

WHAT LIES BEYOND STREAKS AND BADGES? DUOLINGO'S GAMIFICATION STRATEGY AND ITS LIMITATIONS

APA YANG TERSEMBUNYI DI BALIK STREAKS DAN BADGES? STRATEGI GAMIFIKASI DUOLINGO DAN KEKURANGANNYA

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Abstract: The use of gamification has become prominent in marketing especially after the pandemic, where people are often not satisfied with just the normal experience. This need and craving for a personalized engaging experience in each person are leading to a tight competition between businesses to leave the most valuable experience for users. Duolingo has proven to be a market leader within language-learning apps and has retained, also increased loyal customers over the years with the use of gamification. Despite the visible success of gamification in different fields and its importance in today's market, the language-learning app is rarely discussed in a marketing context. This study explores the implementation of gamification by one of its earliest adopters and the limits to this strategy itself. Using phenomenology method and thematic analysis, this qualitative study inquired 20 users of Duolingo using semi-structured interviews. Results showed how intrinsic motivation played a big role in loyal users and Duolingo supported those intrinsic motivation to gather customers and create a more enjoyable way of learning with gamification. With limitations mostly coming because of personal priorities as hindrance and not due to the app lacking itself.

Keywords: Gamification, Marketing, Immersive Experience

Abstrak: Penggunaan gamifikasi telah sering didengar dalam pemasaran, terutama setelah pandemi, di mana orang sering tidak puas hanya dengan pengalaman yang biasa. Kebutuhan dan keinginan untuk pengalaman yang dipersonalisasi dan menarik untuk kebutuhan orang berbeda mendorong persaingan antar bisnis untuk memberikan pengalaman terbaik bagi pengguna. Duolingo telah terbukti menjadi market leader di antara aplikasi pembelajaran bahasa dan telah berhasil mempertahankan dan meningkatkan angka pelanggan setianya selama bertahun-tahun dengan penggunaan gamifikasi. Meskipun keberhasilan gamifikasi terlihat di berbagai bidang dan pentingnya dalam pemasaran saat ini, aplikasi pembelajaran bahasa jarang dibahas dalam konteks pemasaran. Studi ini meneliti bagaimana gamifikasi diterapkan oleh salah satu pelopor awalnya dan kekurangan yang ada pada strategi gamifikasi. Menggunakan metode fenomenologi dan analisis tematik, studi kualitatif ini meneliti 20 pengguna Duolingo melalui wawancara semi-terstruktur. Hasil menunjukkan bahwa motivasi intrinsik memainkan peran besar dalam mempertahankan pengguna setia, dan Duolingo mendukung motivasi intrinsik tersebut untuk menarik pelanggan dan menciptakan pengalaman belajar yang lebih menyenangkan melalui gamifikasi. Batasan yang ditemukan umumnya disebabkan oleh prioritas pribadi, bukan karena kekurangan dari aplikasi itu sendiri.

Kata Kunci: Gamifikasi, Marketing, Pengalaman Immersif

INTRODUCTION

BACKGROUND

The COVID-19 pandemic changed our lives, making technology an important part of how we handle everyday tasks. With travel restricted and most countries facing lockdowns, businesses must search for creative ways to bring experience and engagement into homes. Schools and educational institutes started teaching through zoom meetings, office workers started working from home, museums even offer tours online, and concerts were

also done virtually. This builds a rise to the new Experience Economy after COVID-19, a new post pandemic behavior: Where experience and engagement are as important as ever making consumers crave for experiences in all situations (Kaur and Kaur, 2020). The competition goes to those who are most engaging and bring the most memorable experiences. To provide this experience, in which one of them brings us to Gamification as a strategy to achieve just that.

In the past few years, Gamification has been raising a lot of interest as a tool to help increase user engagement and increasing marketing effectiveness (Xi and Hamari, 2019). Though the use of the word “gamification” is quite recent, the concept of using game-design to influence people has always been used in the video game world. Werbach and Hunter (2020) defined gamification as *the technology of applying elements of game in non-game scenarios* while Huotari and Hamari (2017) described it as a method of improving a service by providing the possibility of gameful experiences to assist user’s overall value generation. Several researches have been done regarding the effects of gamification on user participation (Xu, 2023), buying intention (Agrawal and Punwatar, 2023), response systems in learning (Barrio et al., 2016), and brand engagement (Viega and Napitupulu, 2020). While most of the previous research investigates simply on gamification or its individual elements, few studies have explored the specific effects of gamification on a particular product within a marketing context, especially from a qualitative perspective. Despite gamification being highly related to experiences and gratification experienced by users. Therefore, there is very little evidence and real-life examples and experiences on the concept of gamification.

