

## GAMIFICATION IN DIGITAL MARKETING: IMPACT ON ENGAGEMENT AND BRAND PERCEPTION IN THE REPUBLIC OF MOLDOVA

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### Abstract

*This article analyzes the impact of gamification on consumer engagement and brand perception in the digital market of the Republic of Moldova. The research highlights the fact that digital engagement is a multidimensional construct, encompassing cognitive, emotional, and behavioral components that define the user's relationship with the brand. Although the success of these strategies depends on the player's personality and the maturity of the digital market, the local specialized literature remains underdeveloped. The theoretical analysis demonstrates that maximum impact on the brand is facilitated by active engagement, transforming the brand into a strategic intangible asset designed to generate sustained competitive advantages. Based on international literature and local studies, gamification mechanisms—such as surveys, badges, points, and leaderboards—are examined as incentives for engagement and as generators of positive perceptions. Empirical research, conducted via an online questionnaire on a sample of 200 active internet users (aged 18–45), reveals a strong correlation between gamification and engagement ( $r = 0.62$ ) and a moderate correlation between engagement and brand perception ( $r = 0.57$ ). The results suggest that the effect of gamification is partially mediated by engagement, and the 18–25 age group is the most receptive, offering opportunities for personalized digital campaigns. Finally, the paper argues that game mechanics must be integrated ethically to optimize marketing results and build a solid reputation, thereby providing a necessary foundation for future empirical studies in the Republic of Moldova.*

**Key words:** digital marketing, gamification, engagement, consumer.

**JEL Classification:** M31, L86, D83.

### I. INTRODUCTION

The rapid digital transformation of the global economy has prompted companies to rethink their strategies for engaging with consumers online. In a context of information overload and low user attention spans, traditional marketing methods are often ineffective.

In the Republic of Moldova, promotional strategies and their impact have evolved significantly in recent years. Advertising messages reflect a shift from traditional formats toward digital and interactive campaigns. The use of creative formats plays an essential role in capturing consumers' attention and in market positioning. Building a relationship of trust with consumers is essential for a brand's long-term success. Honest, transparent, and responsible advertising messages contribute to consumer loyalty and the consolidation of a positive reputation (Munteanu, 2024). In digital marketing, gamification mechanics such as points, badges, leaderboards, and interactive challenges stimulate intrinsic and extrinsic motivation, influencing online behavior (Kotler, Kartajaya, and Setiawan, 2021).

The term "gamification" gained widespread popularity in 2010, when researchers and practitioners began to wonder whether game elements could be incorporated into everyday processes and made to resemble games more closely (Spanellis, Dörfler, MacBryde, 2020). The essential tools for gamification are game elements extracted from gaming environments and applied in new contexts. Werbach and Hunter suggest starting the gamification process by considering the dynamics, mechanics, and components of the game (Neves, Oliveira, et al., 2025). Globally, gamification has become a major industry in its own right. The global gamification market was valued at \$10.19 billion in 2020 and is projected to reach \$38.42 billion by 2026. This growth can be attributed, in particular, to gamification's ability to stimulate and increase customer engagement, which is a significant factor in consumers' favorable attitudes toward companies and brands (Santos, Dias, & Bairrada, 2024).

Gamification has become an increasingly powerful strategy in marketing, combining psychological

