and mechanisms within marketing contexts. Moreover, few if any prior studies have applied structured frameworks such as scientific mapping or the TCCM (Theory–Context–Characteristics–Methodology) model specifically to the domain of gamification in marketing. As a result, a focused, theory-informed synthesis that consolidates marketing-specific insights remains lacking.

This paper addresses this critical gap by providing a comprehensive and targeted meta-analytic review of gamification research within marketing. In doing so, it offers a systematic structure to interpret scattered findings, identify consistent themes, and outline directions for future investigation. By unifying diverse research streams—academic, experimental, and applied—this review reveals both the mechanisms and measurable outcomes of gamification strategies and establishes a robust foundation for further theoretical and practical advancements.

To guide this analysis, the paper addresses the following research questions:

- **RQ1:** How has gamification been conceptualized and applied in marketing across academic, experimental, and applied research?
- **RQ2:** What future research avenues emerge from the current gaps in gamification literature?

These questions emerge at a time when gamification is no longer a niche tactic but a mainstream marketing strategy across sectors—from e-commerce to sustainability. Yet, despite its growing adoption, the field lacks a consolidated understanding of which elements are most effective, under what conditions, and why. This paper seeks to bridge that gap through a marketing-specific, theory-driven meta-analysis that distinguishes itself from broader or less structured reviews.

In what follows, the paper first outlines the conceptual foundations of gamification, then presents the methodology of the meta-analysis, and finally discusses findings by linking them to key marketing outcomes. The aim is to provide both scholars and practitioners with a structured understanding of gamification’s multifaceted influence and offer actionable directions for future research.

## **2. Methodology**

### **2.1. Meta-Analytic Review Approach**

To address the research questions, a **meta-analytic literature review** was conducted, combining systematic review principles with qualitative synthesis. This approach allows for the integration of findings from diverse studies to identify recurring patterns, theoretical developments, and gaps specific to gamification in marketing.

### **2.2. Search Strategy and Study Selection**

The literature search was conducted between January and March 2024 across three major academic databases: **Scopus, Web of Science, and Google Scholar**. To ensure comprehensiveness, a combination of keyword strings was used:

- "gamification AND marketing"
- "gamification AND engagement"
- "gamified campaigns"
- "brand gamification"
- "consumer behavior AND game elements"

The search yielded **87 initial records**. Studies were then screened in three stages:

1. **Title and abstract screening:** Articles not related to gamification or marketing were excluded.
2. **Full-text review:** Full papers were examined to confirm relevance and adherence to inclusion criteria.
3. **Final inclusion:** 42 studies were selected for full analysis.

**Inclusion criteria:**

- The study must explicitly focus on **gamification in a marketing context** or offer clear marketing implications.
- Only **empirical (quantitative or qualitative), conceptual, or systematic review** studies were included.
- Articles had to be **peer-reviewed, published in English, and dated between 2010 and 2024**.

**Exclusion criteria:**

- Studies focused solely on gamification in **non-marketing domains** (e.g., education, healthcare) without marketing implications.
- Non-peer-reviewed content (e.g., theses, conference abstracts, white papers) was excluded.

### **2.3. Data Extraction and Categorization**

A structured coding sheet was developed to extract relevant data from each study. Two researchers independently coded the papers to ensure reliability; discrepancies were resolved through discussion and consensus.

The following categories were used to code each article:

- **Marketing focus:** loyalty, brand awareness, engagement, conversion, customer retention.
- **Gamification elements:** points, badges, leaderboards, avatars, challenges, progress bars.
- **Psychological mechanisms:** intrinsic/extrinsic motivation, flow, self-determination, competition.
- **Theoretical frameworks:** including Self-Determination Theory (SDT), Flow Theory, Technology Acceptance Model (TAM), among others.
- **Methodological design:** empirical (quantitative/qualitative), conceptual, or mixed methods.

### **2.4. Analysis Process**

After coding, a **thematic synthesis** was performed to identify dominant trends, theoretical underpinnings, and research gaps. Descriptive statistics were used to summarize methodological and thematic distributions. Additionally, a **TCCM (Theory–Context–Characteristics–Methodology) framework** was applied to further structure and interpret the literature, enabling a multi-dimensional analysis of how gamification has been studied in marketing.

This rigorous and transparent methodology ensures replicability and enhances the validity of findings by synthesizing a fragmented body of research into an integrated framework for theory building and practical application.

