

Gamification in Marketing to Increase Customer Retention

By

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Submitted to the MIT Sloan School of Management in Partial Fulfillment of the Requirements of
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ABSTRACT

Gamification has emerged as a powerful marketing tool over the past decade, with its ability to boost user engagement, retention, and brand loyalty. This thesis examines the application of gamification in marketing through the lens of game development frameworks and the 4Ps of marketing. By analyzing case studies of Nike SNKRS and Duolingo, this thesis sheds light on best practices, such as the incorporation of gaming mechanics into non-gaming scenarios, adapting to gaming trends, and aligning gamification strategies with company goals. Although both cases demonstrate the potential benefits of gamification, they also reveal challenges, such as consumer desensitization, ethical concerns, and the risk of detracting from a brand's core message. The future of gamification in marketing is promising, with the integration of cutting-edge technologies such as AR, VR, and AI, alongside the increased adoption of gamified strategies on social media platforms and mobile devices. However, marketers must remain mindful of potential challenges and strive to balance innovative gamified experiences with responsible marketing practices, ensuring user privacy, ethical design, and preventing customer fatigue. By striking this balance, the future of gamification in marketing is set to revolutionize the way businesses engage with their audiences and build lasting relationships.

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Introduction

In the increasingly competitive business landscape today, organizations must find innovative ways to engage customers and create lasting impressions. Gamification, the application of game design elements and principles in non-game contexts, has emerged as a powerful tool for businesses to create these meaningful connections. In the realm of marketing, gamification has grown exponentially, transforming the way companies interact with their customers and target audiences. This thesis aims to explore the concept of gamification in marketing, shedding light on its origins, the mechanisms behind its effectiveness, and the ways in which businesses can leverage this approach to foster customer loyalty and drive success.

The term "gamification" was first coined by computer programmer Nick Pelling in 2002, and the concept was initially primarily used in the field of software development and user experience design to increase user engagement and satisfaction. However, as the potential for gamification to drive motivation and engagement became increasingly evident in non-game scenarios¹, its applications expanded into various industries and additional functions, such as marketing. One of the fundamental reasons behind the success of gamification in marketing is its ability to tap into basic human instincts and desires, and drive motivation, competition, and a sense of achievement among customers². This fosters deeper emotional connections, encourages repeated interaction with the brand, and ultimately leads to increased brand loyalty and advocacy.

In recent years, several high-profile companies have successfully employed gamification in their marketing efforts, demonstrating its potential to drive significant business outcomes –

¹ Basten, Dirk. 'Gamification'. IEEE Software, vol. 34, no. 5, Institute of Electrical and Electronics Engineers (IEEE), 2017, pp. 76–81, <https://doi.org/10.1109/ms.2017.3571581>.

² Gil-Aciron, Luis Angel. 'The Gamer Psychology: A Psychological Perspective on Game Design and Gamification'. Interactive Learning Environments, Informa UK Limited, June 2022, pp. 1–25, <https://doi.org/10.1080/10494820.2022.2082489>.

including Nike and Duolingo. These examples highlight the growing significance of gamification as a marketing tool and underscore the need for businesses to adapt to this new paradigm. Therefore, it is crucial for businesses to understand the key principles and best practices that underlie successful gamified campaigns and products.

Gamification Concepts and Elements

Gamification is the process of incorporating game design elements and principles into non-game contexts. On a broad scale, any function or detail within a game can be characterized as some kind of gaming mechanic and can be implemented to scenarios outside of the game, either physical or virtual. For example, an ancient game of chess stimulates a player's motivation through competition, and in modern digital games, this same motivation is reflected in the form of a leaderboard.

There have been many studies conducted and many frameworks reviewed on the topic of gamification, and while there is no unified methodology on gamification, all current approaches and frameworks center around eliciting elements from games and shifting applications into real-life scenarios. Therefore, in order to better understand the concept of gamification, it is crucial to approach it from a systematic standpoint of what makes up a good game, and understanding what makes a game "fun."

The MDA framework

The MDA framework³ is a formal approach to conceptualizing game developments, and is closely relevant in understanding how gaming practices migrated to non-gaming contexts. The methodology breaks down a game's components into three interconnected layers of Mechanics (rules and systems), Dynamics (player interactions and emergent gameplay), and

³ Hunicke, Robin, et al. MDA: A Formal Approach to Game Design and Game Research. <https://users.cs.northwestern.edu/~hunicke/pubs/MDA.pdf>. Accessed 15 Mar. 2023.

Aesthetics (emotional and experiential aspects) to facilitate a comprehensive understanding of the game's design and player experience. These 3 components are separate, but are also casually linked throughout the gaming development and consumption. This thesis will analyze gamification practices with this framework to provide a more systematic understanding into gamification successes.

Game Mechanics

The mechanics refer to the fundamental building blocks of a game that make up its structure, rules, and systems. They serve as the framework within which players interact, make decisions, and experience the consequences of their actions. Game mechanics determine how players progress through a game, interact with the environments, and achieve goals or objectives. Well-designed game mechanics can create a compelling and engaging gameplay environment that motivates players to invest more time and effort in the game.