The use of this game design has also been adapted to e-commerce across the world with the aim of increasing engagement and ultimately retention itself. Gamification in the app is also simplified for users by leaving a review and getting coins as a reward and incentive to engage with the brand more. But the earliest use of gamification was done in 2011, by one of the pioneers that popularized gamification as a marketing tool is an app called *Duolingo*. Research on duolingo as gamification on language learning (Saniyah, 2023) has been done multiple times, but there is almost no research done in the marketing sense considering how much success it has gained online. With 120 million users worldwide, *Duolingo* is an app-based language learning application that combines visual, audio and grammatical questions of the language users would want to learn. The success of Duolingo lies in its high retention and quickly growing user base with 19 million daily active users counted in August 2023 (Sensor Tower, 2023). In a study done by Sensory Tower, Duolingo remains superior to other language learning apps as Duolingo’s users exhibit a remarkable loyalty. Compared to their competitor *Babbel*, Duolingo users are more unlikely to use other language learning apps and even other apps in general in a 30-day period.

According to Luis von Ahn, co-founder of duolingo, the app uses AI to tailor its learning programs while providing users with a fun and self-paced program by “gamifying” the language learning experience. There are several features that contribute to the app’s gamified experience. One of their most popular features being the “*streak*” that incentivizes users to open the app regularly. As users consistently open the app, not only a visually appealing fire ignites but users also gain points and special rewards that can be used to unlock certain limitations of the free version. It shows how many consecutive days are spent in using the app. During the game, users are given five hearts as chances to answer the questions. Each incorrect answer will cost a heart and when all hearts are lost users have to wait for the hearts to regenerate again before resume playing. Another of its more recent features is called *the leaderboard* where users collect points to move to another level and earn badges for a certain point collected while competing with users worldwide. There are zones to this board which shows users they’re current rank and whether they are set for promotion or demotion. If users are in the promotion zone, they are set to move on to the next badge but if users fall into the demotion zone they might lose a badge and get demoted to the previous level. But Duolingo goes beyond just these features.

Reflecting on the success of Duolingo, this study aims to fill the current research gap by investigating one of the earliest and most popular gamification apps before the word “gamification” was even popularized in a qualitative sense to gain in-depth insights on what users actually experience and think about when using the app. How in the end, these experiences can bring towards a bigger success in the study realm of Marketing 6.0 focusing on immersive.

Research Objectives

1. Exploring motivational factors that drives user engagement to Duolingo’s gamification strategy
2. Identify specific elements of gamification that Duolingo has succeeded enhancing user experience and engagement
3. Investigate limitations of duolingo’s gamification strategy that hinders overall user experience and engagement

LITERATURE REVIEW

Gamification and the MDE Framework

Chou (2015) defined gamification as: the craft of deriving all the fun and addictive elements found in games and applying them to real-world or productive activities. Chou highlighted gamification as a concept of “Human focused design” a design process that optimizes the human in the system as opposed to the pure efficiency of the system called “Function-Focused Design”. The MDE framework is a three gamification principle adapted from game design literature by Robson et al., (2015) that consists of mechanics, dynamics and emotions.

Previous Studies

Xi and Hamari (2020) investigated the relationships between gamification, brand engagement and brand equity among consumers (N = 824) of two online gamified brand communities. The results showed that achievement and social interaction -related gamification features were positively associated with all three forms of brand engagement (emotional, cognitive and social). Immersion -related gamification features were only positively associated with social brand engagement. Additionally, brand engagement was further positively associated with brand equity. The results imply that gamification can positively affect brand engagement and further increase brand equity, and that gamification appears to be an effective technique for brand management.