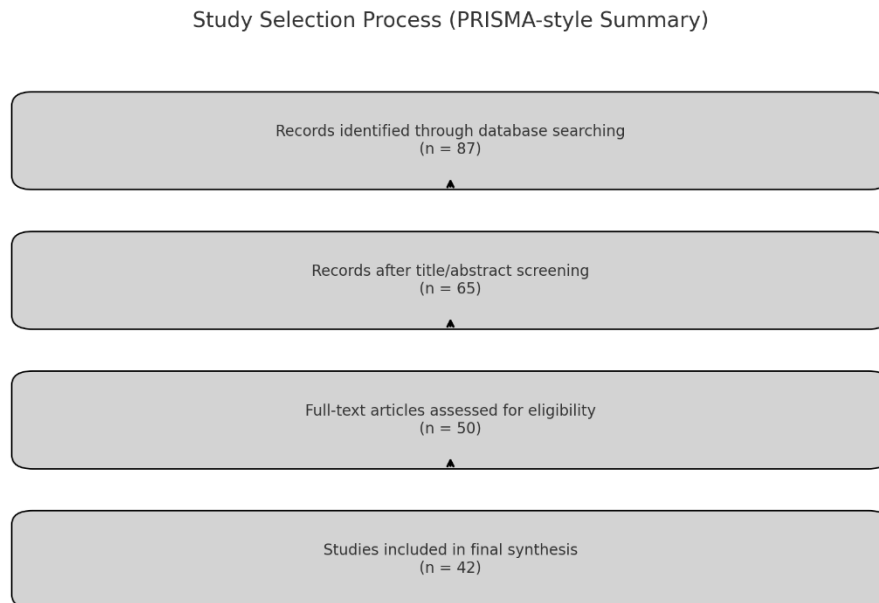


Figure 1. Study Selection Process (PRISMA-Style Summary)

## 2.5. Conceptual Foundations of Gamification

Gamification, though a relatively recent term in the context of the internet, is based on longstanding concepts rooted in the digital media sector (Deterding et al., 2011). Firstly referred to as "funware" by Tahashi (2008), the idea was later advanced by Gabe Zichermann, who described it as the practice of transforming routine customer interactions into engaging game-like experiences that align with business objectives (Zichermann & Linder, 2010, p. 20). The concept gained significant power during the 2010s, encouraged by key industry figures and companies such as Bunchball and Badgeville, which developed platforms that embedded game mechanics into websites (Deterding, 2011). Essentially, gamification involves incorporating elements of game design into non-gaming settings to influence user behavior (Bunchball, 2010).

Numerous studies have highlighted the positive influence of games on individuals, noting improvements in cognitive functions like enhanced attention and creativity, advancements in social abilities and prosocial behavior, as well as support for emotional well-being and increased intrinsic motivation (Santos et al., 2024; Bitrian et al., 2021). When players are intrinsically motivated, they engage in activities for enjoyment themselves. Two key theories explain this: Reiss's (2000) theory of 16 basic desires identifies core human motivations like curiosity, status, and social contact, which help predict behavior; and Deci and Ryan's (1985) Self-Determination Theory (SDT), which emphasizes the importance of autonomy,

competence, and relatedness for sustained engagement. Both theories highlight how personal desires and social-cognitive factors drive behavior. In a gamified environment, for example a marketing campaign, aligning game elements with these internal motivations can positively influence user attitudes and actions. Studies also show that games' emotional and motivational appeal can be harnessed for non-entertainment goals, such as promoting learning, physical activity, or safe behavior. Gamification aims to leverage the powerful motivational aspects of game elements to increase user engagement and commitment, ultimately supporting the core goals of a system (Bitrian, Buil, & Catalán, 2021). Although gamification has gained significant academic attention, there is still no universally agreed-upon definition. A commonly referenced interpretation by Deterding et al. (2011) frames gamification as the use of game design elements in contexts outside of traditional gaming. Similarly, Seaborn and Fels (2015) describe it as the intentional incorporation of various game components—such as principles, strategies, and patterns—into non-game environments to evoke experiences similar to those found in gameplay. More detailed, gamification refers to the use of game design elements—such as points, leaderboards, challenges, and rewards—in non-game contexts (Hamari, Koivisto, & Sarsa, 2014). Its effectiveness relies on fulfilling intrinsic motivations like autonomy, competence, and relatedness, as posited by Self-Determination Theory (Deci & Ryan, 1985). Hofacker, De Ruyter, Lurie, Manchanda, and Donaldson (2016) argue that gamification enhances mobile marketing by leveraging real-time feedback loops and dynamic engagement mechanisms. Due to the multi-factored reasons, the gaming industry, along with number of people gaming, is constantly increasing. Today, games represent a leading form of entertainment across all demographic groups and are expected to maintain this prominence in the future.