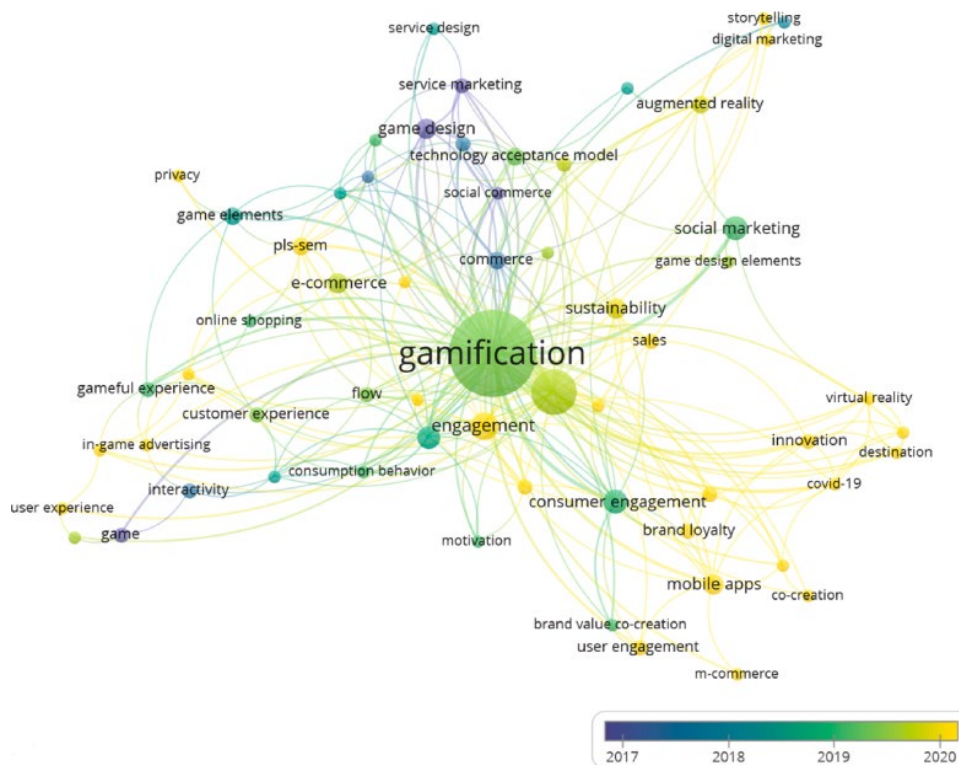
principles and game elements to foster stronger interactions between consumers and brands. Beyond mere entertainment, gamification has proven to generate key marketing outcomes, such as brand recognition, increased sales, customer loyalty, and customer engagement. This analysis explores these impacts through an in-depth synthesis of current research (Naumovska and Petrusevska, 2025). Gamification is defined “not merely as a set of technical tools,” but “as a holistic design philosophy” capable of “triggering positive behaviors” and strengthening “consumer loyalty” in the long term. However, the literature still reveals gaps regarding the actual effectiveness of gamification on consumer behavior and long-term marketing outcomes.

This study examines the impact of gamification on engagement levels in the Republic of Moldova and how it influences brand perception, contributing to the theoretical and empirical development of local digital marketing.

**II.LITERATURE REVIEW**

Gamification is an effective strategy for encouraging consumer participation through points, levels, rewards, and competitions ( Toda et al., 2020). Gamification is a motivational technique that uses game design elements (such as badges, points, and leaderboards) in non-game contexts to trigger positive user behaviors. Essentially, gamification aims to increase people’s motivation to complete various tasks (Mogavi, et al., 2022). Robson et al. proposed a framework based on three principles of gamification: mechanics, dynamics, and emotions. Mechanics encompass the objectives, rules, framework, context, types of interactions, and boundaries of the situation to be gamified. These elements depend solely on the designers’ decisions and do not change from one user to another or over time. Mechanics provide feedback and typically include badges, points, levels, missions, progress bars, and leaderboards. Dynamics, in turn, represent behaviors and interactions that emerge from the gamified customer experience. Cooperation and information sharing, competition among users, or unintended actions (e.g., cheating) are valid examples of dynamics that may arise as a result of the introduced mechanics. Finally, emotional components include the positive and negative affective reactions induced by gamified experiences (Santos, Dias, & Bairrada, 2024). Gamification components, such as digital platforms, AR/VR applications, and point and reward systems, are actively evolving and exert a comprehensive influence on consumer motivation, engagement, and decision-making (Litynska, 2025). International studies show that the implementation of game mechanics increases time spent on digital platforms, improves the user experience, and strengthens brand loyalty (Porto, et al., 2020).

Figure 1 shows a bibliometric map in which each node corresponds to a word, and two nodes are connected if those words appear together in at least one publication (Santos, Dias, & Bairrada, 2024).