Huang et al. (2024) investigated the moderating effect of environmental gamification on the relationship between social media marketing and consumer-brand engagement: a case study of Ant Forest Gen Z users. In the current study, 305 Gen Z users of Ant Forest were surveyed through an online questionnaire, and the data analysis was conducted using the partial least squares structural equation modelling (PLS-SEM) method. This study indicates that the four elements of entertainment, trendiness, customisation and word-of-mouth in social media marketing have statistically significant direct effects on the consumer-brand engagement in Ant Forest. In addition, gamification shows a significant positive moderating effect on the relationship between customisation and consumer-brand engagement and a significant negative moderating effect on the relationship between trendiness and consumer-brand engagement in Ant Forest.

Khaldi et al. (2023) focused on providing a comprehensive overview of the current state of gamification in online learning in higher education that can serve as a resource for gamification practitioners when designing gamified systems. This paper systematically explore the different game elements and gamification theory that have been used in empirical studies; establish different ways in which these game elements have been combined and provide a review of the state-of-the-art of approaches proposed in the literature for gamifying e-learning systems in higher education. A systematic search of databases was conducted to select articles related to gamification in digital higher education for this review, namely, Scopus and Google Scholar databases. It included studies that consider the definition of gamification as the application of game design elements in non-game activities, designed for online higher education. It excluded papers that use the term of gamification to refer to game-based learning, serious games, games, video games, and those that consider face-to-face learning environments. It is found that PBL elements (points, badges, and leaderboards), levels, and feedback and are the most commonly used elements for gamifying e-learning systems in higher education. This study also observed the increasing use of deeper elements like challenges and storytelling. Furthermore, it noticed that of 39 primary studies, only nine studies were underpinned by motivational theories, and only two other studies used theoretical gamification frameworks proposed in the literature to build their e-learning systems. Finally, the classification of gamification approaches reveals the trend towards customization and personalization in gamification and highlights the lack of studies on content gamification compared to structural gamification.

RESEARCH METHOD

Research Approach

The research was done using a qualitative approach which is deemed suitable for this study requiring complex answers of a human perspective regarding how gamification motivates users. Using phenomenological research the overall research focuses on using philosophical inquiries to explore and understand lived experience of participants with the aims of describing a phenomenon in detail (Randles, 2012). In order to understand the emotion and meaning users get from using Duolingo, phenomenology is a sure approach as it unravels perceptions on a personal level. Explaining how the experience is personalized for different users and how it comes across differently for everybody.

Informant Criteria

There are 20 participants selected for this study which are individuals who are prominent users of duolingo that have been using the app for at least a month within a 1 year period and will be conducted offline or online depending on the availability of the participants.

Sampling Technique

The sampling technique for this research would be purposive sampling to target Duolingo users in order for the research to be of relevance. Purposive sampling is then continued by getting recommendations from interviewed respondents bringing the research to the use of snowball sampling.

Data Collection Method

Primary data will be collected through semi structured interviews with open-ended questions and an interview protocol guide. The interview guide will include a pre-defined topic from previous research and will be improved during the data collection process (Busetto et al., 2020). Interviews will take 30-45 minutes and will be recorded if possible and transcribed *non-verbatim* into transcripts, which will then be coded, summarized and categorized. While secondary data will be acquired through online databases with communities that discuss language learning experiences.

Data Analysis Method

Thematic analysis method is a method to develop, analyze and interpret patterns using a systematic process called data coding which becomes themes (Braune and Clarke, 2021). Thematic analysis is suitable for this study because of the possibility to conduct a flexible analysis on participant answers and capture complex thoughts and experience during the Duolingo app usage. Thus the reason why thematic analysis would be inductive and latent. To examine and identify beyond what is said including underlying ideas (Braune and Clarke, 2006).

Validity and Reliability

Validity in qualitative research refers to the process of determining the accuracy of the findings (Rose and Johnson, 2020). To enhance validity, this research will implement triangulation by using multiple data sources and methods to identify common themes. The researcher would also pose questions in a humble and friendly attitude towards participants without leading questions into the wanted answer (Worang and Holloway, 2013). Reliability in qualitative research assesses the consistency of the results over time and making sure that results are repeatable over time (Hayashi et al., 2019). In this study the techniques applied will be a properly inspected transcript, a detailed documentation of what research protocols this study follows, consistently defined coding throughout the data analysis.

