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Examining the failure of gamification in implementing innovation from the perspective of problematization in the retail sectors of emerging economies

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ABSTRACT

Gamification is a strategy, methodology, or activity that has picked up pace over time and has been successfully deployed in organizations. Despite massive efforts to capture the success of the deployment of gamification in implementing innovation, its failure in this regard has hitherto been ignored. Until recently, it has been difficult to understand such failure from a contributing factor perspective. In bridging this gap, we conducted our study through the lens of problematization and social cognitive theory. We drew qualitative data from the field by recording the experiences and observations of stakeholders involved in attempting and failing to implement gamified projects in the retail industry. Our qualitative analysis was aimed at developing a signposting suited to help firms answer the fundamental question of "Why does gamification fail as an innovation strategy?" Our results highlighted four main factors that lead to the failure of gamified projects: a) self-efficacy, b) immersive dynamics, c) the personalization privacy paradox, and d) disengagement. Our study offers a conceptual framework suited to act as a guidebook for firms and consultants who wish to implement various gamified solutions at various stages. Further, we discuss the implications of our findings and propose future research perspectives.

1. Introduction

The rise of internet shopping as a crucial avenue for businesses has been accompanied by an increase in the number of studies in the field. While online buying has already been the subject of a substantial corpus of research, less emphasis has been placed on the generation and management of online customer experience, which has emerged as a critical success factor in modern commerce, compelling companies to go beyond pricing strategies and product innovation (Rose et al., 2011). Consequently, many firms are turning to gamification in order to enhance customer satisfaction, participation, retention, engagement, and performance management (Durugbo and Kalverkamp, 2012). Gamification involves the use of game elements in non-game contexts, turning everyday customer interactions into games for business purposes (Zichermann and Linder, 2010). Gamification may thus enable the development of an immersive consumer experience through innovative and customized shopping journeys (Durugbo and Kalverkamp, 2012). Numerous success cases and reports highlight the theoretically and practically synergetic relationship between gamification and marketing (Durugbo and Kalverkamp, 2012). Interestingly, although the use of gamification-as-intervention in any business process is backed by innovation (AlSaad and Durugbo, 2021), the overall life of the related innovation cycles has sharply declined in recent times (Eisingerich et al., 2019; Huotari and Hamari, 2017). It has been observed that the co-existence of multiple innovation cycles for technologies has made it difficult to assess the interdependence among them (Hyypiä and Parjanen, 2015; Durugbo and Kalverkamp, 2012). Although the successful implementation of gamification has been discussed, its failure in relation to innovation has received less attention (AlSaad and Durugbo, 2021; Behl et al., 2021; Behl et al., 2021).

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As a result, we aimed to understand the failure of gamification in relation to innovation through the problematization lens. Over the past few years, scholars have increasingly shown a keen interest in 'problematization' research (Simonton and Baumeister, 2005).This interest has manifested itself in research conducted in the positive psychology and well-being fields or in attempts to identify the root cause of an issue in interdisciplinary fields, such as organizational behavior, humanistic management, and social innovation (Simonton and Baumeister, 2005; Simonton and Baumeister, 2005). The application of problematization to our study was necessary due to two main aspects.

First, our research was focused on identifying the root cause of transformative service research (TSR). The aim of our study was to increase our understanding of the online customer experience by empirically investigating the use of gaming components within the online shopping process by making reference to theoretical assumptions. According to social cognitive theory, the health-related behaviors of individuals may be influenced by their personal experiences, other people's actions, and the environment.

As a second step, problematization involves uncovering the conventional understanding of a subject in order to gain a new perspective. Instead, the failure of the deployment of gamification in regard to innovation in the retail sectors of emerging economies has often been under-researched due to a lack of infrastructure (Wan et al., 2022; Bishop, 2014), changes in the technology markets in emerging economies (George and Prabhu, 2003; Onifade and Alola, 2022), and policy changes (Wan et al., 2022; Dana et al., 2022). Therefore, problematization was necessary to challenge the conventional understanding of natural resource volatility evaluation (Behl et al., 2023a,b) and proactive strategic adherence (Wan et al., 2022; Dana et al., 2022).

Thus, we were prompted to examine the online customer experience by conducting an empirical investigation of gamification applications employed in the online shopping process and gain a broader sense of consumer psychology. In addition, Brown and Dant (2008) recommended the use of non-web-specific terms in the study of online retail, potentially creating consumer dissonance.

The term 'gamification' refers to the addition of game-like elements to a service in order to encourage and facilitate the creation of value for customers (Huotari and Hamari, 2017). The gamification of in-store touchpoints can effectively create value for customers. Retail can enhance the customer shopping experience by improving the in-store component of the purchase process. The game-like experience determines the value generated for the user by gamification. If no such value is generated, gamification is useless (Huotari and Hamari, 2017). It is equally important to study the aspects hindering the growth of gamified marketing tools, which are linked to the factors contributing to the failure of implementing gamification as an innovation strategy. The increased use of gamification in retail has caused the emergence of several grey areas. Thus, we intended to answer the following question: "*What factors cause the implementation of gamification to fail as an innovation strategy in the retail sector*?"

Our study uniquely contributes in five ways: i) by exploring the failure of gamified projects in regard to innovation in the retail sector, ii) by establishing the effectiveness of the problematization and social cognitive factors lenses, iii) by analyzing empirical evidence using NVIVO, iv) by proposing a conceptual framework pertaining to innovative gamified behaviors based on four factors, v) by offering managerial implications to practitioners and a future research agenda.

The subsequent sections of this paper are as follows. Initially, a literature review and our study's theoretical underpinnings are presented to set the direction of the discussion. This is followed by the methodology, qualitative data analysis, and discussion of the findings. Finally, our study's managerial implications, conclusions, limitations, and future research perspectives are presented.

2. Literature review and theoretical underpinnings

The extant literature has extensively captured the positive side of gamification, but has rarely discussed its failure in regard to innovation. To address this research gap, we focused on the failure of gamification as an innovation strategy to recognize its (un)desirable impacts on users, identify the failure pointers of gamification applications in the retail sector, and highlight the related potential problems. Grounded in social-cognitive theory and privacy paradox, our study demonstrates the riskiness and double-edged characteristics of gamification as a business strategy.

2.1. Gamification as innovation

Unconventional and disruptive innovative business strategies, such as gamification, have brought creative thinking to the forefront. Gamification refers to game-like interventions applied to non-game environments in order to improve the overall user engagement and experience (AlSaad and Durugbo, 2021). The widespread application of gamification is being witnessed in education, training, and marketing activities (Eisingerich et al., 2019; Huotari and Hamari, 2017; Tanouri et al., 2019). Gamification employs game design elements to constantly influence individual behaviors and provide support for customer experience, promoting value proposition (Zhou et al., 2023). Research studies have focused on gamification as a form of innovation due to its phenomenal contribution to emerging business models (Hyypiä and Parjanen, 2015). While few studies have highlighted gamification as game changer of modern business, others have identified it as a mature business strategy suited to reposition an organization (AlSaad and Durugbo, 2021).

Gamification offers several benefits to individuals and organizations. Unsurprisingly, individuals are inherently attracted to games and naturally inclined toward game elements (Durugbo and Kalverkamp, 2012; Robson et al., 2015). The natural appeal of games enhances user creative engagement and experience (AlSaad and Durugbo, 2021). Further, such creative engagement may benefit organizations (Behl et al., 2021). Interestingly, the existing literature explicitly highlights the role played by gamification in improving organizational performance (AlSaad and Durugbo, 2021). However, besides successful implementations, gamification also exhibits innovation-related failings (Wood and Reiners, 2015; Andrade et al., 2016), as mentioned below.