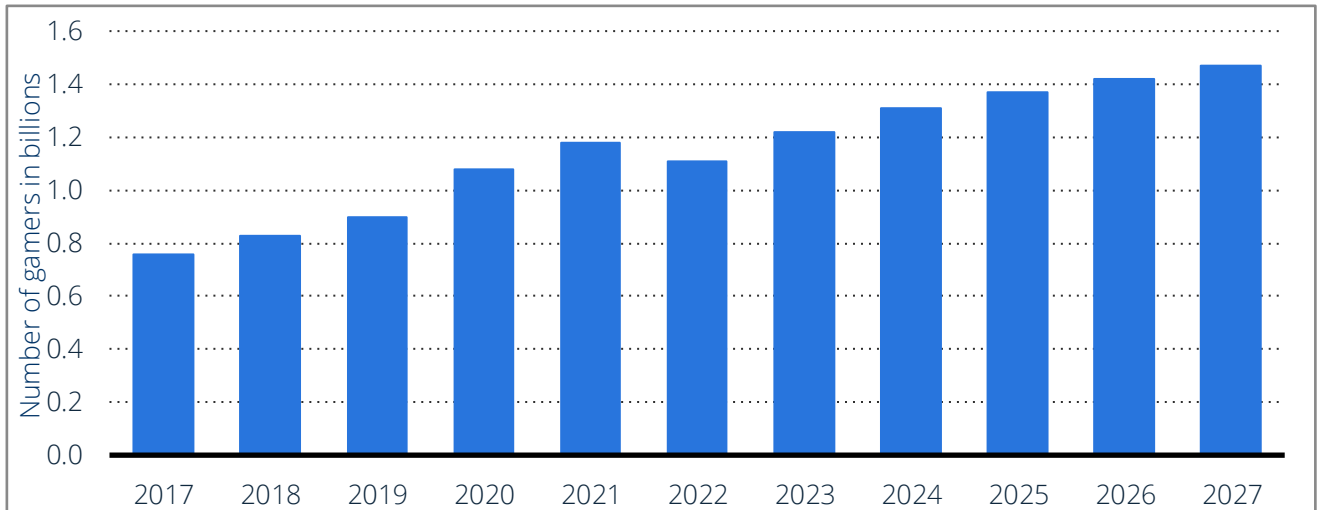


Figure 2. Number of video game users worldwide from 2017 to 2027 (in billions)

Source(s): Statista; Statista Advertising & Media Insights.