RESULTS AND DISCUSSION

Results

Extrinsic User Motivation

Extrinsic motivation refers to the external or tangible rewards a user receives such as points, badges and recognition or even avoiding penalties from others. In Duolingo most participants mentioned the satisfaction of receiving immediate validation or response from the app. This mechanism gives instant feedback on answers whether it is correct or incorrect with visual and audio cues like color changes or animated characters celebrating to indicate whether an answer is correct or not. The app also provides hints for users struggling with an answer right away. Other types of external motivation look like rewards, receiving extra hearts or unlocking a new chapter. Some participants also mention receiving gems (virtual money) after completing the *Streak* challenge which in the end can be used to purchase boosters — tools to provide additional benefit.

Intrinsic User Motivation

Intrinsic motivation refers to the inner sense of fulfillment and personal satisfaction that is centered in self-improvement. Compared to extrinsic motivation, intrinsic motivation has less varieties of what motivates participants as most participants mainly talk about personal growth and fulfillment. Emphasized that although they are playing a game, it is done intentionally with the purpose of studying a language for their own personal goals.

Emotions about Features

There are three features that participants mostly talk about involving their emotions : The *Streak*, the *leaderboard*, and repetition within the app. A large number of participants gain fulfillment from using the *Streak* compared to other features. Most participants just see it as a way to keep themselves accountable and not something to be overly obsessed with. The *Leaderboard* feature on the other hand, showed a majority of participants expressing indifference implying that competition among strangers might not be an effective motivator.

Mechanics of Features

There are only a few mentions of the mechanism of the game features as only 2 out of 20 participants had spoken about the heart and repetition features which received mixed feedback.

Dynamics within the App

Dynamics refers to the actions of a player as a result of playing the game. Competition in Duolingo happens through the *leaderboard* with 4 participants focusing on their ranks. Three of the participants wanted to surpass others while one avoided demotion in the *leaderboard*. Some participants also connect and compare scores with others with the same amount of 4 out of 19 participants. While some users are motivated by competition and social interactions, results do not show a significant number.

User Experience

Most users have positive emotions and feedback when using the app as most participants mentioned how it is easy to use. Though most users recommended this for beginners as it is easy to navigate, some users in the advanced stages wished for the app to give a more relatable level. A lot of users have also expressed positive interest in its animation saying that Duolingo will not be the same without its animations. Most suggestions of improvement was more conversational content with other users and for the app to measure a users skill a lot better to prepare a more personalized lesson according to their level. The participants that gave these suggestions do not particularly feel that it is a flaw of Duolingo, but rather just a suggestion to make it better which is why the research decided to label this emotion as neutral as there is no negative dissatisfaction involved.

Barriers to usage

Most of the time participants, when asked about experiences of feeling unmotivated, answered that the barriers lie in external factors—events outside Duolingo and not directly related to the app itself.

Discussion

Marketing 6.0 and Duolingo's Immersive Engagement

Duolingo's application of AI and personalized learning experience also immediate feedback gives us a glimpse of what it's like to use Marketing 6.0 to enhance user engagement. Using gamified learning, Duolingo enhances its user experience by giving real-time corrections, personalized progress tracking and gamified elements like The *Streaks* and The *Leaderboard*. Personalization could be seen by how different people have different levels, in different languages and also in different topics depending on what they are learning. Which also results in different and various reactions towards the app. Thus the different results and arrays of emotions regarding the app in the interview keep users engaged and satisfied. Personalization from Duolingo then results in customer loyalty which can also be seen by daily users in the app trying to keep their streak numbers to stay consistent in learning which in reality means they are staying loyal to the app.

Exploring Motivation and SDT

Intrinsic motivation within the app seems to be playing a much more significant role compared to extrinsic motivations. While external motivation is fueled by rewards like gems, points and badges, the research shows that participants don't really see these rewards as a main drive. This could be seen through how longer users that have streaks are usually self-driven by their own motivation to learn a language and sees the app as a supporting media. Streaks are just something that helps them become consistent and brings upon a feeling of personal satisfaction or gratification. This finding comes in line with Ryan and Deci's *self-determination theory* (SDT) more specifically *goal content theory* (GCT) referring to the importance of intrinsic behavior and autonomous motivation in pushing individuals to do a certain action. While rewards like points and virtual currency can boost initial engagement and support experience, they lead to only short-term participation.