**Figure 1 – Grouping keywords by year (Santos, Dias, & Bairrada, 2024).**

In general, the words that appear most frequently in older publications are grouped in cluster 5 and mainly refer to topics related to game design, service marketing, and social commerce. In turn, the results show that the most recent keywords are grouped in cluster 3 and largely refer to topics related to tourism, co-creation, and virtual reality. Previous research has focused on conceptualizing gamification in the field of marketing (Huotari, Hamari, 2017) and has primarily concentrated on the implementation of gamification processes, mainly in the context of services. Initially, publications focused more on understanding game design elements (such as progression paths, feedback, rewards, badges) that should be implemented in a gamification platform (Conaway, Garay, 2014). Currently, the literature focuses more on the consequences of implementing gamification. This demonstrates that scientific interest in the field of gamification and marketing has broadened and expanded successfully. Researchers are moving beyond a basic understanding of what gamification is and how it is implemented to examine how it affects consumer behaviors and business outcomes, indicating development and progress in the field. The keywords “tourism” and “co-creation” stand out, with an average publication date of 2021.5. Furthermore, the terms in yellow, such as “mobile platform,” “mobile apps,” “mobile phone,” and “m-commerce,” indicate that current studies are particularly focused on mobile (Santos, Dias, & Bairrada, 2024).

Gamification, defined as the application of game elements in non-game contexts, offers an innovative solution for increasing engagement (Hamari, Koivisto, Sarsa, 2014). The effectiveness of gamification depends less on the novelty of the mechanisms and more on their meaningful, participatory, and ethical integration into the brand experience. As gaming environments continue to evolve, marketers must move beyond simply playing the game to designing a game that truly matters, based on evidence from various usage contexts (Mazur, 2025).

The literature highlights that digital engagement is a multidimensional construct with cognitive, emotional, and behavioral components that reflect the degree of consumer involvement with a brand or digital platform (Brodie, Hollebeek, et al., 2011). Consumer engagement with a brand has become a central concept for marketing professionals, and understanding its antecedents, consequences, and mechanisms is essential (Adhikari and Panda, 2019). A brand no longer serves merely as a symbolic identifier but has become a key intangible asset, capable of generating sustained market advantages by influencing consumer behavior (Belostecinic, 2025). A strategic and coherent approach in the digital environment can yield significant benefits in building and maintaining a strong brand image (Memet, Burbulea, Gangan, 2023). Interactive and gamified experiences help increase engagement, prompting consumers to devote more time, attention, and emotional resources to their relationship with the brand.

The impact of gamification on brand perception is not limited to its direct effect; the literature suggests a mechanism mediated by engagement. Thus, interactive campaigns not only attract consumers' attention but also generate positive emotional connections, increasing loyalty and purchase intent (Porto, et al., 2020). A game-like experience has a positive impact on the customer's perception of a brand and, ultimately, leads to more active engagement with the brand. The gaming experience is directly influenced by the player's personality, which is a more personalized system and was used as a moderating factor. Although it appears to have a limited impact, it has a significant effect on customer perception (Elshoubashy, Abd Elkader, Khalifa, 2023).

Numerous studies have investigated the role of gamification, but their findings vary across different fields, methodologies, and theoretical frameworks, making it difficult to draw clear conclusions or formulate practical recommendations for marketing professionals (Naumovska and Petrussevska, 2025). In emerging markets, the degree of gamification adoption depends on the level of digitalization, consumer culture, and the maturity of the digital market (Brodie, Hollebeek, et al., 2011). In the Republic of Moldova, the local literature on gamification is underdeveloped (Popa, 2021).

Thus, the theoretical analysis reveals that the relationships between gamification, engagement, and brand perception are based on:

1. **Gamification** → **Engagement**: increasing engagement through interactive mechanics.
2. **Engagement** → **Brand perception**: engagement generates positive perceptions and emotional attachments.
3. **Gamification** → **Brand perception** (mediated effect): the maximum effect on the brand occurs through engagement, according to experiential marketing literature.

This theoretical framework provides the conceptual basis for the empirical analysis of the survey data and allows for the validation of the relationships between the studied variables, offering a clear perspective on how interactive digital strategies influence consumer loyalty and perception.