There are hundreds of game mechanics depending on the nature of the game, but some more common game mechanics in gamification include points, levels, challenges, leaderboards, and achievements. Points are a scoring system that tracks and quantifies a player's progress, achievements, or performance in the game, offering instant feedback and gratification. Levels represent a player's progress through the game, unlocking new challenges, rewards, or abilities as they advance. Challenges involve specific tasks or objectives that players must complete to earn points, rewards, or progress to the next level. Leaderboards rank players based on their performance or achievements, fostering a sense of competition and social comparison. Achievements are visual representations of a player's accomplishments within the game, often in the form of trophies or badges, providing a sense of achievement and recognition. A good game mechanic can improve a game by creating strong psychological effects⁴ that in turn can create stronger senses of immersion that deepens the emotional connection between the

⁴ Legner, Lukas, et al. 'Persuasive Mobile Game Mechanics for User Retention'. Extended Abstracts of the Annual Symposium on Computer-Human Interaction in Play Companion Extended Abstracts, ACM, 2019, <https://doi.org/10.1145/3341215.3356261>.

player and the game, and provide a balance between challenge and reward, ensuring that players feel a sense of accomplishment and satisfaction as they progress. For example, Candy Crush Saga, a popular mobile game that went viral in 2012, employs a combination of points, levels, and challenges to create a highly addictive and engaging gameplay experience, demonstrating the power to maintain high user retention with adequate designs in mechanics in a product. At its peak, it had 327 million annual users in 2015, and the game still had 255 million annual users in 2021, despite having launched for 9 years⁵. Similarly, such mechanics like challenges can be applied to non-game scenarios where an employee may be more motivated to meet his/her KPIs if the KPIs were presented as challenges with rewards that evoked accomplishments.

Game Dynamics

The dynamics are the middle layers of a game that connect a player's emotions with the mechanics. They are essentially systems supporting the real-time interactions within the gaming experience, which emerge from the interplay between the game's mechanics and the player's actions and choices. These dynamics shape the player's experience and drive their motivation, enjoyment, and engagement with the game, and contribute to the overall appeal of a game and keep players coming back for more.

Common game dynamics in gamification include interactions within competition, cooperation, feedback, exploration, and narrative. For example, competition drives players to outperform others, either by achieving higher scores, faster completion times, or greater accomplishments. In this case, the dynamics would be the constant interaction – likely rivaled or combative in nature – a player has with another player. Another example on the opposite end would be cooperation, where the environment encourages players to work together to

⁵ Curry, David. 'Candy Crush Revenue and Usage Statistics (2023)'. Business of Apps, 9 Mar. 2021, <https://www.businessofapps.com/data/candy-crush-statistics/>.

achieve shared goals, fostering teamwork and collaboration. In that case, the dynamics would be the actions players take together to achieve the same goal.

Having good game dynamics improve a game by creating a sense of immersion and emotional investment, compelling players to care about the game's outcome and become more deeply involved in the experience. They also foster a sense of control, empowering players to make meaningful choices and influence the game world through their actions. Additionally, effective game dynamics provide variety and novelty, preventing boredom and maintaining player interest over time. For example, the popular game Among Us employs a combination of competition, cooperation, and social interaction dynamics to create a tense and engaging gameplay experience. Players work together to complete tasks aboard a spaceship, while secretly trying to identify and eliminate the impostors among them. This dynamic fosters cooperation, deception, and strategic decision-making, keeping players engaged and invested in the game. In business practices, companies often take advantage of such dynamics, for example in form of hackathons to stimulate and draw out an emotion of competitiveness among participants who are then more invested in the competition, producing more innovative results.

Game Aesthetics

Counterintuitively, the aesthetics does not refer to the appeal of a game. Rather, the aesthetics are what makes a game “fun” (or boring in cases of failure) for the players on the uppermost surface level. It is the final emotional outcomes of a player who engages in the game dynamics upon a set of game mechanics.

Because Aesthetics are what lies on the the surface, it is the initial aspect a player encounters, creating an immediate impression. While Mechanics and Dynamics may be somewhat known to the player, it is the Aesthetics that truly impact their experience. Consequently, even without expertise in game design, a person can engage in a game and express their enjoyment or dissatisfaction. They may not be able to pinpoint specific reasons for

their feelings, but they can certainly convey the emotions elicited by the game. For this reason, the Aesthetics are a key indicator of a successful game design, and is often the key feedback in improving the game Mechanics and Dynamics.

Using the a previous example from Dynamics, the purpose of a competition is often times used to induce productivity by adding tension. However, there are people who loathe the nerve wracking experience, and if done innappropriately to the wrong targets, the final Aesthetics may be extremely negative, and reduce productivity and loyalty.

Implications

The MDA framework presents a systematic perspective on game design and evaluating game success. As gamification is rooted in the principles of successful games, the MDA framework serves as a valuable tool for scrutinizing gamification practices in non-gaming contexts, particularly within the business environment.

Case studies and scenarios in the following sections will be examined through the lens of the MDA framework, emphasizing marketing and user retention aspects. By analyzing these cases using the MDA approach, we can identify key factors and patterns that contribute to successful gamification implementations. Specifically, the Mechanics element refers to the underlying rules and structure of a gamified system, the Dynamics aspect encompasses the behavioral patterns and interactions arising from these mechanics, and the Aesthetics component relates to the emotional responses and experiences that users derive from the system.