Realizing the importance of intrinsic motivation Duolingo's most popular feature, the streak focuses on supporting users with their intrinsic motivation instead of providing rewards. Instead of adding more rewards which lead only to short term participation, Duolingo decided to add a feature to support the intrinsic motivation to push users in the long term. With showing personalization of how consistent a user can be and entitling a sense of gratification in learning, this drives long-term customer loyalty as it focuses on enhancing personal satisfaction. Giving the feeling of "I can be consistent too" and having users feel in control of their own consistency in studying or learning a language. According to Ryan and Deci, it is important to give users or customers a sense of control or autonomous motivation. In order for autonomous motivation to happen the core components of SDT must be fulfilled: Autonomy, Competence and Relatedness. Using Duolingo as an example this is how the app fulfills the core components of SDT resulting in autonomous motivation.

Autonomy in the Streak feature is found in how each user has their own goal and can choose just how much and when they want to study each day. Users feel like they are learning because they want to and at the same time align with their goals. In comparison to Duolingo's other feature the leaderboard, though every user has their own goal, the amount of studying and xp points determine the rank and whether a user is to get promotion or demotion which is limited in its autonomy. The streak also allows competence by giving accurate timely positive reinforcements right after one task is finished. No matter the amount or time spent, as long as users have done their daily work Duolingo provides daily feedback that gives users' a sense of competence and achievement. Added with a visual representation of their progress in the language, users can decide whether to continue studying or not depending on their level of busyness that day. Relatedness in Duolingo happens even though the streak was an individual challenge. Users are able to share and express their streak with friends as the results of this research showed that some participants compared their score with other friends. Better social connections and relatedness, increase better networking which results in better decision making (Rumokoy et al., 2023) giving better results in language learning and app usage.

Though some users are driven by the desire to not streak, that is not the only motivation but instead users are also motivated because they are in control of their own learning. This requires customization according to customer preference, community building for a sense of belonging and opportunities for customers to feel rewarded internally by participating with the brand which are mostly elements of game-like features.

Focusing on What Game Features Does

Previous section discussed two of the most popular game features from duolingo. Based on the general MDE (Mechanics Dynamics Emotion) framework division laid out in the results, it is found that the most emotions are evoked from two features : *The Streak* and *The Leaderboard*. The streak presents and gives a sense of fulfillment towards users while the *leaderboard* gives a sense of indifference to competition.

The streak affects the emotions of participants as it brings fulfillment and a sense of consistency when completing the streak invoking intrinsic motivations. While there are less emotions mentioned regarding fulfillments through the *leaderboard* with most participants feeling indifferent towards the *leaderboard*. The *leaderboard* however receives quite the dynamic response, meaning it motivates users through extrinsic motivation like competition and social comparison. People who mention the dynamics of *leaderboard* talk about how they are competitive and would not like to be below others but still does not become they're main motivation in using the app. Though some participants claimed that the dynamic component in the *leaderboard* is not utilized well because not everybody feels the urge to compete with strangers and is more likely to compete and check their own friends.

This shows how different features of Duolingo have its own purpose in affecting different parts and motivations of each user. In order to create personalization, Duolingo does as much as possible to accommodate the needs and tendencies of users in Duolingo by creating different features with different purposes. On both features, participants rarely mention the mechanics and were never explicitly mentioned, especially for the LB. Perhaps showing the mechanics of the leaderboard to be less impactful. Most participants just mentioned how they feel indifferent towards the leaderboard. Though knowing how it works, participants do not have a certain opinion on whether it is good or bad suggesting limited engagement with participants.

In terms of social interactions, the leaderboard having an advantage in social dynamics as its strength could involve more intrinsic motivation elements if they were to focus on creating more meaningful interactions between users. Meaningful interactions start when users connect with meaningful people around them like friends and family through the app to celebrate their progress together instead of strangers that are only presented through name.

User Experience and Engagement through Gamification

A gamified experience is nothing without a satisfying user experience. Findings on user experience that were frequently mentioned in the findings were the ease of use for beginners of any level, positive interest in Duolingo's animations and a few suggestions for improvements. Both ease of use and animations in Duolingo are important aspects as it invites initial users to use the app. This opens Duolingo towards a bigger market and first time tryers as learning something new is always scary for everybody and those who want to try it for the first time would definitely want an easy-going, less scary option. Learning is always associated with something tedious which is Duolingo's task to change first time user impression by adding gamification and making sure new users want to try gamified learning. This makes it easier for Duolingo to search and invite new users as first impressions determine whether they would continue using it or not. This is how Duolingo creates an experience for users by branding themselves as a fun way of learning which could invite more people to learn without fear of losing time or feeling frustrated during their first try. With more people trying the app, it opens a new chance for Duolingo to engage with more people and in the end create retention using other gamified features.