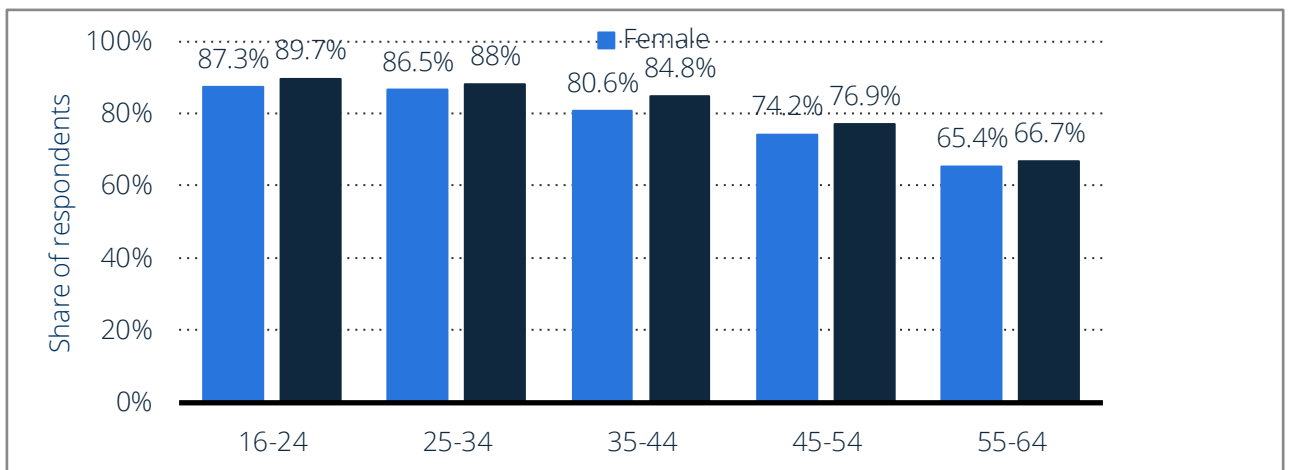


Figure 3. Share of internet users worldwide who play video games on any device as of 3rd quarter 2022, by age group and gender

Note(s): Worldwide; Q2 2022; 16 to 64 years; among internet users

Source(s): GWI; We Are Social; DataReportal; Meltwater.

Recent systematic mappings (Noorbehbahani, Saleh, & Jafar Zadeh, 2019) reveal that gamification applications in marketing have matured from simple reward programs to complex ecosystem integrations, emphasizing user experience and emotional resonance. Moreover, Santos, Dias, and Bairrada (2021) highlight that marketing-related gamification research increasingly incorporates multidisciplinary theoretical frameworks including Flow Theory, Technology Acceptance Model (TAM), and Behavioral Economics. The authors also highlight that gamification encourages behavior by engaging both intrinsic motivators (such as enjoyment, curiosity, and personal satisfaction) and extrinsic motivators (including rewards, financial incentives, and social status) concluding that effective gamification design should incorporate both emotional elements and reinforcements—whether positive or negative—to create experiences that ultimately result in satisfying outcomes for participants (Santos et al., 2024).

### **3. Gamification in Marketing**

In recent years, gamification has become an increasingly prominent trend in the business world, particularly within marketing contexts. Marketers' growing interest in gamification stems from the recognition that games effectively capture and maintain individuals' engagement over time, fostering a generally positive outlook on the integration of game design elements into marketing strategies (Santos et al., 2024). Gamification in marketing often aims to convey product or brand information in a way that encourages users to participate and stay engaged. However, much of the current research on gamification in marketing has emphasized its role in branding as well, highlighting the advantages of incorporating gaming mechanisms and suggesting that gamification strengthens the relationship between consumers and brands, augmenting various aspects of brand engagement—emotional, cognitive, social, and behavioral, as well as positively influencing brand attitude, brand co-creation experiences, brand awareness, brand love (Leclercq et al., 2017), and brand equity (Santos et al., 2024; Xu et al., 2027). Furthermore, applying game elements in marketing has been linked to greater customer loyalty (Bitrian et al., 2021), increased willingness to pay a premium price (Santos et al., 2024), more positive word-of-mouth communication, and stronger purchase intentions (Nobre & Ferreira, 2017). Additionally, gamification has been shown to boost consumer interaction, increase website and app traffic, encourage positive recommendations, and enhance sales performance (Santos et al., 2024). Consequently, gamification tools have become valuable assets for e-commerce platforms, helping drive conversions, foster customer loyalty, generate content, and ultimately improve business profitability (Behl et al., 2020).

#### **3.1. Theoretical Frameworks of Gamification in Marketing Context**

Gamification can enhance user engagement, yet limited academic research has explored its practical application, particularly within the marketing field.

Based on the Technology Acceptance Model (TAM) and the Theory of Reasoned Action (TRA) by Fishbein and Ajzen (1975), an individual's actual use of a technology system is shaped—either directly or indirectly—by their behavioral intentions, attitudes, perceived usefulness, and perceived ease of use of the system.

However, several researchers (e.g., Davis et al., 1989; Davis, 1993; Benbasat & Barki, 2007; Li, 2014) have criticized TAM for being incomplete and have advocated for its extension to particular contexts with the inclusion of context-specific variables.