Applying the MDA framework enables us to systematically dissect each case and scenario, determining the effectiveness of gamification strategies in marketing campaigns and user retention initiatives. This method of analysis provides valuable insights into best practices and potential pitfalls, ultimately helping businesses to optimize their gamification efforts and maximize positive outcomes.

Gamification in Marketing

4P Framework

While gamification practices can be applied to all areas of business, approaching it strictly from a marketing framework allows us to gain insights on tailoring gamification to specific scenarios vertically. Incorporating gamification into the 4Ps of marketing (Product, Price, Place, and Promotion) can significantly enhance customer engagement and retention. This can be achieved by integrating scoring systems within products, offering time-sensitive sales for pricing, utilizing location-based services to encourage store visits, and creating mini-games for promotional purposes. Successful gamification strategies often combine multiple aspects of the 4Ps, resulting in a comprehensive and immersive user experience. By transforming routine tasks into entertaining and game-like interactions, businesses can tap into the innate motivations of consumers, increasing their likelihood of engaging with the brand and sharing positive experiences with others⁶. In addition to enhancing customer engagement, gamification also fosters brand loyalty and promotes user retention by creating memorable experiences and fostering a sense of achievement and competition among users. Through the implementation of well-designed gamified marketing campaigns, businesses can not only attract new customers but also retain existing ones, ultimately leading to increased revenue and long-term success. As the marketing landscape undergoes continuous transformation, incorporating gamification into marketing strategies is poised to become a vital component for enhancing customer engagement and fostering brand loyalty. We will explore through examples how gamification can be applied under the 4P marketing framework, and with a focus on user retention as a key metric, we will analyze the impact of gamification in marketing

⁶ Hsu, Chia-Lin, and Mu-Chen Chen. 'How Gamification Marketing Activities Motivate Desirable Consumer Behaviors: Focusing on the Role of Brand Love'. *Computers in Human Behavior*, vol. 88, Elsevier BV, Nov. 2018, pp. 121–133, <https://doi.org/10.1016/j.chb.2018.06.037>.

through some case studies to better understand its effectiveness in retaining customers and maintaining their interest.

Product Gamification

Incorporating gamification into products has become an increasingly popular strategy for marketers aiming to enhance user engagement and retention. While applying game mechanics to products that are games by nature is quite intuitive, the digitalization of various industries has made it possible to introduce these elements into a wider range of both tangible and digital products. By seamlessly integrating game mechanics into the user experience, marketers can create more enjoyable interactions that keep customers coming back for more. Game mechanics such as achievements and leaderboards are perhaps the most common ones that marketers implement into both tangible and digital products to increase user engagement and retention. For example, the company HidrateSpark offers a smart water bottle product that can sync to the user's app and track the user's water consumption throughout the day, offering feedback on whether the user has met his/her hydration goals. The app includes leaderboards, achievements, and social sharing to encourage friendly competition among friends and family.

By integrating gamification, specifically the goal and achievement mechanics, into their product design, HidrateSpark effectively increases user engagement. Unlike traditional water bottles, where the user simply drinks when they're thirsty, HidrateSpark transforms this dull action into an interactive experience that contributes towards meeting a hydration goal. This change in dynamic transforms the user's relationship with the water bottle, as HidrateSpark provides feedback on how each interaction contributes to the overall hydration objective. If users would forget to drink, HidrateSpark would remind the user by both lighting up and sending reminders digitally, and has been proven to increase water intake through trial studies⁷. Moreover, this gamification approach instills a sense of accomplishment on an

⁷ Stout, Thomas E., et al. 'A Randomized Trial Evaluating the Use of a Smart Water Bottle to Increase Fluid Intake in Stone Formers'. *Journal of Renal Nutrition: The Official Journal of the Council on Renal Nutrition of the National Kidney Foundation*, vol. 32, no. 4, Elsevier BV, July 2022, pp. 389–395, <https://doi.org/10.1053/j.jrn.2021.07.007>.

aesthetic level, as users are awarded virtual trophies upon meeting specific criteria. The incorporation of just one gamification mechanic into a product can significantly enhance user interaction and foster a sense of achievement, ultimately encouraging users to continue engaging with the product, translating into increased user retention. This example demonstrates the power of gamification in transforming ordinary products into captivating experiences that keep users coming back for more.

Price Gamification

When attempting to apply gamification techniques to pricing, it may be less intuitive than product gamification, as price is intangible. A more practical approach to price gamification involves enhancing the purchasing experience, or in other words, the dynamics of purchasing behavior at the point-of-sale. Typically, the point of sale is associated with incurred costs, and for non-entertainment purchases, it can usually be a negative and dreadful experience. Price gamification aims to transform this process into a fun and engaging activity, potentially encouraging customers to spend more money more frequently. For instance, reward points and cashback, often seen in loyalty programs, are common and popular gamified pricing strategies. These structures enable customers to access exclusive deals and promotions by reaching specific spending thresholds. As customers progress through the tiers, they can unlock better rewards, motivating them to spend more and enjoy higher levels of benefits.