Not only by the impression it is easy to use, Duolingo's colorful animations also create a friendly atmosphere and an appealing first impression. Each character has their own personalities creating a more real personalized visual which is more similar to a game than just a monotonous educational task. Small details like instant feedback and color cues also unconsciously create satisfaction within users. Although participants do not often express negative feelings regarding their experience in using Duolingo, there are suggestions for Duolingo to create a more personalized conversational content. As users are not only searching for colorful animations but also meaningful connections within the application.

Limitations in Duolingo's Gamification

As revealed in the results, participants when asked about experiences of feeling unmotivated, answered that the barriers lie in external factors—events outside Duolingo and not directly related to the app itself. Participants explained that times when they are not using the app would be during the time they have external matters like work, studies, or university activities. What all these external matters have in common is the fact that it's an immediate or obligatory task. Although Duolingo's strategies are engaging to a certain degree, it still cannot overcome obligatory external demands especially when competing with higher priorities. Human beings will eventually have higher priorities in most activities of their lives that will temporarily stop their routine which in this case would be studying using Duolingo. But what is important is whether there are triggers to re-engage users to the app when the routine is disrupted. As the app is highly dependent on the users schedule and availability, learning must be flexible to these circumstances in order for Duolingo to be able to overcome these limitations. The next thing to highlight is social interactions in Duolingo are not major motivators for users.

Social interaction in Duolingo's user experience plays a limited role and reflects a missed opportunity for deeper engagement. As seen in the previous section of dynamics. Even though within the app Duolingo seems to encourage users to connect with friends through contacts and recommendations, most users don't see Duolingo as a tool to socialize with others. People are more likely to engage in an activity while others are doing the same. Although this applies to mostly friends and family we know. This could be seen in how social media trends affect users to do certain challenges especially after seeing people they know do the challenge. As language is mainly learned to be used as a conversational tool to connect people with people, it's a shame to see less of these interactions in Duolingo. Duolingo could create a more meaningful community driven learning experience in the Leaderboard fulfilling relatedness in one of the parts of STD theory.

Implications for Business and Marketing

There are three things from Duolingo's success and limitations that businesses can learn : (1) Enhancing personalization (2) The use of intrinsic motivation (3) Incorporating gamification. Results and findings of this research suggest the level of personalization companies are heading to in the future if they want to keep retaining customers and using gamified elements for engagement. Personalization itself is not something that is just invented recently, but what can be learned from Duolingo is leveraging the level of personalization by making use of intrinsic motivation by utilizing data analytics which in the end gives a more personalized and tailored challenge, rewards, and feedback. Companies could create personalized journeys that adapt specially to users and show progress that resonates personally with them.

The use of intrinsic motivations have been brought up a lot of times so far throughout this research. Businesses can learn to integrate features that fosters intrinsic motivation according to the SDT (Self-Determination Theory) main conditions : Autonomy, Competence and Relatedness. Campaigns could emphasize intrinsic rewards for using a product indirectly while making sure customers have fun. Highlighting personal

growth and meaningful rewarding experience. Examples of the use of these aspects include apps that use personalized achievement tracking and virtual milestones for achieving a specific challenge while indirectly supporting the brand. This markets a certain brand while aligning with users' preference and intrinsic desire. Some brands also start integrating habit-forming elements to help users consistent use of the brand while aligning with the self-improvement of the user. To increase the effectiveness of their marketing, businesses can focus on enhancing intrinsic motivation to build long-term engagement by focusing on personalized experience using gamification.

Incorporating gamification would enhance both personalization and foster these intrinsic motivations even more, making even the most mundane activities engaging and enjoyable creating a desirable behavior for businesses. Duolingo's use of gamification signals a shift to a more advanced gamification strategy than just utilizing simple rewards and points. Advanced gamification use within the Duolingo app looks like the incorporation of AI to create more personalized content and chat conversations available for premium users. While these features prove to be effective through Duolingo, it is important to note that for bigger companies with diverse markets only the use of one feature might not be enough to cater to a broad customer base and that it might be more effective to use a variety of gamified features for different preference and enhance personalization. Different features resonate differently with users as a result of a higher-level of personalization and ensures that companies are meeting the needs of all of their customers. In the end, gamification is just but a tool to improve intrinsic desires and build a more personalized profile for users.