First, prior studies have mainly captured the failure of gamification in regard to innovation through individual cognitive and behavioral dimensions (Mullins and Sabherwal, 2020; Hammedi et al., 2021). Individuals who spend long hours engaged in gamification are claimed to be negatively affected in regard to psychological resistance, emotional exhaustion, and addiction (Hammedi et al., 2021). Further, gamification is claimed to affect the cognitive-affective state of users, thus contradicting the 'gamification-as-innovation' concept (Srivastava et al., 2022; Mullins and Sabherwal, 2020). As a result, many users have been observed to quit online gamification platforms due to a decline in interest (Aguirre-Rodriguez, 2013; Nyström, 2021). And loss of internal drive (Hanus and Fox, 2015) to participate in games. Interestingly, poorly implemented gamification elements may quickly go viral and influence online communities (Behl et al., 2021; Yang and Li, 2021). Paradoxically, any breach in the trust of the online community may be detrimental to the overall performance of gamification. Likewise, one study found that the loss of autonomy stimulates psychological resistance among users (Zhou et al., 2023). Another important change in the behaviors of users has been found to arise from dissonance between the expected and received rewards (Deci and Ryan, 2008). In the gamification process, gamers experience a loss of control and high interference from others, which often creates compulsive feelings (Toda et al., 2019). Such experiences lead to negative emotional reactions and deep emotional exhaustion (Mullins and Sabherwal, 2020).

Second, once users start experiencing negative emotions during

gamified interaction, the core aspects of motivation—reward, achievement, and competition (Richter et al., 2015)—are violated. If not treated well, these three core concepts—which aid the gamification environment—may lead to the development of anti-game attitudes among users through reasoned behavior (Maltseva et al., 2019). Interestingly, Friedrich et al. (2020) identified competition as an external pressure induced and built through social comparison in gamified activities (see, for example, Leclercq et al., 2020; Baxter et al., 2016); as a result, an individual's natural desire to play is decreased.

Third, the innovation failure of gamification pertains to information disclosure. Research studies have raised several ethical concerns (Koivisto and Hamari, 2019). Paradoxically, users that are highly concentrated and involved in gamification may drop their guard and engage in risky behaviors (Trang and Weiger, 2019). Prior studies have claimed that gamification leads to invasions of privacy in regard to personal user information (Srivastava et al., 2022; Yang and Li, 2021). Despite government attempts at regulation, service providers sometimes breach user trust and disclose inappropriate information (Trang and Weiger, 2019).

2.2. Failure perspectives of gamified projects in the retail sector

Beyond the negative aspects mentioned above, it is essential to highlight the failure of gamification in regard to innovation. Kappen and Nacke (2013) found that the failure of gamification is due to bad user experience. Gradually increasing feelings of being controlled remove the fun experience and build a lack of trust among users (Kasurinen and Knutas, 2018). Status, rewards, rivalry, and accomplishment are all important game dynamics (Zichermann and Cunningham, 2011), and the provision of some form of payoff for the achievement of specific goals represents the most fundamental aspect of game mechanics (Zichermann and Cunningham, 2011). First, many online customer communities award points or badges to their users for the content they produce and share. *Second*, the effectiveness of gamification is directly linked to the obtainment of benefits; any change in this may directly reduce it (Hamari et al., 2014; Robson et al., 2015).

Third, in gamified situations, inappropriate game element choices may fail to generate user interest (Landers et al., 2017). A lack of immersive gamified situations will fail to involve users (Kam and Umar, 2018). *Fourth and last*, the improper application of gamification in a context may sometimes diminish the goal-achievement of individuals (Koivisto and Hamari, 2019). Thus, the success of gamification largely depends upon four factors—user experience, user benefits, the right game elements, and an appropriate context setting. The positive emotional and involving aspects of a gamified application are described as the gamefic experience (Eppmann et al., 2018, p. 100), which, according to Eppmann et al. (2018) and Högberg et al. (2019), is co-created by the user and the gamified services (Huotari and Hamari, 2017). In customer management and brand engagement, the psychological state created by interactions between brands (Högberg et al., 2019) and customers transcends purchases (Lemon and Verhoef, 2016). A bad gamified experience caused by a mismatched interaction between customer and brand may have severe repercussions.

2.3. The problematization lens

Viewed through the problematization lens, the inappropriate placing of the three main elements of gamification design—mechanics, dynamics, and aesthetics (Zichermann and Cunningham, 2011)—may lead to problems. First, the configurational settings of these three elements are prerequisites of the gamified experience; therefore, any mismatch among them may potentially disrupt the intended goal (Cózar-Gutiérrez and Sáez-López, 2016). Second, user involvement may intensify over time, creating stronger competition and challenging attitudes among users (Toda et al., 2018; Andrade et al., 2016). Third, an excessive addiction to gamification may impact individual psychological behaviors and social interactions (Moqbel and Kock, 2018). An unhealthy psychological state of loneliness and lack of social activities fuel addiction, consequently resulting in task distractions (Toda et al., 2018). Fourth, gamification addiction coupled with an inappropriate game design may lead to the complete failure of gamification applications (Yang and Li, 2021). Fifth, although they are the mechanics most commonly used in gamification, reward and recognition have a high probability of raising high user expectations (Tang and Zhang, 2019). When individuals achieve rewards that meet their expectations, they find themselves motivated; however, any deviation makes them emotionally exhausted. One of the problems most commonly identified in research studies pertains to data privacy. As the game element is fundamentally modified based on user information, developers may sometimes easily slip from the bright to the dark side of data usage (Tang and Zhang, 2019). Sixth, two broad categories of problems arise from the limiting and harmful issues of gamification. The limiting issues are related to the design of gamification, whereas the harmful ones are related to its delivery. Both are critical and equally important for the acceptance and success of gamification in an organization.

Gamification—as a form of innovation—can be viewed through the problematization lens. Problems are a grey area of strategy; they are invisible at the start and emerge over time. While, on the one hand, conformists highlight the positive aspects of gamification as a powerful tool (Kapp, 2012) towards critical thinking (Agogué et al., 2015), peer learning, teamwork (Parjanen and Hyypiä, 2019), and solving difficult problems (Agogué et al., 2015), others argue that gamification can be used to manipulate people into doing tasks, or that it can lead to a decrease in motivation as people get bored with the game-like structure. These non-conformists suggest that gamification can have negative outcomes at the individual (e.g., Hammedi et al., 2021; Andrade et al., 2016) and organizational levels (e.g., Neeli, 2015; Hammedi et al., 2021). Thus, the problematization lens widens the scope of understanding potential areas of concern of gamification as a form of innovation.

2.4. Social cognitive factors through the social cognitive theory lens

Social cognitive theory suggests that behaviors of individuals are influenced by their own experiences, the actions of other people, and environmental factors (Jayawardena et al., 2022). Albert Bandura developed social learning theory (SLT) in the 1960s which was then transformed to social cognitive theory. In social cognitive theory, the self-efficacy factor is a person's level of self-assurance to succeed. Many later theories also included self-efficacy, including the theory of planned behavior. Self-efficacy is influenced by contextual factors (barriers and facilitators) and personal characteristics (Agogué et al., 2015). High levels of self-efficacy enable consumers to factor in their assumptions when inspecting products or determining which products to purchase rather than looking for excuses such as a lack of enthusiasm for the work (Rachels, 2016; Insley and Nunan, 2014). Self-efficacy increases the ability of producers and customers to collect pertinent information, make informed decisions, and take appropriate action, especially under time constraints (Rachels, 2016; Insley and Nunan, 2014).