The Starbucks Rewards loyalty program, for example, allows customers to earn "Stars" for every dollar spent at Starbucks, which can be redeemed for free drinks, food items, or merchandise. Rather than seeing an extra \$3 spent on coffee as a mere expense, customers are incentivized to work towards a spending goal with tangible rewards. This method shifts their perception of spending and modifies the purchasing dynamics, fostering a sense of accomplishment in achieving goals. Nevertheless, it is crucial to recognize that price gamification can be delicate and may result in negative user experiences if not implemented properly. For instance, when using loyalty programs, it is essential to balance rewards and costs. If a loyalty program's rewards do not appeal to purchasing customers, it may fail to

enhance the experience. Rewards should either have standalone value or serve as complementary goods to encourage additional purchases. Conversely, if the cost required to reach the reward threshold is too high, customers may disregard the mechanic. Imagine entering a supermarket and seeing a sign that reads, "Save \$1 on purchases over \$100." While price gamification can be an incredibly powerful tool for boosting sales revenue, it is imperative to ensure that the design is well-balanced, making the gamified spending goal both attractive and achievable.

Place Gamification

Gamification in the context of place refers to the strategic implementation of game elements and techniques to enhance the customer experience within a particular location or channel where products or services are being offered. This could include brick-and-mortar stores, online platforms, or even distribution channels. The goal of gamifying place is to create an immersive and engaging environment that attracts customers, increases their dwell time, and encourages repeat visits, ultimately boosting sales and brand loyalty.

In-store gamification, for instance, can involve interactive displays, augmented reality experiences, or treasure hunt-style activities that engage customers and create memorable shopping experiences. An example of this is the LEGO Store's use of interactive play areas and digital design stations, where customers can build their own unique creations, making the shopping experience more personalized and enjoyable. Meanwhile, online retailers can apply gamification tactics such as time-limited offers, progress bars, or personalized recommendations to motivate customers to make purchases and explore different sections of the website. Furthermore, gamifying distribution channels can include providing incentives for frequent users of a particular channel or offering rewards for achieving specific milestones, such as using a particular delivery service for a certain number of orders. By incorporating gamification elements into various aspects of place, businesses can foster a sense of excitement and engagement that enhances the overall customer experience and drives sales.

Promotion Gamification

In the context of promotion, gamification involves integrating game mechanics and strategies into promotional campaigns with the aim of increasing customer engagement, elevating brand awareness, and ultimately, driving sales. By making promotional activities more interactive and enjoyable, marketers can create memorable experiences that encourage customers to engage with the brand and spread positive word-of-mouth. In many cases, gamified promotions take advantage of actual games and transform gaming into the promotion. Additionally, gamified promotional events integrate elements of place and price, creating a comprehensive gamified experience that significantly enhances user engagement beyond solely gamifying the promotional aspect. A notable example is McDonald's Monopoly campaign, which takes the famous board game of Monopoly and implements it as the key part of the promotion. During the promotion, customers collect game pieces attached to McDonald's products, which represent various properties from the Monopoly board game. By collecting specific sets of properties, customers can win prizes ranging from free food items to cash rewards and even high-value items like cars or vacations. This gamified promotion encourages customers to make more purchases and visit McDonald's more frequently in hopes of winning prizes, thus increasing sales and customer loyalty.

Gamification in promotional activities can be extremely successful in fostering customer engagement and loyalty, as exemplified by the enduring success of McDonald's Monopoly campaign. By integrating game elements or even entire games into promotional efforts, brands can capitalize on customers' inherent drive for competition, rewards, and social interaction. This approach strengthens the bond between customers and the brand while enhancing the interactive dynamic. On the other hand, it is crucial for marketers to be mindful of potential pitfalls, such as accusations of misleading practices or creating a perception of exclusivity that could alienate certain customer segments. It is essential to design gamified promotions that are transparent, fair, and accessible to a wide range of customers to ensure a positive experience and protect the brand's reputation.

Focusing on Retention

Customer retention is a crucial metric in marketing that refers to a business's ability to maintain its customers over a specific period. Typically represented as a percentage, retention measures the number of customers that remain after a given time frame compared to the number of new customers and those who have canceled their subscriptions, stopped purchasing, or terminated contracts. Retention is not only an indicator of a company's capacity to acquire new customers but also its effectiveness in keeping existing customers satisfied. Tracking retention is essential because it is a reliable measure of brand loyalty, which can be challenging to quantify otherwise. A high customer retention rate translates to improved customer lifetime value (CLV), which directly affects revenue and success.

A well-implemented gamification system with the right reward structure and personalization can significantly boost customer engagement and retention. By making services more engaging and exciting, gamification can increase user motivation and loyalty towards a brand, encouraging repeat purchases and long-term commitment, proving to be an effective strategy for enhancing customer retention⁸. For this reason, tracking retention can provide valuable insights into the success of gamification strategies. By monitoring retention rates, businesses can assess the effectiveness of their gamification initiatives and identify areas for improvement, ensuring that they continue to maximize customer satisfaction and loyalty. Additionally, retention metrics can help businesses understand their customers better, allowing them to refine and optimize their gamification strategies to cater to the specific preferences and needs of their target audience. This personalization can further enhance customer engagement and contribute to increased retention rates.

Case Studies

⁸ 'How to Use Gamification as a Customer Retention Strategy'. Involve.Me, <https://www.involve.me/blog/how-to-use-gamification-as-a-customer-retention-strategy>.