### III. RESEARCH METHODOLOGY AND RESULTS

The present study employed a quantitative, exploratory research design aimed at examining the relationships between gamification, digital engagement, and brand perception. Data were collected via an online questionnaire distributed through social media platforms. The sampling method was non-probabilistic (convenience sampling). The final sample consisted of 200 respondents, aged between 18 and 45 years, all identified as active internet users. The main variables analyzed included: the use of gamification elements, the level of digital engagement, brand perception and brand attitude. Data analysis involved descriptive,

correlational, and inferential statistical methods. Pearson's correlation coefficient ( $r$ ) was used to determine the strength and direction of the relationships between the studied variables. Statistical significance was assessed using the  $p$ -value, with a threshold of  $p < 0.05$ , ensuring the validation of the proposed hypotheses and the reliability of the observed relationships.

The findings indicate that 75% of respondents reported having interacted at least occasionally with gamified campaigns, suggesting a growing penetration of interactive marketing practices among digital users.

Moreover, 68% of participants stated that they experienced higher engagement levels in interactive campaigns compared to traditional formats. This result highlights the effectiveness of game-based mechanics in enhancing user involvement.

Regarding the impact on brand perception, the responses were distributed as follows:

- Much more positive: 32%
- More positive: 44%
- No change: 18%
- More negative: 6%

Overall, 76% of respondents reported a more favorable perception of brands that implement gamification elements.

Pearson correlation analysis revealed statistically significant positive relationships between the studied variables:

- **Gamification** → **Engagement**:  $r = 0.62$  (strong positive correlation)
- **Engagement** → **Brand attitude**:  $r = 0.57$  (moderate positive correlation)
- **Gamification** → **Brand perception**:  $r = 0.41$  (moderate positive correlation)

The results suggest that digital engagement partially mediates the relationship between gamification and brand perception. Additionally, the 18–25 age group demonstrated the highest responsiveness to gamified mechanics, indicating greater receptivity among younger consumers.

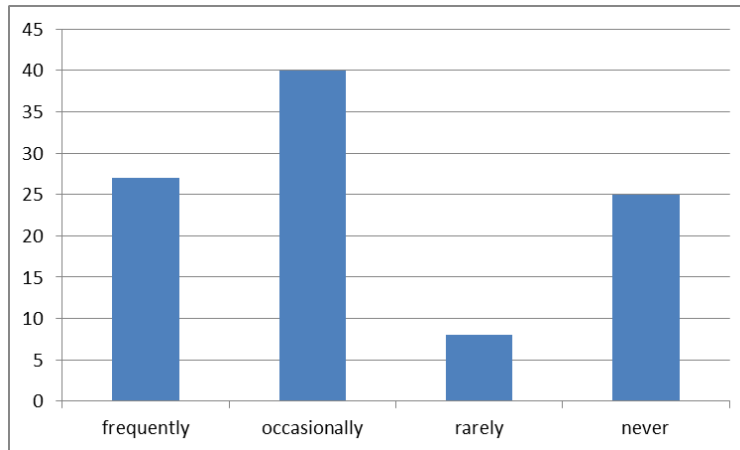
Hypotheses testing. The hypotheses were tested using Pearson correlation analysis, with statistical significance set at  $p < 0.05$ .

- **H1** predicted a positive relationship between gamification and digital engagement. Results indicate a strong positive correlation ( $r = 0.62$ ,  $p < 0.01$ ), confirming that the inclusion of game mechanics significantly increases user engagement.
- **H2** proposed that engagement positively influences brand attitude. The findings reveal a moderate positive correlation ( $r = 0.57$ ,  $p < 0.05$ ), suggesting that higher engagement levels are associated with more favorable brand perceptions.
- **H3** assumed a direct positive effect of gamification on brand perception. The correlation analysis shows a moderate positive relationship ( $r = 0.41$ ,  $p < 0.05$ ), confirming the hypothesis while indicating a weaker direct effect compared to the gamification–engagement link.
- To examine **H4**, the mediating role of engagement was assessed conceptually through relational comparison. The stronger correlation between gamification and engagement ( $r = 0.62$ ), combined with the moderate association between engagement and brand perception ( $r = 0.57$ ), and a weaker direct effect ( $r = 0.41$ ), suggests partial mediation. Thus, engagement partially mediates the relationship between gamification and brand perception.
- Regarding **H5**, age differences were analyzed across demographic segments. The 18–25 age group demonstrated significantly higher responsiveness to gamified campaigns, indicating a moderating effect of age on the gamification–engagement relationship.
- Finally, **H6** was supported by descriptive and correlational evidence showing that positive brand perception is associated with increased purchase intention and recommendation likelihood.