The original TAM posits that system acceptance is driven by perceived usefulness and perceived ease of use. However, later scholars criticized it for overlooking context-specific factors, which constrained its ability to explain and predict user behavior. In the realm of game studies, social factors have been identified as key predictors of players' attitudes and intentions, with enjoyment recognized as the most significant motivational driver for gameplay (Hsu & Lu, 2007; Li, 2014). Yang, Asaad, and Dwivedi (2017) in their research explore the relationship between behavior intention of engagement and brand attitude in order to examine the marketing benefits of gamification. Consistent with previous research, the findings of Yang, Asaad, and Dwivedi (2017) support the validity of TAM not only for understanding information system adoption but also for evaluating marketing systems. Furthermore, the extended model revealed several positive effects of gamification in marketing contexts. Notably, the intention to engage with a gamified brand tends to foster favorable attitudes toward that brand. This study also adds to the TAM literature by highlighting the critical role of enjoyment in predicting engagement intentions. Consequently, marketers and game designers should be focused on features that increase enjoyment during gameplay—such as competition, interactive elements, or reward

systems. Overall, the study offers practical evidence of gamification's effectiveness, providing a foundation for its broader application across various fields.

In addition to TAM few more theoretical frameworks are famous in the academic context: The psychological mechanisms underlying gamification are rooted in:

- **Self-Determination Theory (SDT):** Emphasizes autonomy, competence, and relatedness.
- **Flow Theory:** Suggests that optimal engagement arises when challenge and skill levels are balanced.
- **Operant Conditioning:** Game rewards (points, badges, status) reinforce desirable behavior.

### **3.2. Marketing Applications of Gamification**

Gamification has evolved into a sophisticated marketing tool with specific strategies designed to influence consumer behavior at various stages of customer journey. In the following chapters we are detailing its application in different segments.

#### **3.2.1 Gamification and Brand Recognition**

Gamified marketing experiences boost brand awareness by embedding brand elements in memorable, interactive contexts. For instance, Starbucks' mobile app employs a gamified loyalty program where users earn stars for purchases, enhancing brand interaction and recognition. Studies show that game-like interactions can significantly improve brand recall through emotional engagement and repeated exposure (Hamari et al., 2014; Yang et al., 2017). Yang, Asaad, and Dwivedi (2017) found that gamification positively impacts consumers' brand attitude and intention to engage, serving as an intermediary between initial exposure and sustained brand loyalty. Their study shows that when consumers perceive the gamified experience as enjoyable and rewarding, they form more favorable brand associations. This is aligned with Hofacker et al. (2016), who highlight that brand-related content within games improves recognition through repeated, emotionally charged interactions. Further to this, research has shown that brand exposure within video games can significantly influence players' memory of those brands (Grigorovici & Constantin, 2004; Nelson, 2002). Advertising interactions, including videos, generally fall into two categories: passive and active. Traditional media like television and films are considered passive, as they offer limited opportunity for immediate audience engagement. In contrast, video games are classified as active-interactive media, since they demand real-time responses and participation from users (Lee & Faber, 2007).

#### **3.2.2. Gamification and Sales Performance**

The relationship between gamification and sales performance is multifaceted. Gamification can create a "flow" state—where users are fully immersed, which fosters impulsive buying behaviors (Hamari et al., 2014). By using mechanics like time-limited offers, progress bars toward discounts, and exclusive unlockable products, gamified systems encourage users to make purchases faster and in higher volumes.

In a systematic review, Noorbehbahani et al. (2019) observed that e-marketing strategies incorporating gamification reported higher conversion rates, especially when integrated with social sharing mechanisms. Similarly, Mulcahy (2020) demonstrated that gamification in sustainability campaigns could drive purchasing choices towards greener products, suggesting broader potential for sales influence when tied to ethical consumption.

Nevertheless, the impact of gamification of sales performance is not uniformly positive. Many authors including Mulcahy (2020) warns that extrinsically motivated purchases, driven purely by gamified rewards, may not translate into long-term customer value unless the underlying product quality and service support are aligned.

### **3.2.3 Gamification and Customer Loyalty**

One of the strongest contributions of gamification is cultivating customer loyalty. Gamified loyalty programs, such as tiered rewards systems and achievement badges, create psychological ownership among consumers (Hamari et al., 2014). Yang et al. (2017) show that engagement intention generated through gamification directly strengthens loyalty metrics such as repeat purchase intention and advocacy. Santos et al. (2021) confirm that loyalty is not only driven by rewards but also by the emotional satisfaction derived from completing tasks and achieving milestones within the gamified system.

Critically, Santos et al. (2021) suggest that the combination of intrinsic motivation (fun, mastery) and extrinsic incentives (rewards, recognition) creates a synergistic effect on loyalty. Brands that rely solely on tangible rewards without offering intrinsic satisfaction risk creating transactional rather than emotional loyalty.