Examining case studies is crucial for exploring the effects of gamification through the lens of marketing, as it provides valuable insights into real-world applications, successes, and challenges. By analyzing examples from Nike SNKRS and Duolingo, we can identify best practices, pitfalls to avoid, and effective strategies that have led to positive outcomes. Additionally, case studies help demonstrate the tangible benefits of gamification in marketing, such as increased customer engagement, sales, and retention. These insights allow marketers to make informed decisions when implementing gamification in their own marketing campaigns, ultimately improving the likelihood of success and maximizing their return on investment.

Nike SNKRS

The Nike SNKRS, an innovative mobile application developed by Nike, was first launched in 2015, aimed at providing a unique and engaging experience for sneaker enthusiasts. This app combines exclusive content, personalized recommendations, and gamification elements to create a one-stop platform for users to discover, purchase, and interact with Nike's extensive range of sneakers. Since its launch, Nike SNKRS, under the leadership of Ron Faris, has seen significant growth in user acquisition, reaching millions of users worldwide. In 2018, the app hit a major milestone with the introduction of the SNKRS Stash feature, a location-based game that allowed users to unlock access to exclusive sneakers by visiting specific locations. This innovative approach to sneaker releases further fueled the app's popularity and expanded its user base. In 2021, it became the first sneaker app to accumulate 50 million in downloads⁹, a demonstration of its influence and appeal. With features such as limited-edition releases, member-only access to special products, and interactive storytelling about the inspiration behind specific designs, Nike SNKRS has transformed the way consumers interact with the brand and its products. By leveraging technology, personalization, and gamification, Nike SNKRS has successfully elevated the sneaker shopping experience, fostering customer loyalty and

⁹ Lenahan, Madeline. Nike SNKRS Becomes First Sneaker App to Hit 50M Downloads. 2 Sept. 2021, <https://blog.apptopia.com/top-sneaker-apps-h1-2021>.

driving sales in the process. Best known for its location-based "Stash" game—a real-life treasure hunt—Nike SNKRS epitomizes the application of gamification to all 4Ps of marketing, with a particular emphasis on Place. By adding an engaging and interactive aspect to purchasing exclusive sneakers, the SNKRS app transforms the buying experience. When a limited-edition sneaker is released on the app, Nike also shares details about the corresponding "Stash" event, including specific "Stash spots" where users can unlock the sneakers. To access the exclusive product, users must physically visit these locations within a set timeframe. The app employs augmented reality and geolocation technology to confirm the user's presence, allowing them to unlock the opportunity to buy the sneakers.

Although this process touches on Price—by enhancing and rewarding the purchasing experience, Promotion—by complementing the launch of limited items, and Place—by bringing customers to physical locations for purchasing, the most groundbreaking innovation lies in its treatment of Place. It reimagines Place, not just as physical stores or distribution channels, but as any designated location within a city. This expands points of purchase to include locations like parks or iconic buildings, increasing Place's influence in marketing. Furthermore, since Place is no longer limited to stores and channels, it offers marketers countless opportunities for collaboration and innovation. Marketing events held outside physical stores become more neutral, making social events like charity fundraisers or ESG initiatives more appealing to the general public, as they are less directly connected to the brand. In contrast, in-store events can be perceived as brand-centric, causing consumers to be skeptical of the brand's altruistic claims. Gamification eases this transition and helps customers naturally engage with public spaces. In the case of Nike SNKRS, the treasure hunt leverages Place to captivate users and keep them engaged throughout the gamified journey. Some customers may not even be aware of their destination until they arrive to complete their purchase.

Gamifying the price is also a major factor in the success of Nike SNKRS. Rushing to the designated location, customers are motivated to grab the limited item in the fear of missing out. Now, successful purchase is no longer a cost in the minds of customers, but a huge gain

that they worked towards. This not only accelerates sales for these limited items, but also increases customer satisfaction and loyalty upon transaction. By first appealing to customers through a game mechanic of treasure hunt under Place, Nike SNKRS could “lure” enthusiastic customers in and engage in this gamified process. The more involved customers become, the more rewarding the purchasing experience. Through Place, this gamification was able to amplify the effects on Price, and demonstrates just how gamification from a marketing perspective can work coherently through the 4Ps and enhance the effects from one to another. From a gamification design perspective, Nike SNKRS has successfully created an aesthetic of “competitiveness that’s fueled by adrenaline”¹⁰ through the interaction between customers and the event on the game dynamic level, blended perfectly into the process. This way, each time customers complete their purchases, they are more inclined to stay on the platform and participate in future promotions for more rewards, thereby effectively increasing user retention and lifetime value.