Due to its task-specific nature, there is no single standardized measure of self-efficacy. Instead, it is necessary to design measures that assess an individual's self-evaluated capacity to achieve a particular outcome on a specific task or engage in the processes likely to lead to a desired end (Rajani et al., 2021). For example, the use of gamification in mobile applications can positively affect self-efficacy and the motivation to stop smoking (Rajani et al., 2021). In the retail sector, clear feedback has been found to provide direction (Rachels, 2016; Insley and Nunan, 2014), with badges, levels, and other rewards being used to keep users informed of their progress in the game (Rachels, 2016; Insley and Nunan, 2014).

2.5. The dual factor model of personalization in the privacy paradox

Consumer trust in a company may vary depending on whether they feel that their privacy is being compromised by the company's increased access to and use of their personal information (Aguirre et al., 2016; Rachels, 2016). Businesses use information gleaned from various sources to send personalized marketing communications to each customer (Murthi and Sarkar, 2003). Such information is gathered at every touchpoint between a company and its clientele (Murthi and Sarkar, 2003). In this context, engagement occurs at any time a customer interacts with a business, including behavioral responses, such as viewing ads or making purchases (Aguirre et al., 2016; Rachels, 2016). Each customer's interaction type and reaction can be gleaned from these records. This personalization results in a privacy paradox between increasing and decreasing customer interaction with businesses (Aguirre et al., 2016; Rachels, 2016).

Customers who receive personalized communications that raise privacy concerns about the way an organization collects and uses their personal information will likely reduce their level of participation (Jayawardena et al., 2022; Zichermann and Cunningham, 2011). On the other hand, consumers who enjoy receiving individualized communications may feel an increased desire to interact with the company (Zichermann and Cunningham, 2011). With this study, we intended to identify the factors that most likely do not support gamification as an intervention in an online retail marketing process and discourage customer engagement (Aguirre et al., 2016; Rachels, 2016).

3. Methodology

As our research context is an emergent area of research and our study was aimed at identifying the factors contributing to the implementation of gamification as an innovation strategy in the retail sector, we selected a sample of 40 retailers from emerging and developed countries—i.e., Sri Lanka, Pakistan, Bangladesh, India, Nepal, Germany, Spain, and Canada (Behl et al., 2021). Moreover, our literature review revealed that, in the gamification of science education, those game elements that are intended to affect both intrinsic and extrinsic motivations—as well as the integration of modern retailing strategies, such as inquiry- or experience-based learning—have shown promising results in relation to increasing consumer achievements (Jayawardena et al., 2021; Pereira et al., 2022). Based on our literature review, we developed a detailed interview guide and used it to conduct semi-structured in-depth interviews for data collection. Engagement, retention, personalization, obstacles, and challenges were only a few of the gamification-related topics covered in the guide. We started by asking our participants about their experiences and opinions before moving on to questions about the gamification techniques they employed. Audio and video conversations were used to conduct the interviews remotely. On average, the interviews lasted 30 min (Jayawardena et al., 2022). Among our 40 participants, 75% were male and 25% female. We assessed our thematic findings separately for our male and female participants because gender-based differences were highlighted in previous studies—e.g., Kwon and Özpolat (2021) and Behl et al. (2021), which respectively discussed the failure of gamification in relation to innovation for university students and gig workers. Our primary data, which were drawn from the interview transcripts, were thus divided into female and male feedback (Jayawardena et al., 2022). Second, we developed themes based on the transcripts. Then, we coded and grouped the interview material into analyzed nodes (Jayawardena et al., 2022). A description of our thematic analysis follows.

4. Qualitative data analysis

This section presents our qualitative data analysis.

4.1. Social cognitive factors on self-efficacy in relation to innovative gamified behaviors

The themes and nodes were generated through the NVivo QSR software by separately uploading the self-efficacy-related transcripts in relation to innovative gamified behaviors. To identify the codes, we used a node cluster diagram, and performed a tree map analysis to confirm the themes with the sub-concepts. We further verified each theme by performing a word cloud analysis. Table 1 shows the NVivo query findings representing the social cognitive factors.

Figs. 1 and 2 respectively show the outputs of the NVivo QSR word cloud analysis and tree map analysis. The themes of experiences and intellectual capacity can be further justified based on the word cloud analysis and tree map analysis sub-concepts.

4.2. Immersive dynamics on innovative gamified behaviors

We generated the themes and nodes through the NVivo QSR software by separately uploading the transcripts related to immersive dynamics toward innovative gamified behaviors. We used a node cluster diagram to identify the codes, and performed a tree map analysis to confirm the themes with the sub-concepts. We further verified each theme by performing a word cloud analysis.

Table 2 shows the NVivo query findings representing the immersive, dynamic factors.

Figs. 3 and 4 respectively show the NVivo QSR word cloud analysis and tree map analysis. We were able to further justify the themes—including game mechanics, dynamics, and aesthetics—based on the word cloud analysis and tree map analysis sub-concepts.

4.3. The personalization-privacy paradox on innovative gamified behavior

We generated the themes and nodes through the NVivo QSR software by separately uploading the transcripts related to the privacy paradox toward innovative gamified behavior. We used the node cluster diagram to identify the codes, and performed a tree map analysis to confirm the themes with the sub-concepts. We further verified each theme by performing a word cloud analysis.

Table 3 shows the NVivo query findings representing the personalization factors.

Figs. 5 and 6 respectively show the NVivo QSR word cloud analysis and tree map analysis. We were able to further justify the themes—including gamified design elements, interaction mechanics, game rules, and personal image consciousness—based on the word cloud analysis and tree map analysis sub-concepts.

Table 1
NVivo query findings of social cognition on engagement.

Theme	Codes	NVivo QSR query results
Experiences	Interesting	"To make the experience more exciting, I believe we need first to become familiar with the game-based components included in retail apps and shopping centers." "It is interesting to see many movements and different game elements in mobile apps for levels, rewards, and points in each stage of the game."
	Behavior	"I find it difficult to deal with this new strategy as I am used to traditional retail shopping."
	Identify	"Maybe we can identify the products only using pictures other than the product description."
Intellectual capacity	Thinking	"I don't think being innovative in retail is useful as we are doing shopping to relax our minds sometimes after hectic work."
	Feeling	"Kids might enjoy this feeling of object movements with game elements."

Fig. 1. NVivo QSR word cloud analysis for social cognition on engagement.

4.4. Disengagement toward innovative gamified behaviors

We generated the themes and nodes through the NVivo QSR software by separately uploading the transcripts related to disengagement toward innovative gamified behaviors. We used the node cluster diagram to identify the codes, and we performed a tree map analysis to confirm the themes with the sub-concepts. We further verified each theme by performing a word cloud analysis.

Table 4 shows the NVivo query findings representing the disengagement factors.

Figs. 7 and 8 respectively show the NVivo QSR word cloud analysis and tree map analysis. We were able to further justify the themes of technology and standard design templates based on the word cloud analysis and tree map analysis sub-concepts.

As per the above qualitative findings, we identified four main themes: self-efficacy, immersive dynamics, the personalization-privacy paradox, and disengagement in gamification. The conceptual framework in Fig. 9 was developed based on the above analysis.

5. Conceptual framework and hypothesis development

This section presents the development of the hypotheses of this study.

5.1. Self-efficacy and innovative gamified behaviors in the retail sector

Gamification makes shopping enjoyable and engaging (García-Jurado et al., 2021; Shi et al., 2022), and retailers thus implement game mechanics and elements into their e-commerce sites to increase customer engagement (Shi et al., 2022). People's sense of self-efficacy is based on their self-belief and understanding of a given situation, both of which are closely related to characteristics and choices (Polo-Peña et al., 2021). People who have a strong sense of self-efficacy are more likely to take risks, challenge themselves, and persist in the face of adversity. One such example are the Amazon fulfillment centers, which improve the efficiency and accuracy of order fulfillment in Amazon's warehouses.