### **3.2.4 Gamification and Customer Engagement**

Customer engagement is arguably the most immediate outcome of gamification strategies. Engagement, defined as the intensity of customer participation and emotional connection with the brand, is significantly enhanced through well-designed gamified experiences (Hofacker et al., 2016).

Yang et al. (2017) found that gamification increases engagement intention by making brand interactions enjoyable and intrinsically motivating. Noorbehbahani et al. (2019) map out various tactics for boosting engagement: competitive leaderboards, narrative-driven experiences, and social sharing mechanisms. Mulcahy (2020) additionally underscores that gamification, when aligned with consumers' ethical or social identity (e.g., environmental responsibility), can achieve deep engagement that transcends mere entertainment, fostering authentic consumer-brand bonds. However, engagement is highly contingent on personalization. Santos et al. (2021) note that gamified systems need to cater to different cognitive styles, demographics, and psychographic segments to maximize participation. Generic gamified experiences can quickly lead to user fatigue or abandonment.

### **3.2.5 Critical Insights: Moderators and Boundary Conditions**

While gamification offers significant promise, its effectiveness is moderated by several factors:

- **Demographic Variations:** Younger consumers and digital natives respond more positively to gamified experiences than older segments (Hamari et al., 2014; Noorbehbahani et al., 2019).
- **Cognitive Style Differences:** Individuals with an analytic cognitive style prefer structured, goal-oriented gamification, whereas intuitive thinkers respond better to narrative and exploratory elements (Wang & Tahir, 2020).
- **Cultural Factors:** Cultural dimensions like individualism versus collectivism moderate gamification's impact, with collectivist cultures responding better to social and collaborative game elements (Santos et al., 2021).
- **Dominant Theories:** SDT, technology acceptance model (TAM), and uses & gratifications theory are most common.

- **Methodological Bias:** 75% of studies used quantitative, cross-sectional designs—calling for more longitudinal and qualitative work.
- **Contextual Focus:** Research is heavily focused on digital platforms, with less attention on offline, hybrid, or emerging contexts (e.g., augmented reality, metaverse).

Moreover, poorly executed gamification can backfire, leading to perceptions of manipulation or "gamification fatigue," where users become desensitized to incentives (Hamari et al., 2014). By deepening the discussion of how specific gamification strategies are operationalized in real marketing contexts, this section illustrates the practical relevance and strategic versatility of gamified systems in achieving diverse marketing goals.

#### **4. Future Research Directions**

The field is moving towards more sophisticated, AI-driven personalization in gamification, real-time adaptive gaming environments, and integration with emerging technologies like AR/VR (Santos et al., 2021). Future studies should also address ethical considerations, particularly regarding consumer autonomy and transparency in gamified systems.

Meta-analyses by Noorbehbahani et al. (2019) call for more longitudinal studies to understand the sustainability of gamification's effects over time, beyond short-term engagement spikes.

#### **5. Conclusion**

Gamification in marketing is more than a playful trend; it is a strategic tool capable of driving brand recognition, increasing sales, building loyalty, and deepening engagement. However, its success is contingent upon thoughtful, theory-driven design, sensitivity to audience differences, and ethical deployment. As gamification evolves alongside technological advances, it holds promise for shaping the future of interactive marketing in profound and lasting ways.

Gamification in marketing has evolved from a novelty into a powerful strategic tool that shapes consumer engagement, brand perception, and behavioral outcomes. Through a comprehensive meta-analysis of academic, experimental, and applied studies, this paper responded to **RQ1** by mapping how gamification has been conceptualized and applied over time. The findings show a clear progression from early reward-based mechanics to more sophisticated, user-centric systems that integrate psychological theories such as Self-Determination Theory, Flow Theory, and the Technology Acceptance Model. These frameworks have helped illuminate the mechanisms by which gamification influences intrinsic motivation, emotional attachment, and sustained participation across various marketing domains.

In addressing **RQ2**, the paper identifies critical gaps and future research opportunities. While current studies highlight short-term benefits—like increased engagement, loyalty, and sales—longitudinal research is needed to assess the sustainability of these effects. Moreover, there is a strong need for qualitative and cross-cultural studies to uncover deeper insights into user experiences, emotional resonance, and ethical considerations. As marketing platforms increasingly integrate AI, AR/VR, and personalized content, future research should explore how gamification can adapt within these evolving digital ecosystems without compromising user autonomy or trust.