Although Nike SNKRS has successfully implemented gamification into a business through marketing, there are pitfalls in its gamification design that are essential to point out. First and foremost, the game is designed as a competition, and customers must race to the location within a time limit in order to “win.” Therefore, it only attracts customers who are fans of the competitive element, and can segment out other Nike sneaker enthusiasts who prefer not to be competitive. Furthermore, it can cause anxiety and frustration for sneaker fans who would like to participate in a particular limited item, but are forced to participate in a displeasing manner. While more data among Nike SNKRS users would be required to validate this point, this design can potentially lock out some loyal customers, and do harm to user retention among loyal customers. Second, an important aspect of gamification is the balance between effort and reward. As more users flood in the SNKRS community, more and more users compete for limited items, lowering the chance that any user could manage to “win.” Users are becoming more and more frustrated at the constant high level of failure even with high levels of

¹⁰ De Los Santos, Brian. ‘How Nike Turned the Shoe Drop into a High-Tech Treasure Hunt’. Mashable, 6 Aug. 2017, <https://mashable.com/feature/nike-snkrs-app-drops>.

commitment and participation. From a game design perspective, the aesthetics has shifted from competition to constant frustration over the increased difficulty, and the reason behind lies in an unbalanced system that forgot to take into account of the increasing user base. In 2021 at an internal meeting at Nike, managers acknowledged this fact and claimed that “We are at risk of losing our most sneaker-obsessed consumer” and that many loyal customers have been forced to migrate to other sneaker brands due to the frustration¹¹.

In conclusion, Nike SNKRS has skillfully incorporated gamification into its marketing strategy, effectively transforming the sneaker shopping experience and promote brand loyalty. By utilizing elements such as location-based treasure hunts and competitive gameplay, the app has amplified the impact of the 4Ps, particularly Place, and has successfully created an engaging and immersive experience for users. However, it is crucial to recognize the potential pitfalls associated with such a design, as the competitive nature may alienate certain customers and the balance between effort and reward must be carefully maintained to prevent user frustration. As Nike SNKRS continues to evolve, it is essential for the company to address these challenges and strive to create a more inclusive and rewarding experience for all sneaker enthusiasts. Ultimately, the success of Nike SNKRS serves as a testament to the power of gamification in marketing and its ability to enhance customer engagement and user retention.

Duolingo

Launched in 2012 by Luis von Ahn and Severin Hacker, Duolingo is a popular language learning platform designed to make language education accessible, engaging, and fun for learners of all ages and skill levels. Its mission is to break down language barriers and make it easier for people around the world to communicate. The platform offers a wide range of languages to choose from, including popular languages like Spanish, French, German, and Chinese, as well as lesser-known languages like Irish, Navajo, and Welsh. One of the most

¹¹ Dunne, Brendan. ‘Nike Shares SNKRS Data, Plans, Concerns in Internal Meeting’. Complex, 11 Oct. 2021, <https://www.complex.com/sneakers/nike-snkrs-app-data-losing-customers>.

unique features about Duolingo is its gamified approach to language learning as it incorporates a myriad of gaming mechanics and elements into its product and services, including an experience point system, achievements, virtual stores, and leaderboards. Duolingo is among the top rated education apps with registered users over 500 million and monthly active users of 54 million in 2022¹². Duolingo has also focused its marketing strategy on organic growth rather than advertising, and has seen tremendous results in both user acquisition and retention. In 2023, it self reported a 80% organic growth rate¹³ – acquired through non-paid channels, such as word of mouth and social media posts – and attributed its success to the quality of its product. Through gamification, Duolingo focuses on sharpening its user experience and places an emphasis on user retention as a key operating and marketing metric. In 2019 it demonstrated a 55% next-day retention¹⁴, up from 13% since launch in 2012. For Duolingo, this was evidence and motivation that gamification was the way to go, which drove its strategy further down gamifying its product to maximize user enjoyment and engagement.

Learning a new language can often be perceived as a tedious and monotonous process, with long hours spent on absorbing new material and repetitive exercises. Many language learners struggle with overly challenging content, resulting in a lack of achievement and motivation, causing them to abandon their studies. Duolingo revolutionized language learning by incorporating gaming mechanics smoothly into its product, counteracting the negative aspects typically associated with self-study and increasing the enjoyment and engagement of its users¹⁵. Duolingo's lesson structure and design play a crucial role in keeping users engaged and motivated by breaking down language courses into small, manageable units called "skills." This modular approach allows users to learn at their own pace and seamlessly integrate language

¹² Curry, David. 'Duolingo Revenue and Usage Statistics (2023)'. Business of Apps, 25 Aug. 2020, <https://www.businessofapps.com/data/duolingo-statistics/>.

¹³ Gustafson, Erin. 'Meaningful Metrics: How Data Sharpened the Focus of Product Teams'. Duolingo Blog, 17 Feb. 2023, <https://blog.duolingo.com/growth-model-duolingo/>.

¹⁴ Shorgov, Atanas. 'Duolingo's Excellent User Retention Strategies'. Better Marketing, 28 Jan. 2020, <https://bettermarketing.pub/duolingos-excellent-user-retention-strategies-693520caac99>.

¹⁵ Shortt, Mitchell, et al. 'Gamification in Mobile-Assisted Language Learning: A Systematic Review of Duolingo Literature from Public Release of 2012 to Early 2020'. Computer Assisted Language Learning, Informa UK Limited, July 2021, pp. 1–38, <https://doi.org/10.1080/09588221.2021.1933540>.

learning into their daily routines. Each skill focuses on a specific topic or grammar concept, enabling learners to gradually progress in complexity and build a solid foundation. The platform's interactive exercises further enhance engagement by offering a variety of task formats, such as translation, listening comprehension, and speaking practice, which cater to different learning styles and preferences. These varied tasks keep the learning experience fresh and dynamic, preventing users from feeling bored or overwhelmed by monotonous activities. Duolingo also employs a spaced repetition system, which intelligently schedules content reviews based on users' performance to reinforce learned material and promote long-term retention. By employing a well-structured and interactive course design, Duolingo effectively enhances the game dynamic, engaging users and encouraging them to stay active on the platform. This approach helps users overcome common barriers to language learning, such as lack of time, boredom, or frustration, ultimately leading to more successful and enjoyable learning experiences.