**Statistical conclusion.** All proposed hypotheses were supported at a significance level of  $p < 0.05$ . The findings validate the conceptual model and confirm that gamification enhances brand perception primarily through increased digital engagement, with stronger effects observed among younger consumers.

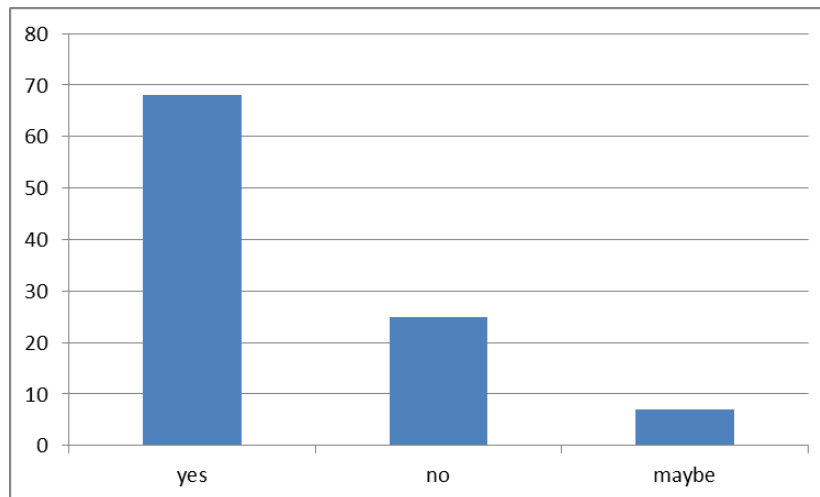
The data analysis was conducted based on a sample of 200 respondents from the Republic of Moldova, selected using convenience sampling, through the distribution of an online questionnaire via social media. The statistical analysis included descriptive and correlational analyses, as well as hypothesis testing using inferential methods.

The descriptive results indicate that 75% of respondents have interacted at least occasionally with gamified digital campaigns, confirming the growing penetration of interactive mechanics in the Moldovan online environment (Figure 2). This result is consistent with regional trends highlighted in reports on the digitalization of Eastern Europe.



**Figure 2 – Analysis of degree of using gamification (%)**

With regard to digital engagement, the majority of respondents reported an increase in engagement when gamified elements were present, as evidenced by an increase in time spent on platforms, greater interaction (likes, shares, comments), and active participation in interactive campaigns. Approximately 68% of respondents stated that they are more engaged with interactive digital content compared to traditional formats (Figure 3).



**Figure 3 – Purchase intention analysis (%)**

Analyzing how interactive campaigns influence consumers’ perceptions of a brand is a key element of contemporary digital marketing research. In the context of accelerated digitalization and competition for consumer attention, brand perception is becoming a key indicator of the effectiveness of online communication strategies. Attitude toward a brand reflects the consumer’s cognitive and emotional evaluation and directly influences behaviors such as purchase intent, loyalty, and recommendations to other users.