Additionally, such people are more likely to believe in their abilities and to achieve their goals. As a result, self-efficacy builds a strong foundation suited to pursuing or withdrawing attention from gamified projects (Polo-Peña et al., 2021). Regardless of any gamification-as-innovation strategy, users may withdraw or lose interest in gamified projects in the long run if they perceive a dissonance in their own self-belief. Self-efficacy perceptions also predict how engaged people will be with a task, how much effort they will expend, and how

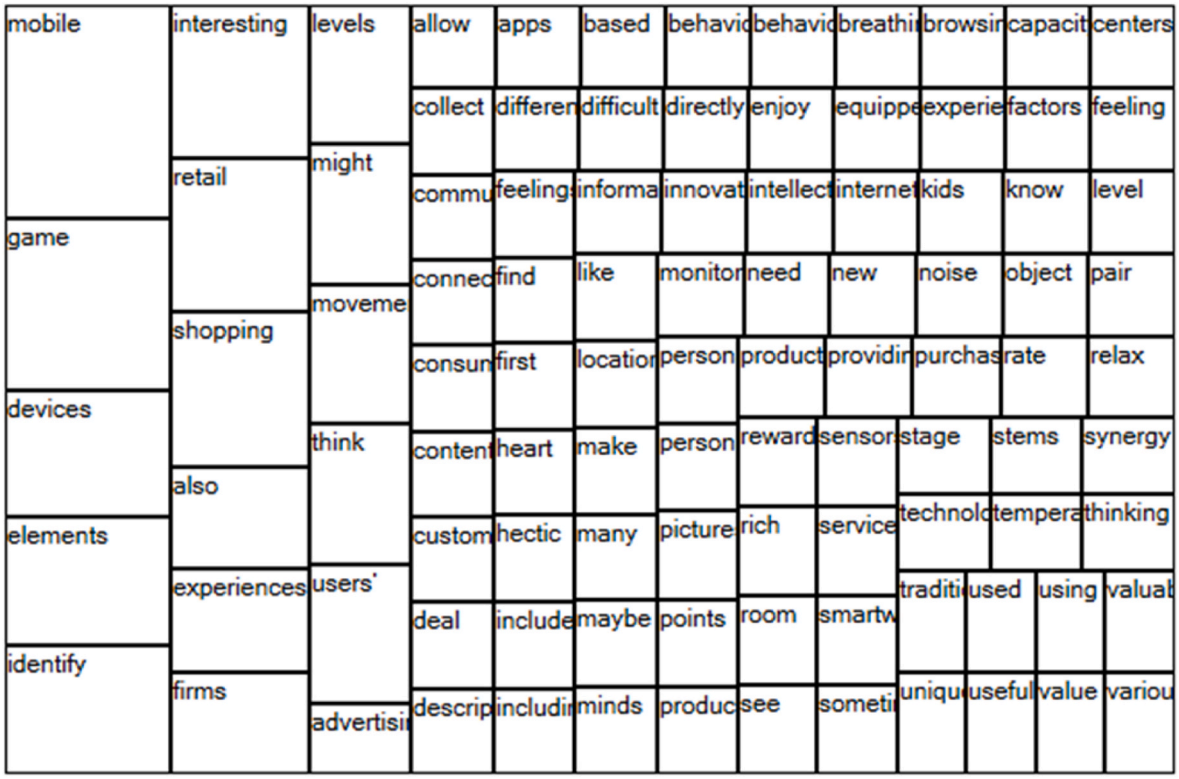

Fig. 2. Tree Map analysis.

Table 2
NVivo query findings of retention.

Theme	Codes	NVivo QSR query results
Game mechanics	Rules	"The service looks exciting, with new game rules." "Loyalty towards a brand can be enhanced with the new game rules, which look exciting and incredible"
	Badges	"It feels like the prices and product details in the apps guide us through these badges."
	Reward Systems	"The reward system is very appealing, with free delivery and free discount points." "Normally, the reward is the part customers are seeking."
	Leaderboards	"Most of them focus on retaining customers and increasing their lifetime value through these game methods."
Dynamics	Apps	"I think the staff needs to update their knowledge of these new methods … especially these new apps."
	Points	"For instance, Sainsburys offers consumers points for every purchase they make. These points can subsequently be redeemed for discounts or other merchandise, thus encouraging customers to return."
Aesthetics	Sociability	"Visuals are appealing. I think it would be better to add cartoon characters too." "This whole setup up would look a mess if there were no appealing images with bright colors."
	Emotions	"I felt that I was in the middle of watching a movie when deciding the prices."
	Pleasure	"It is relaxing indeed … why should we not relax and have fun when there is something like this … It is indeed a sort of entertainment."

Fig. 3. NVivo QSR word cloud analysis for retention.

long they will persist. In other words, self-efficacy affects how people perceive their own abilities and how they behave and make decisions.

Generally, people avoid those domains in which they feel less proficient (low self-efficacy) and initiate tasks in those in which they perceive themselves to be competent (high self-efficacy) (Polo-Peña et al., 2021). For example, a gamification platform motivates behavioral change by using a pervasive application that analyses context, sends personalized messages, and manages gamification peer competition and feedback. In retail, customer value is created through gamification; this affects hedonic value, which is positive when applied to an activity. Gamified motivators change consumer behaviors. As the hedonic value is better than the reward, it fosters continued engagement (Sheetal et al., 2022). In innovative gamified environments, employees have the opportunity to take control of their own career development. As a result, they become more confident in their abilities to acquire new skills and progress within the organization, which makes them a more motivated and skilled workforce. Gamification-as-innovation adds to the customers' in-store experience and potentially affects their self-efficacy. Adding points on every shopping activity increases a customer's self-efficacy and the chances of repeat behaviors. Thus, we hypothesized:

H1. Customer self-efficacy has a high propensity to influence customer innovative gamified behaviors in the retail sector.

5.2. Immersive dynamics in gamification and innovative gamified behavior in the retail sector

Gamification has been shown to increase customer acquisition through immersive dynamics such as levels, awards, and online visuals. A gamification strategy takes advantage of the human instinct for competition, which can encourage retail shoppers to remain engaged throughout the customer journey. Retailers use several methods to drive loyalty through gamification. A few examples are earning a special status through an app or a loyalty program that keeps customers coming back (Insley and Nunan, 2014; Singh, 2012). The gamification of progress can be as simple as the creation of charts or the sharing of stats with customers to show them how far they have come. There are many ways to measure anything, from purchases to friend referrals, to personal accomplishments (Risso and Paesano, 2021). The creation of digital or physical challenges can effectively encourage consumers to collaborate, become engaged long-term, and being pulled into the brand's ecosystem (Noorbehbahani et al., 2019). Immersive dynamics in gamification have been shown to significantly enhance the effectiveness of innovative gamified behavior strategies in the retail sector. Employees and customers alike benefit from these dynamics, which create a more engaging and interactive environment for both parties. One such example is represented by Pokémon GO and Sponsored Retail Locations. The Pokémon GO mobile game is a game that allows players to explore real-world locations to locate and catch virtual Pokémon in augmented reality (AR). Niantic, the company behind the game, partnered with various businesses, such as retail stores, to turn their locations into in-game points of interest that players can visit. In the game, players can collect in-game items from these PokéStops and Gyms, as well as battle other players at these locations.

As a result, a customer's in-store experience may vary due to the immersive dynamism in gamification and subsequently influence their own innovative gamified behaviors. Therefore, we developed our second hypothesis:

H2. The immersive dynamics in gamification have a high tendency to influence customer innovative gamified behaviors in the retail sector.