Ultimately, this paper contributes to the growing body of gamification literature by offering a structured synthesis of past research and guiding a more responsible, inclusive, and effective use of gamification in marketing. By understanding both its current impacts and its limitations,

researchers and practitioners can better design gamified systems that go beyond play—creating meaningful, engaging, and ethically sound brand experiences.

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## Appendix

### Meta-Analysis Table: Gamification in Marketing Outcomes

**Summary:** This table illustrates that gamification impacts multiple stages of the customer journey, from raising initial awareness to fostering ongoing loyalty. Studies consistently highlight engagement as the most immediate benefit, while brand recognition, loyalty, and sales depend more heavily on the design quality and value alignment of gamification strategies.

| Study                                      | Objective  | Methodology                  | Key Findings  | Relevance to Marketing Outcomes            |
|--|--|------------------------------|---|--|
| Hamari, Koivisto & Sarsa (2014)            | To review empirical studies on gamification's effectiveness  | Literature Review            | Gamification boosts engagement; context-dependent results                     | Engagement, Loyalty                        |
| Hofacker et al. (2016)                     | To explore how gamification enhances mobile marketing        | Conceptual Paper             | Real-time feedback loops improve consumer interaction and emotional bonding   | Brand Recognition, Engagement              |
| Noorbehbahani, Saleh, & Jafar Zadeh (2019) | To map gamification in e-marketing                           | Systematic Mapping           | E-marketing gamification leads to higher conversion and emotional involvement | Sales, Engagement                          |
| Mulcahy (2020)                             | To explore gamification's effect on sustainable choices      | Field Study                  | Gamified campaigns influence green buying behavior when value-aligned         | Sales (Ethical Products), Loyalty          |
| Yang, Asaad, & Dwivedi (2017)              | To examine effects on brand attitude and engagement          | Quantitative Survey          | Enjoyment in gamification fosters engagement and favorable brand attitudes    | Brand Recognition, Engagement, Loyalty     |
| Santos, Dias, & Bairrada (2021)            | To outline current and future directions in gamification     | Bibliometric + TCCM Analysis | Calls for more longitudinal and ethical research; rise of personalization     | Loyalty, Engagement, Research Gaps         |
| Wang & Tahir (2020)                        | To review gamification in education (Kahoot!)                | Literature Review            | Enjoyment enhances learning outcomes and motivation                           | Engagement (Indirectly marketing-relevant) |
| Bitrian, Buil, & Catalán (2021)            | To analyze gamification's role in user engagement            | Empirical Study              | Gamification increases mobile app engagement via intrinsic motivation         | Engagement, Loyalty                        |
| Nobre & Ferreira (2017)                    | To examine gamification and brand co-creation                | Case-based Conceptual Paper  | Gamification strengthens brand-consumer co-creation and trust                 | Brand Loyalty, Brand Experience            |
| Leclercq, Poncin, & Hammedi (2017)         | To investigate gamification in product development platforms | Mixed Methods                | Gamification promotes value co-creation and collaborative engagement          | Engagement, Co-creation, Innovation        |
| Behl et al. (2020)                         | To review gamification in e-commerce                         | Literature Review            | Gamification boosts loyalty, engagement, and conversion on digital platforms  | Sales, Loyalty, Digital Engagement         |
| Xu, Buhalis & Weber (2017)                 | To examine gamification in tourism                           | Conceptual + Case Studies    | Gamification drives tourist engagement and experience personalization         | Brand Engagement, Experience Design        |
| Deterding et al. (2011)                    | To define and contextualize gamification                     | Conceptual Definition        | Framed gamification as applying game design to non-game contexts              | Theoretical Foundation                     |
| Deci & Ryan (1985)                         | To establish Self-Determination Theory (SDT)                 | Theoretical Framework        | Autonomy, competence, relatedness drive intrinsic motivation                  | Theoretical Basis for Engagement           |
| Reiss (2000)                               | To outline 16 basic human desires                            | Theoretical Framework        | Core motivations like curiosity and status drive behavior                     | Motivation Design in Gamification          |
| Zichermann & Linder (2010)                 | To present gamified marketing strategies                     | Practitioner Book            | Gamification aligns business goals with user engagement                       | Strategic Marketing Design                 |