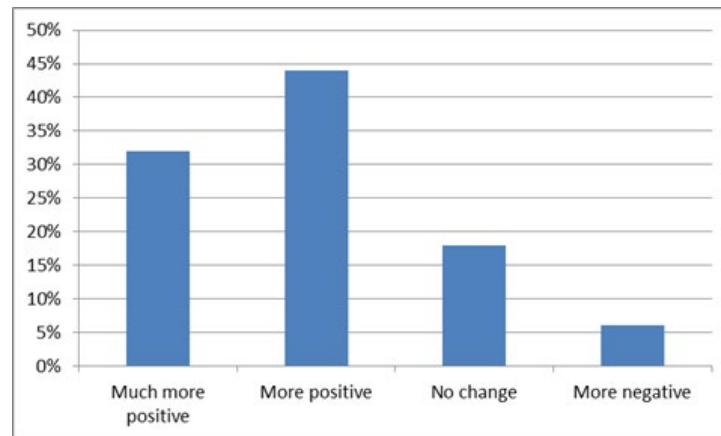
Interactive campaigns, including those based on gamification, digital storytelling, or participatory experiences, have the potential to transform the traditional relationship between brand and consumer into a two-way, experiential one. According to the literature, the active involvement of consumers in digital communication processes generates higher levels of emotional attachment and trust in the brand (Hamari, Koivisto, Sarsa, 2014). Thus, assessing the impact of these campaigns on brand perception becomes crucial for understanding the effectiveness of digital strategies.

In response to the question: “How do interactive campaigns influence your perception of the brand?”, respondents’ answers were distributed as follows (Table 1):

**Table 1. Respondents’ answers to the question: “How do interactive campaigns influence your perception of the brand?”**

Effect	Percentage	Interpretation
Much more positive	32%	One-third of respondents have a very favorable view; this indicates that interactive campaigns have a strong impact on consumers who are receptive to gamification and participatory experiences.
More positive	44%	Most respondents (nearly half) reported a more positive perception of the brand, suggesting that interactivity creates a favorable impression on both a cognitive and emotional level.
No change	18%	A small group was not influenced; this may be explained by limited digital experience or a preference for traditional communication.
More negative	6%	Very few respondents had a negative reaction; this may reflect the perception that some interactive campaigns are intrusive or superficial.

The analysis of brand attitudes reveals a predominantly positive outlook: 76% of respondents reported a more favorable perception of brands that use gamification mechanics. Only a small percentage (6%) reported a negative influence, suggesting high acceptance of these practices among local consumers (Figure 4).



**Figure 4 – Brand attitude analysis (%)**

An analysis of the results shows that interactive campaigns have a significant positive impact on brand perception in the Republic of Moldova. The majority of consumers responded positively, which confirms the theory of experiential marketing and the international literature on gamification. At the same time, there is a small group that was not influenced or reacted negatively, indicating the need to adapt the content to consumers’ needs and profiles.

A qualitative analysis of this question provides us with useful insights such as:

- **The gamification effect:** Interactive experiences (quizzes, prize wheels, digital storytelling) boost engagement and create an emotional connection between the brand and the consumer.
- **The sensitive segment:** Young respondents (ages 18–25) are more prone to positive perceptions; according to the literature, young people pay closer attention to playful and interactive experiences.
- **Loyalty and recommendation:** Positive responses suggest that most consumers would recommend the brand to friends and would be more likely to make repeat purchases.
- **The “no change” group:** 18% did not change their perception; for these segments, interactive campaigns must be combined with personalization and relevant content to increase their impact.
- **Negative reactions:** 6% – highlight the importance of ethical campaign design and avoiding consumer overload.

Next, we will examine the general interpretation of the *r* values (Table 2) and the Pearson correlation coefficient (*r*), which measures the strength and direction of the linear relationship between two quantitative variables:

- $r = +1$  → perfect positive correlation
- $r = 0$  → no linear correlation
- $r = -1$  → perfect negative correlation

**Table 2. General interpretation of the r values**

r	Interpretation
0,00 – 0,19	very weak
0,20 – 0,39	weak
0,40 – 0,59	moderate
0,60 – 0,79	strong
0,80 – 1,0	very strong

These metrics are standard in digital marketing studies to demonstrate statistical correlations between variables such as gamification, engagement, and brand perception.

Interpretation of the survey results

**a) Gamification → Engagement (r = 0.62)**, which means:

- Strong positive correlation
- This means that: the more gamification elements campaigns include (quizzes, badges, points, leaderboards), the more significantly user engagement increases.
- Interactive marketing is effective for increasing online engagement.

**b) Engagement → Attitude toward the brand (r = 0.57)**, which means:

- Moderate positive relationship
- More engaged consumers tend to perceive the brand more positively.

**c) Gamification → Brand perception (r = 0.41)**, which means:

- Moderate direct positive relationship
- Gamification influences brand perception, but not as strongly if there is no engagement.