5.3. The personalization-privacy paradox in gamification and innovative gamified behaviors in the retail sector

When designing and implementing gamified systems, there is a tension between personalization and privacy concerns that can be referred to as the 'privacy paradox'. On the one hand, personalization is one of the most important elements of effective gamification, as it enabled the tailoring of the experience to individual preferences, thus increasing engagement and motivation among users. However, users are often concerned about how their data are collected, used, and shared, which can result in potential privacy concerns. The creation of gamified experiences that are both ethical and successful requires balancing these two aspects. The personalization-privacy paradox persists because, while consumers appreciate the value of personalization, they are concerned by the way marketers' exploit their personal information to provide such personalization (Scarpi et al., 2022). Consumers can refuse

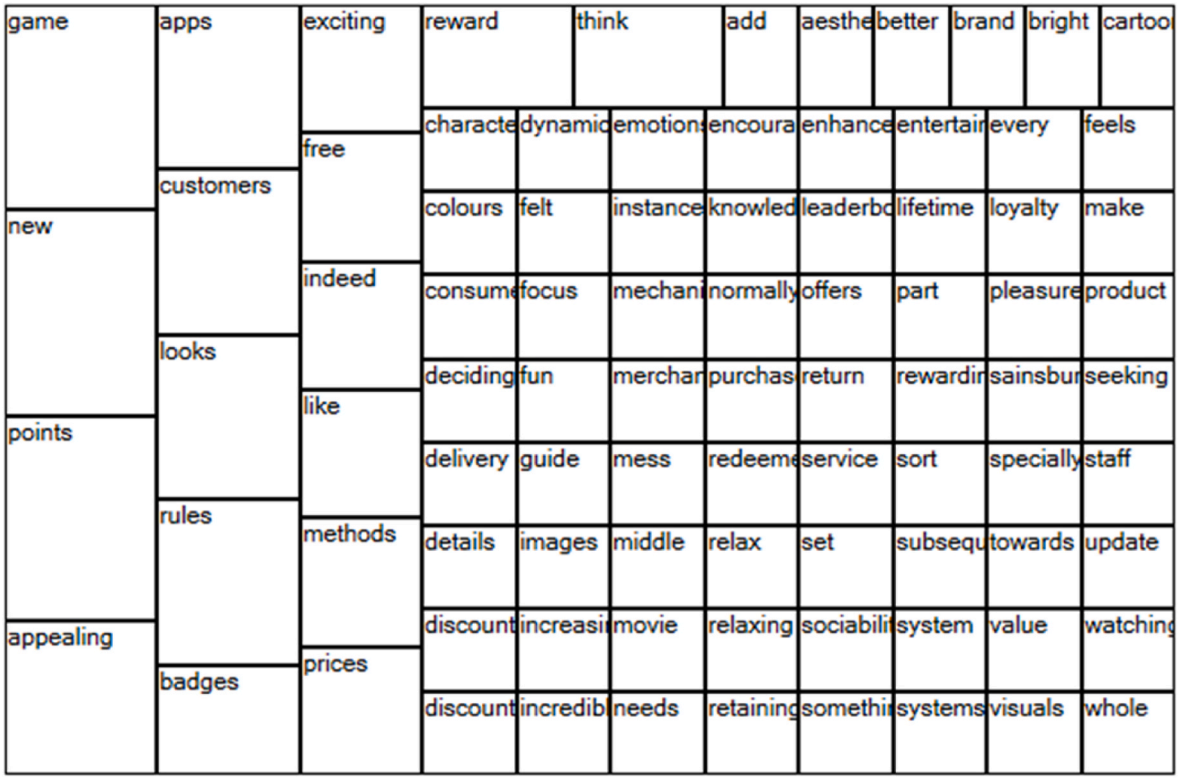

Fig. 4. Tree Map analysis.

to provide personal information, limiting the personalization efforts that can be undertaken. Gamified experiences are individualized settings that create personalization (Dincelli and Chengalur-Smith, 2020).

While personalization potentially enhances gamified behaviors, privacy paradoxically worsens the user experience (Ebbers et al., 2021). Consequently, the personalization-privacy paradox may affect innovative gamified behaviors (Ebbers et al., 2021). In their pursuit of consumer attention, senders face the limitation represented by people's limited ability to process information (Avoyan and Schotter, 2020), which consumes the recipients' attention and "creates a poverty of attention" (Avoyan and Schotter, 2020). With big data, such issues become even more pressing, leading economists and choice theorists to call for more research. The personalization-privacy paradox may have the propensity to drastically alter the customer experience in the retail sector. Any breach in customer experience caused by the personalization-privacy paradox in gamification may directly reduce innovative gamified behaviors. Hence, we developed our next hypothesis:

H3. The personalization-privacy paradox in gamification has a high propensity to influence innovative gamified behaviors in the retail sector.

5.4. Disengagement in gamification and innovative gamified behaviors in the retail sector

In the retail industry, gamification can represent a significant challenge due to the critical importance of maintaining employee and customer engagement for the success of the business. As a result, innovative gamified behavior strategies may be able to help address any disengagement issues with some success (Ginder and Byun, 2022; Michael and Fotiadis, 2022). Gamification elements can create immersive and interactive training programs. Businesses develop training games that simulate real customer interactions, product knowledge quizzes, or scenario-based challenges so that any prospective employees are able to practice what they learn. By completing training modules or demonstrating their knowledge, employees can earn points, badges, or rewards. Additionally, the disengagement from retail loyalty programs can be addressed. Instead of physical stamps, customers can receive virtual rewards through gamified mobile apps.

Employee and customer disengagement is detrimental to any business, especially retail ones, for which customer service and customer experience are crucial to success. This is primarily because disengaged employees tend to be unproductive. The personalized nature of gamification contributes to its appeal, as it allows customers to compare retail employees' achievements and abilities, fostering a sense of accomplishment. A game allows the incorporation of individual traits into a strategy. Employees can incorporate personalization into an engagement strategy by gamifying retail. For example, employees engaged in their work often deliver far better customer service.

As a consequence, retail companies can increase both their revenue and profitability while lowering the percentage of clients who leave without making a purchase. On the other hand, any employees not invested in their work will not care as much about customer satisfaction and may drive them away. Several researchers have found that disengagement leads to higher employee turnover rates (Michael and Fotiadis, 2022; Xu et al., 2022), a bad reputation for the company (Ginder and Byun, 2022), and poor customer service (Michael and Fotiadis, 2022; Insley and Nunan, 2014; Singh, 2012). In the retail sector, customer disengagement in gamification may lead to decreased innovative gamified behaviors. As a result, we hypothesized:

H4. Disengagement in gamification has a high likelihood of impacting customer innovative gamified behaviors in the retail sector.

The next section presents the findings of our study.

6. Discussion of the findings

This section presents a detailed discussion of our findings pertaining to customer self-efficacy, immersive dynamics, the personalization-

Table 3
NVivo query findings in regard to personalization.