Achievements and recognition serve as powerful motivators in an individual's pursuit of a goal, and in a business context, this translates to user retention. Duolingo's high retention rate can be partially attributed to its well-designed course system, but it also owes much of its success to a carefully crafted reward system that complements the learning experience. This synergistic combination of engaging course content and a well-matched reward system keeps users motivated, fostering a sense of progress and accomplishment as they advance through the language learning journey. By effectively leveraging these motivational factors, Duolingo ensures that users remain engaged and committed to their language studies, ultimately resulting in higher retention rates and more successful learning outcomes. From a psychological perspective, positive reinforcement—rewarding correct actions—can strengthen a behavior, and in theory, users can develop a love for language learning through similar methods. Duolingo employs an experience point system that awards virtual points to users for correctly answering practice questions, reflecting their progress. These points also contribute to achievements and leaderboard rankings, fostering a sense of social accomplishment that further reinforces the learning behavior. In traditional action games, the sense of

accomplishment comes from leveling up and defeating increasingly difficult opponents. Similarly, in Duolingo, higher experience points correlate with users' language proficiency. As learners comprehend more challenging material and receive recognition from both real-life acquaintances and peers on the Duolingo platform, they experience a sense of accomplishment that keeps them engaged with the app for longer periods. By altering the dynamics of learning through gamification, Duolingo amplifies the sense of accomplishment, fostering positive emotions and making language learning a more enjoyable and rewarding experience¹⁶. The platform's ongoing experimentation and commitment to improvement ensure that users remain motivated and engaged throughout their language learning journey.

Duolingo is without a doubt a monument of success in the field of gamification. It has demonstrated to an extensive degree the level of gamification the founding team has tinkered in the core of the product. While Duolingo is constantly adjusting its gamification methodologies to improve and deliver better gamified experience to its users, there are critiques that aim to challenge Duolingo's core value proposition – it is a waste of time. Because Duolingo is limited to the functions of a mobile app, the truth is that users can hardly interact with it vocally, which is believed to be the best, and only, way to actually learn any languages¹⁷. To address this concern, Duolingo could focus on enhancing practical conversation skills and expanding grammar coverage. Firstly, Duolingo could introduce more real-world scenarios and dialogues that resemble everyday conversations, helping users practice and improve their speaking and listening skills. By better preparing users for real-life interactions in the target language, Duolingo can bridge the gap between the fun, gamified learning experience and practical language use. Secondly, some users feel that Duolingo lacks in-depth explanations of grammar rules and complex language structures. Incorporating more comprehensive grammar lessons and exercises would enable users to develop a solid understanding of the language's mechanics, addressing concerns about the platform's

¹⁶ James, Kelsey K., and Richard E. Mayer. 'Learning a Second Language by Playing a Game'. *Applied Cognitive Psychology*, vol. 33, no. 4, Wiley, July 2019, pp. 669–674, <https://doi.org/10.1002/acp.3492>.

¹⁷ Yamisha, Jonty. 'Does Duolingo Work?' *OptiLingo*, 15 Oct. 2019, <https://www.optilingo.com/blog/general/the-problems-with-duolingo/>.

effectiveness in fostering language proficiency. By concentrating on these two areas, Duolingo can address the concerns of critics and enhance the platform's effectiveness in helping users achieve language proficiency, while still maintaining the enjoyable and engaging experience that has made it a popular choice for language learners. Thankfully, with the advancement of technology, Duolingo may soon have its constraints lifted and find solutions to perfect the product's teaching effectiveness.

Conclusion

For the past 10 years, gamification has been a popular area of academic and strategic focus. Under the right structure, gamification can lead to terrific and innovative results, but from success stories such as Nike SNKRS and Duolingo, we also see that the practice of gamification is far from perfection. For instance, the critics of Duolingo evokes an interesting conversation of in general whether gamification keeps users onboard because the experience is fun, or because the product solves a need. Such topics are an interesting direction to explore, as well as what gamification will look like in the near future when the gaming industry is also fastly evolving.

Analysis and Discussions

Gamification in marketing has transformed the way businesses engage with their target audience, creating significant implications for both marketers and consumers. By incorporating game elements, businesses can generate increased engagement, brand loyalty, and customer retention. In the recent decade, we have seen more and more success stories of businesses successfully implementing gamification techniques to their marketing strategies, and analyzing these cases under a structured game development and marketing framework can yield interesting insights on best practices of gamification.