The effect of gamification on the brand is partially mediated by engagement (theoretical model: gamification → engagement → brand). Consequently, Pearson’s correlation analysis revealed that gamification elements have a strong relationship with the level of engagement ( $r = 0.62, p < 0.01$ ), confirming the effectiveness of interactive strategies in stimulating consumer engagement. Engagement, in turn, has a moderate correlation with brand attitude ( $r = 0.57, p < 0.05$ ), suggesting that positive brand perception is indirectly influenced by active participation. The direct relationship between gamification and brand perception is moderate ( $r = 0.41$ ), indicating that the impact of interactive campaigns is partially mediated by engagement. These results support theoretical models of experiential marketing, according to which active consumer involvement is essential for strengthening loyalty and favorable brand perception (Brodie, Hollebeek, et al., 2011). Hypothesis testing confirmed the validity of the conceptual model.

The following statistic was used in the study: p-value ( $p < 0.05$ ), to provide statistical certainty that the observed relationship between variables (e.g., gamification → engagement) is not due to chance.

The p-value is a statistical measure that indicates the probability that the observed results occurred by chance, under the null hypothesis (H0). Interpretation:

- $p < 0.05$  → the result is statistically significant, so the alternative hypothesis (H1 or H2) is supported.
- $p \geq 0.05$  → the result is not significant; we cannot reject H0.

The research analyzed differences across age groups and compared averages or scores between demographic segments (e.g., 18–25 vs. 26–35), which helps marketers personalize gamified content and prioritize their target audience. The purpose of this metric is to identify the segments most receptive to interactive campaigns. The “age” variable does not completely alter the primary relationship (gamification → engagement), but it can amplify or diminish the effect, and is used strategically to optimize segmented digital campaigns.

Testing hypotheses H1 and H2 demonstrated the validity of the conceptual model, with p-values  $< 0.05$ , indicating that gamification positively influences both engagement levels and brand perception. Analysis of differences across age segments revealed a moderate effect of the demographic variable, with maximum receptivity among consumers aged 18 to 25. These indicators confirm the need to tailor gamified content to the consumer profile in order to maximize the effectiveness of digital campaigns.

#### IV. CONCLUSION

In the context of the Republic of Moldova, these results indicate a gradual maturation of consumers’ digital behavior and confirm the potential of interactive strategies to increase the competitiveness of local brands. Based on the analysis conducted, the following conclusions were reached, summarizing the main aspects studied:

1. Gamification significantly increases digital consumer engagement—the strong correlation ( $r = 0.62, p < 0.05$ ) confirms the effectiveness of gamification elements in capturing the attention of online users.
2. Engagement mediates positive brand perception – the moderate relationship between engagement and

brand attitude ( $r = 0.57$ ) shows that interactive experiences contribute to creating a favorable impression.

3. The direct impact of gamification on brand perception is moderate – the  $r$  coefficient of 0.41 suggests that the maximum effect is achieved through active user involvement.
4. Young people (ages 18–25) are the most receptive to interactive campaigns – an analysis of differences across age groups indicates that the younger segment exhibits the highest potential loyalty, which is why gamified content must be tailored to their preferences.
5. A positive perception of the brand is dominant—76% of respondents reported a positive attitude, which validates the implementation of interactive strategies in digital marketing in the Republic of Moldova.

The study's findings allow us to outline the following practical recommendations, relevant to the Moldovan market:

1. Integrating gamification mechanics into e-commerce and social media, targeting the 18–25 age group in particular.
2. Creating interactive content tailored to users' profiles and online behavior.
3. Segmenting campaigns by age and digital preferences, with tailored messages.
4. Continuous monitoring and analysis of engagement through dedicated dashboards.
5. Training and developing internal expertise in gamification and digital marketing for ethical and effective implementation.

Implementing these recommendations will enable companies to adapt more effectively to the dynamics of the digital market in the Republic of Moldova, maximizing user engagement and strengthening customer relationships. In conclusion, the responsible and ethical integration of gamification and digital marketing strategies can significantly contribute to increasing the competitiveness and sustainability of local businesses.

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