Theme	Codes	NVivo QSR query results
Gamefic design elements	Graphics	"I would say that I love the graphics of this app. Also, it can attract the viewers, to a certain extent, as the red, pink, and blue colors seem a bit attractive."
	Color	"I would say that I love the graphics of this app. Also, it can attract the viewers, to a certain extent, as the red, pink, and blue colors seem a bit attractive."
Interaction mechanics	Virtual reality and game-based techniques	"I do not have much experience with gamified retail apps. I think it is interesting to go through a new experience such as some product details using virtual reality and game-based techniques."
Game rules	Strategies	"For instance, Sainsburys offers consumers points for every purchase they make. These points can subsequently be redeemed for discounts or other merchandise, thus encouraging customers to return." "The AR mirror when purchasing cosmetics is something of which female customers are aware." "Rewards are an effective approach utilized in retail gamification campaigns. While obtaining rewards for completed tasks, customers experience a dopamine release. These benefits may consist of badges, points, levels, special discounts, account credits, free presents, and free delivery."
Personal image consciousness	Routines	"So, It shows your image especially as a woman will engage more when buying groceries than a man. For example, the price of certain products might be lower depending on season. These things will get noticed more by a person who does grocery on a routine basis."
	Personal experience	"My personal experience with certain brand types is not good as, no matter how good the gamified elements are, I may not purchase some products considering the user experience." "It is not practical to see gamified components during physical shopping and at a time when users are super busy … You know that we all go home for a nap after a hectic day and so on."
	Experience	"I do not have much experience with gamified retail apps. I think it is interesting to go through a new experience such as some product details using virtual reality and game-based techniques."

privacy-privacy paradox, and disengagement in gamification.

6.1. Customer self-efficacy and innovative gamified behaviors

Customer self-efficacy—or the belief in one's ability to achieve a certain goal or achieve a particular task—can be captured and enhanced through innovative gamified behaviors across diverse industries, including retail (Wood and Reiners, 2015; Andrade et al., 2016). There is a substantial difference between business-model innovations and technological ones (Markides, 2006). An analysis of the influence of social cognition elements on self-efficacy for innovative gamified behavior has revealed that themes of experience and intellectual capacity have a

Fig. 5. NVivo QSR word cloud analysis for personalization.

significant impact on the formation of game-based behaviors (Huotari and Hamari, 2017; Wood and Reiners, 2015).

When considering the relevance of the self-efficacy model in influencing behaviors, it is important to note that there is no universally accepted self-efficacy measure because self-efficacy is highly specific to particular tasks. It thus becomes necessary to create assessments that evaluate a person's ability to either achieve a specific outcome in a given task or engage in the actions required to attain that outcome. This can be achieved through a variety of methods, as demonstrated by various studies (Huotari and Hamari, 2017; Wood and Reiners, 2015; Rajani et al., 2021). The incorporation of gamification elements in mobile applications has the potential to boost an individual's self-efficacy and motivation to, for example, quit smoking, as indicated by Wood and Reiners (2015). Clear and constructive feedback has been observed to play a guiding role for employees, particularly those in the retail sector, assisting them in determining whether they are making progress or facing challenges in their careers (Wood and Reiners, 2015; Mullins and Sabherwal, 2020). In the realm of gamification, mechanisms like badges and levels serve as means to provide users with feedback about their advancement within the game (Mullins and Sabherwal, 2020).

6.2. Immersive dynamics and innovative gamified behaviors

Combined with inventive gamified behaviors, immersive dynamics produce interactive, captivating, and motivating participant experiences (Deterding et al., 2011; Hamari et al., 2014). These dynamics transport individuals into a world in which they are active participants, thereby increasing their engagement and involvement. Gamification fosters innovation by actively involving individuals in the process (Andrade et al., 2016; Mullins and Sabherwal, 2020). Through gamification, employees with diverse backgrounds and varying levels of knowledge, and expertise in different fields are brought together to collaborate in enjoyable activities (Huotari and Hamari, 2017; Wood and Reiners, 2015; Andrade et al., 2016; Mullins and Sabherwal, 2020). For instance, numerous researchers have explored how social cognitive factors like understanding, encoding, attitude persuasion, and the activation of short-term memory are influenced by gamified elements in the retail sector of emerging economies.

In the retail industry, augmented reality (AR) and virtual reality (VR) technologies can be used to create immersive purchasing experiences (Jayawardena et al., 2023; Jayawardena and Behl, 2023). With these

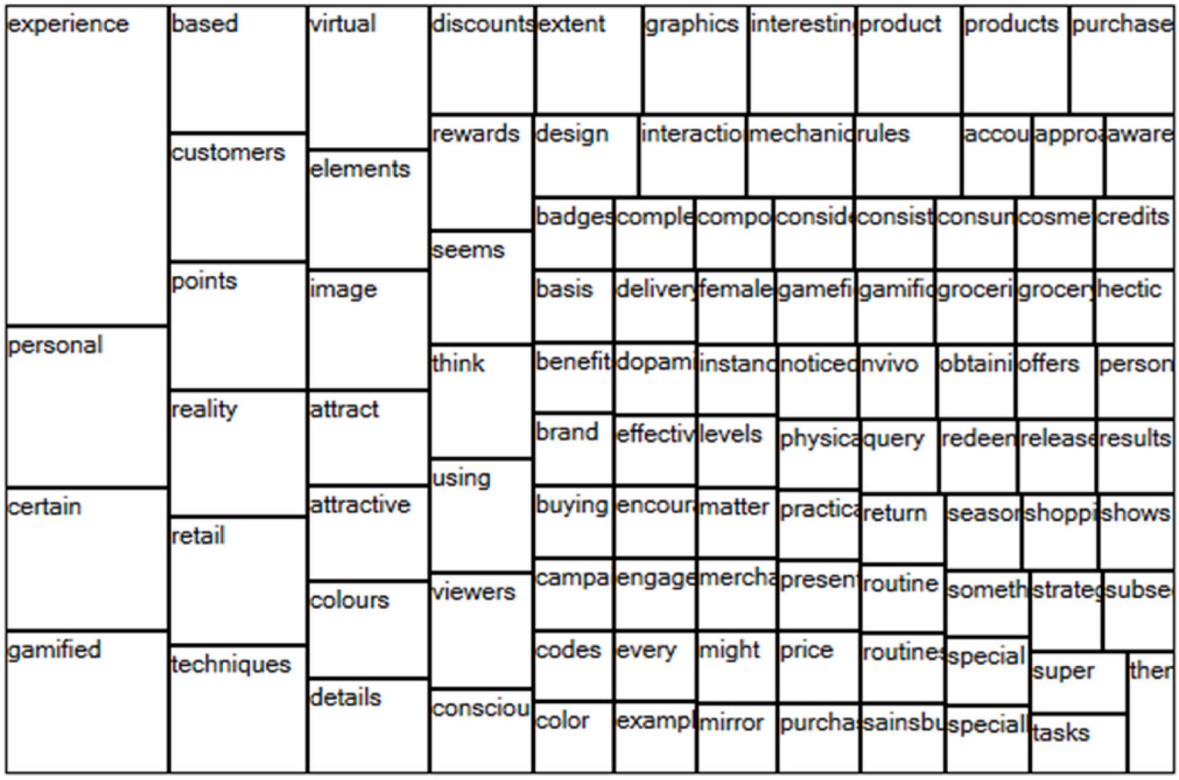

Fig. 6. Tree Map analysis.

Table 4
NVivo query findings on disengagement factors.

Theme	Codes	NVivo QSR query results
Technology	Brand techniques	"For major corporations like McDonald's, Lazada, and Starbucks, gamification methods and gamified aspects have proven to be wildly effective. To successfully implement gamification, however, brands must be equipped."
	Mobile apps	"At its core, gamification is a process that uses game design ideas to get people interested, build loyalty, or change their behaviors. Gamification can have social features other than the mobile apps such as point systems, and leaderboards."
		"I do not have much experience with gamified retail apps."
Standard design template	Design	"It is hard to have a standard design template when deciding the game-based features. For example, prices vary based on the seasons, and the exact templates for free shipping, delivery, or discounts are very hard to manage or implement."