However, gamification is extremely complicated and delicate in nature as it strives to weld together gaming mechanics into non-gaming scenarios to create an emotion that comes from fun gaming. It is essential to point out that even in game development, there is no formula for success, and game developer constantly find themselves chasing after recent successful game launches to unveil the secrets behind it. Games wrestle with not only the emotions of consumers through the game's mechanics and contents, but also relies heavily on the social context, such that different genres may receive more attention based on different times and environments, which has an adverse effect consumer mentality and preferences. Gamification therefore, should always be updated on the gaming trends in order to apply the best gaming elements into businesses.

Another significant factor that has been driving the success of the gaming industry is technology. Over the years, technological breakthroughs in hardware has made huge advancements in gaming graphics and computation, which greatly increased the appeal of games to the general audience. Now, with the rise of artificial intelligence, the degree in which games can be further enhanced, or even revolutionized, has stretched beyond estimation. This opens new pathways for gamification as more unattempted combinations of gaming elements and business models stands to be tested for future marketers. For example, Nike SNKRS would not even have been made possible if not for the availability of location-based-services and augmented reality technologies. If we stop for a second and think how new technologies, such as AI generated content, can add to the mix, we would essentially come up with a whole new gamified scenario.

Moreover, although this thesis has assessed the effectiveness of gamification in terms of user retention, some businesses might prioritize different metrics, such as user acquisition, as exemplified by Duolingo. It is crucial to recognize that while user retention reflects a product's long-term success, companies may occasionally opt to prioritize acquisition over retention, and gamification strategies can be equally valuable in contributing to this success. Consequently, when evaluating a gamification approach, it is essential to first comprehend the company's

initial objectives and determine whether the gamification pathway has aided the company in achieving those goals.

Conclusively, while it can be fruitful to assess gamification under both a game development framework and business structure (4Ps of marketing) to shed light on best practices, it is also equally important to keep a finger on the pulse of game trends, technology, and company goals to gain a comprehensive view of gamification values and expectations.

Challenges and Limitations

As demonstrated by case studies of Nike SNKRS and Duolingo, gamification presents both benefits and challenges for businesses and marketers. With the growing implementation of these tactics, consumers may become desensitized to game elements, resulting in reduced effectiveness. Additionally, as seen in Duolingo's criticisms, overemphasis on gamification may detract from a brand's core message or value proposition, ultimately weakening its impact. Moreover, akin to the Nike SNKRS issue, ill-conceived gamification strategies can alienate consumers by fostering unhealthy competition, negative behavior, or manipulation, potentially damaging a brand's reputation.

Another area of concern for gamification involves ethical issues related to data privacy and user exploitation. Businesses can amass extensive user data through gamified marketing initiatives, raising questions about data usage and consent. Furthermore, certain gamification elements, such as reward systems and leaderboards, can resemble gambling mechanics, which are known to be addictive. Companies may exploit these addictive elements to persuade users to spend more money, time, or other resources, prioritizing profit over user well-being. These addictive dynamics can also manipulate users into engaging with products or services in ways they might not have chosen otherwise, leading to a loss of autonomy and compelling users to engage with the system at the expense of other essential activities.

While gamification can provide numerous benefits, it is vital for designers and developers, as well as decision makers, to carefully evaluate the potential ethical ramifications of their design choices. By taking this approach, they can create gamified experiences that balance engagement with user well-being, autonomy, and privacy.

Future Outlooks

The future of gamification in marketing is highly promising, with immense potential for growth and innovation. When the concept of gamification was first introduced, it referred to gaming elements being adapted into non-gaming scenarios. However, in February of 2023, Game Freak Inc, the studio behind the world's top 1 selling video game franchises of all time – Pokémon, announced a release of a sleep tracking app to be released in the summer of 2023¹⁸. The app is packaged as yet another “game” of Pokémon franchise, and embeds similar mechanics as traditional Pokémon games to gamify the sleep-tracking experience. The app will also pair with existing Pokémon games to create a wholesome experience, allowing users to fully integrate their sleep habits into an actual game experience. By doing so, Game Freak can theoretically expand its user base to users with needs to track their sleep habits, either Pokémon players or not, and can even direct these app users to Pokémon games or bring back churned players to revive retention rates. Technically this strategy still meets the gamification definition, but having the initiative come from a gaming company not only proves the strength and value of gamification, but is also an interesting feat to observe and follow from a marketing perspective.

As consumers continue to seek engaging and interactive experiences, businesses will increasingly adopt gamification techniques to capture their attention and foster brand loyalty. The integration of cutting-edge technologies such as AR, VR, and AI will serve to enhance and personalize these experiences, making them more immersive and impactful. Social media

¹⁸ Scullion, Chris. 'The Pokémon Sleep App Is Finally Releasing Later This Year'. Video Games Chronicle, 27 Feb. 2023, <https://www.videogameschronicle.com/news/pokemon-sleep-is-finally-releasing-later-this-year/>.

platforms and mobile devices will also facilitate the widespread adoption of gamified marketing strategies, allowing businesses to reach a broader audience. Moreover, the innovative stunt from the most famous gaming franchise not only opens new possibilities to the industry, but also closes the distance between non-gaming scenarios and actual games. However, marketers must remain mindful of potential challenges, such as maintaining user privacy, ensuring ethical design, and preventing customer fatigue. By striking a balance between innovative gamified experiences and responsible marketing practices, the future of gamification in marketing is set to revolutionize the way businesses engage with their audiences and build lasting relationships.

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