Fig. 7. NVivo QSR word cloud analysis for obstacles.

technologies, customers can virtually try on clothing, visualize products in their own environments, and shop from the comfort of their own homes. Gamification can be incorporated into these immersive experiences to incentivize customers to interact with products, complete challenges, and explore a brand's or a store's offerings (Huotari and Hamari, 2017; Wood and Reiners, 2015). This immersive shopping experience can be highly engaging and interactive, and can also help to create a more personal connection between the company and its customers. Also, it can be used to generate valuable customer data that can be used to help better understand customer preferences and behaviors (Andrade et al., 2016; Deterding et al., 2011).

Rubio et al. (2023) and Tabaeeian et al. (2023) incorporated the social psychology elaboration likelihood model theory to assess the attitude persuasion toward gamified elements in the retail sector. Rubio et al. (2023) found that thoughts, attitudes, and behavior intentions are positively correlated, and that attitudes can partly mediate the relationship between thoughts and behavior intentions toward the use of serious games. Further, Tabaeeian et al. (2023) showed that the dimensions of the gamified e-service quality scale in the e-retail industry include ease of use, reliability, emotional appeal, interactivity, security, and visual appeal. Due to time constraints, grocery shopping is the most stressful, and gaming elements can reduce such stress (Högberg et al.,

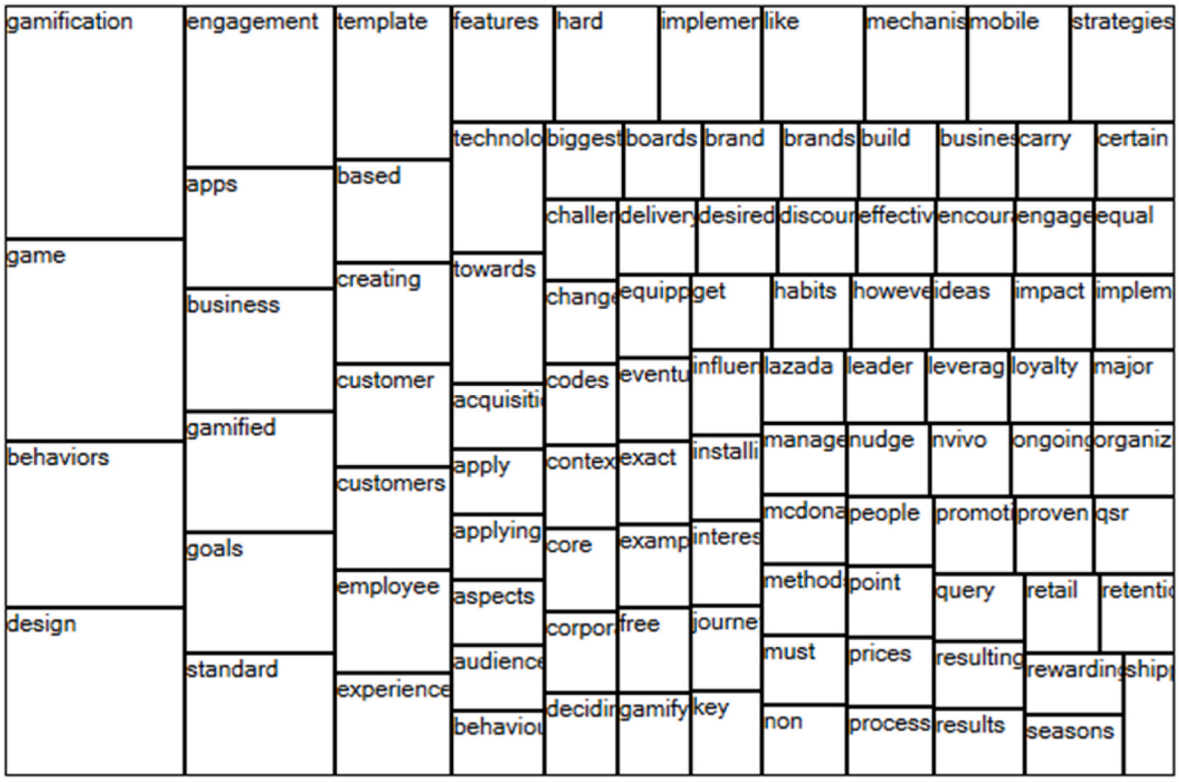

Fig. 8. Tree Map analysis.

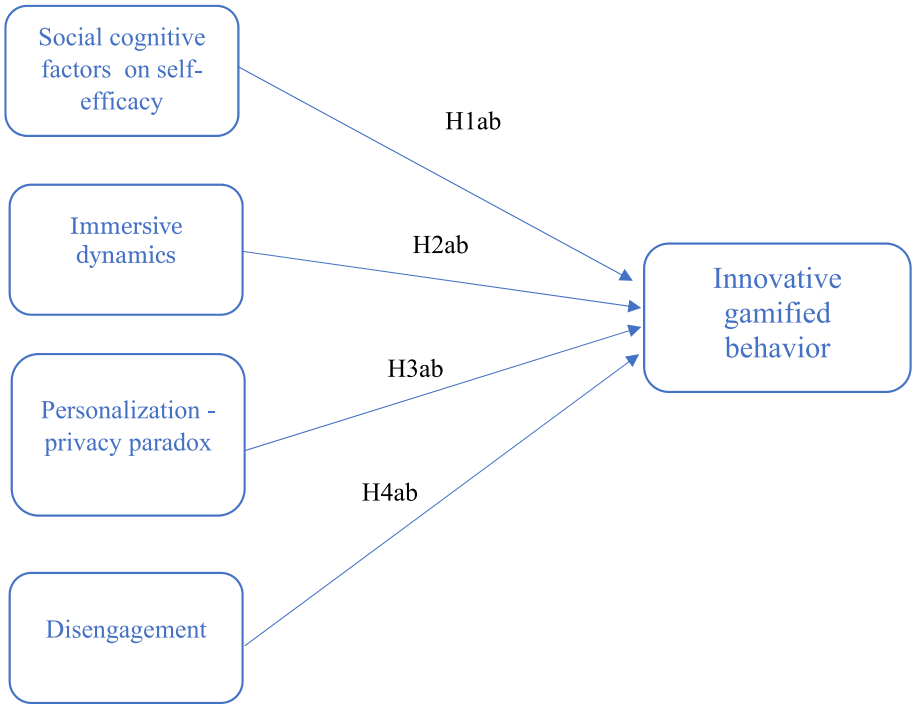

Fig. 9. Conceptual model developed by the authors.
Source: Developed by authors

2019). For example, technology and standard design template themes have been identified as obstacles to engagement in gamified behaviors (Hammedi et al., 2021). When organizations fully understand why they need to add this technology to their processes, they can promote it and discuss its benefits, especially how it could affect their bottom line. Moreover, to define motivation, the literature on gamification frequently refers to flow theory (Hamari and Koivisto, 2014).

Moreover, the themes of game mechanics, dynamics, and aesthetics have been highlighted while analyzing the impact of immersive dynamics on inventive gamified behaviors (Hammedi et al., 2021;

Srivastava et al., 2022). The second option available to traditional retailers is to stop doing business the way they always have and adopt new ideas to capture growing markets—if they have the assets and skills to do so (Landers et al., 2022; Hyypiä and Parjanen, 2015). Charles Schwab, for example, did not start out as an online brokerage firm, but was still successful because it grew to serve many people.

6.3. The personalization-privacy paradox and innovative gamified behaviors

In innovative gamified behaviors, the personalization-privacy paradox is related to gamic design elements, interaction mechanics, game rules, and personal image consciousness (Huotari and Hamari, 2017; Wood and Reiners, 2015). Gamification can create in players a sense of identity that may conflict with the sense of privacy that they are trying to maintain as part of their personal lives. For example, some games require players to post personal information in order to be able to interact with other players, which may not align with their privacy preferences. As the name suggests, gamification is the process of trying to change different kinds of systems so that they can elicit good feelings, such as a flow state, more effectively. Players may be motivated to complete tasks by using reward systems, or they may be made to feel competitive by means of leaderboard systems (Behl et al., 2021).

Most people believe that whether or not gamification can trigger a flow state depends on several moderating factors, such as the user's characteristics (Andrade et al., 2016; Mullins and Sabherwal, 2020; Hammedi et al., 2021). Any negative effect of gamified retail apps on innovation depends on customer level of engagement (Huotari and Hamari, 2017; Wood and Reiners, 2015). For example, task-oriented customers might consider a crowded store as an impediment to achieving their goals. Furthermore, the extra time a gamified assignment could take or threaten to take may have detrimental effects on the participants (Högberg et al., 2019; Hammedi et al., 2021). In this case, customers may become frustrated or overwhelmed if they are required to complete too many tasks or if they are required to complete them too quickly. Customers may also become discouraged from using an application if they are unable to complete any tasks (Behl et al., 2021; Hamari and Koivisto, 2014).

6.4. Disengagement in gamification

In gamification, the term 'disengagement' refers to the phenomenon whereby individuals or users lose interest, motivation, or engagement with a gamified experience or system (Landers et al., 2022; Hyypiä and Parjanen, 2015). An example of disengagement in relation to gamification occurs when a user or individual loses interest, motivation, or engagement with an experience or system that is gamified. As a result, gamification has all the potential to be a significant challenge for those organizations that rely on it to achieve specific goals; e.g., improving employee performance, increasing customer engagement, or incentivizing specific behaviors (Huotari and Hamari, 2017; Wood and Reiners, 2015). Several studies have investigated how different motivational factors influence user engagement in gamified systems as a result of different motivational factors. In studying consumer engagement, researchers have investigated the role played by intrinsic motivation (e.g., enjoyment or curiosity) and extrinsic motivation (e.g., rewards or competition) in sustaining or disengaging users (Dincelli and Chengalur-Smith, 2020). Intrinsic motivation has been found to be more effective at encouraging long-term engagement, whereas extrinsic motivation has been found to be more effective at encouraging short-term engagement. Additionally, to increase engagement, combining both intrinsic and extrinsic motivation has been found to be the most effective way of achieving this (Behl et al., 2023a,b).

All four factors—self-efficacy, immersive dynamics, the personalization-privacy paradox, and disengagement—contribute to innovative gamified behaviors among customers in the retail sector. While the magnitude of change in innovative gamified behaviors in the retail sector depends upon the customer experience with each factor, the impact is existential. Gamification-as-innovation has a transcendental impact on the overall customer retail experience. Our findings highlight how all four factors in gamification make a significant contribution to customer innovative behaviors. Thus, as a counterfactual findings, the absence of these factors in the retail sector may lead to failed gamified projects.

7. Managerial implications

The two main managerial implications of our findings are as follows. This study was an initial step toward comprehensive industry-level research of player typology in gamification for the retail sector in emerging economies (Insley and Nunan, 2014). Further, it is worth noting that gamified systems involve not only gamification features but also several others such as screen type and color or texture (Jayawardena et al., 2022; Hammedi et al., 2021; Srivastava et al., 2022). Thus, it is unclear whether the gamification aspects (the subject of the studies) or other interface components have a greater impact. Gamification design as a whole, as well as ancillary factors, should be considered in future studies aiming to assess gamification customization—e.g., colors, visual aspects, position (in the users' interface), when and how the elements will appear when connected to the pedagogical activities of the system and other components (Jayawardena et al., 2022; Behl et al., 2021).

As the title suggests, 'engagement' is the desired outcome of a gamification strategy. The aim is to get the player to forget everything else and focus solely on the game. The game's enjoyment is the key incentive (Huotari and Hamari, 2017; Wood and Reiners, 2015; Andrade et al., 2016). All players need to know when they have completed a task or are very close to doing so. The lack of feedback in a game removes the incentive to keep playing. Retailers who wish to effectively include gamification into their marketing plans need to gather and analyze user feedback to determine whether their current approach is working (Toda et al., 2019). Disruptive innovations "emerge in diverse ways, have distinct competitive implications, and need varied reactions from incumbents" (Markides, 2006, p. 19); therefore, companies must employ a variety of strategies to deal with them (Christensen, 2015). The conclusion is that retail businesses can respond to business model changes in various ways, other than by altogether abandoning the old model in favor of the new one.

8. Theoretical implications

This study has several important theoretical implications. The conceptual framework of this study focuses on building a foundation for innovative gamified behaviors based on social-cognitive dimensions. For example, the findings highlight four main factors that lead to failed gamified projects—namely, a) self-efficacy, b) immersive dynamics, c) the personalization privacy paradox, and d) disengagement. Prior studies highlighting gamification failure rarely focus on the problematization lens. Thus, the theoretical framework built on self-efficacy and personalization privacy paradox illustrates different lenses, thus substantially changing academic research. One such factor is the reliability of gamified e-service quality for the investigation of in-game service quality, which may be used in gamified retail environments. This conceptual framework assures that the gamification elements in the retail sector include coordination with the rational and emotional aspects of client incentives.

Additionally, the framework helps analyze consumers' impressions of a retailer's gamified e-services to improve the motivational offerings that attract and keep customers. Second, this research used empirical evidence gathered through interviews with respondents who had employed gamification in the retail industry in developing economies. The findings could assist researchers in conducting more in-depth

investigations of the negative aspects of gamification. The extension of study to why gamification as an innovation method can be unsuccessful contributes to a more comprehensive understanding of the useability of gamified elements such as levels, badges, and online awards.

9. Conclusions, limitations, and future research perspectives

The information we gathered with our research enabled us to classify retail managers as several different sorts of gamers. Recent research indicates that players need to exert a more granular control over gamified systems that go beyond just the primary game type. Future research could categorize participants according to their level of gaming involvement (Jayawardena et al., 2022; Behl et al., 2021). The benefits of gamification are diminished when monetary incentives are added to games because players will be motivated less by the intrinsic pleasure of playing the game and more by the extrinsic motivation of winning a prize or getting a discount (Mullins and Sabherwal, 2020; Hammedi et al., 2021). Playing shopping-related games that do not offer monetary participation incentives can, on the other hand, have a beneficial influence on three relational outcomes—namely, customer satisfaction, customer loyalty, and favorable word-of-mouth intents (Huotari and Hamari, 2017; Wood and Reiners, 2015; Andrade et al., 2016). This is because, if customers are allowed to play games while they purchase, their overall contentment is improved, which should be investigated further. Thus, context may be responsible for the poor consequences of gamification observed in this study toward innovation in a retailing context. Thus, a follow-up study with hedonistically oriented customers might be beneficial.

Our study was limited to exploring the innovation-related failure of gamification in the retail sectors of emerging economies with specific socio-economic settings. We would recommend that future researchers use empirical or quantitative methods to test the above conceptual framework. Additionally, future research could be extended to other economies with diverse socio-political settings. In addition, we collected data suited to understand why gamification fails as a strategy within a limited time. Such an issue may require a longitudinal study to capture firm dynamism and its potential impact on strategies. We studied gamification in the retail sector, while future research could include other industries and geographical locations in which gamified projects are highly used. Despite its limitations, our study yielded a conceptual framework that may be validated empirically. The framework may be tested with other moderating and mediating factors influencing the relationship among variables, such as platform-based features and motivational factors (Behl et al., 2021; Jayawardena et al., 2021). Further, any extension in the length and breadth of gamification from the perspective of contributing factors may reflect a paradigm shift from conventional issues to contemporary sustainable business strategies.

Data availability

Data will be made available on request.

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