The end-game is just what marketing is all about, delivering maximum value according to customer needs. But just delivering a product is not enough. In order to understand their needs, understanding the intrinsic desires of customers and personalizing it using gamification to make a product according to their needs perfectly. Marketers need to look beyond just traditional engagement methods and focus on creating more meaningful experiences. Gamification when executed properly can significantly enhance customer engagement. and retention driving success in the long-term

CONCLUSION AND RECOMMENDATIONS

Conclusion

1. Two motivational factors are found at play in app usage: Intrinsic and Extrinsic Motivation. Intrinsic motivation refers to app usage for personal gratification and self-achievements and extrinsic motivation relies on rewards from the app. Though both play their own roles, intrinsic motivation plays a bigger role in long-term usage within the app and that features in Duolingo are created to accommodate personalization. Businesses can learn to integrate features that fosters intrinsic motivation utilizing personal goals and meaningful experiences.
2. Duolingo's streak feature are mostly mentioned by participants to be successful and highly effective in maintaining user engagement and encouraging daily use. Duolingo's streak feature makes use of personal gratifications by having users feel a sense of accomplishment in being consistent. User experience details like lights, colors, maps and other game-like features in Duolingo also enhance the experience and keep customers more engaged and interactive.
3. Despite these strengths, Duolingo has its own limitations. Though to a certain degree gamification is able to push someone to use the app, when priorities and external commitment comes, users are rarely to use the app and could result in a loss of consistency. Although external engagement cannot be helped, gamification strategies must prepare another strategy to re-engage customers back with the app.

Recommendations

1. Based on this research Duolingo could further enhance its use of intrinsic motivation to align it more with users' individual goals and needs. This can be achieved using a more personalized element as some users suggest providing mock tests or more real-like conversational features based on the needs and topics of users. The app would also improve further if it addresses disengaged uses external commitments by having a more flexible but still engaging strategy based on the user's schedule. .
2. Businesses on the other hand can learn from Duolingo's success by the use of gamification by utilizing intrinsic motivation of users giving users a memorable and personalized experience. This includes designing features that foster a sense of autonomy and competence, such as personalized achievement tracking and meaningful rewards. Companies can also integrate habit-forming features and create personalized experiences for users using milestones that are important to them and aligned with the user's personal goals.

REFERENCES

- Agrawal, N. A., & Punwatkar, S. (2023). Exploring the Impacts of Gamification in Marketing on Consumer's Buying Intention. *Research Review International Journal of Multidisciplinary*, 8(8), 145–153. <https://rrjournals.com/index.php/rrijm/article/view/825>.
- Barrio, C.M., Muñoz-Organero, M., & Soriano, J.S. (2016). Can Gamification Improve the Benefits of Student Response Systems in Learning? An Experimental Study. *IEEE Transactions on Emerging Topics in Computing*, Vol. 4, No. 3, 429-438. <https://ieeexplore.ieee.org/document/7317765>.
- Braun, V., & Clarke, V. (2021). *Thematic Analysis: A Practical Guide*. SAGE Publications.
- Chou, Y-K. (2015). *Actionable Gamification: Beyond Points, Badges, and Leaderboards*. Createspace Independent Publishing Platform
- Huang, M., Saleh, M.S.M., & Zolkepli, I.A. (2024). The Moderating Effect Of Environmental Gamification On The Relationship Between Social Media Marketing And Consumer-Brand Engagement: A Case Study Of Ant Forest Gen Z Users. *Heliyon*, 10(4), e25948. <https://www.sciencedirect.com/science/article/pii/S2405844024019790>.
- Huotari, K., & Hamari, J. (2017) A Definition for Gamification: Anchoring Gamification in the Service Marketing Literature. *Electron Markets*, 27, 21-31. <https://link.springer.com/article/10.1007/s12525-015-0212-z>.
- Kaur, G., & Kaur, C. (2020). COVID-19 and the Rise of the New Experience Economy. *FIIB Business Review*, 9(4), 239-248, <https://journals.sagepub.com/doi/10.1177/2319714520958575>.
- Khalidi, A., Bouzidi, R., & Nader, F. (2023). Gamification Of E-Learning In Higher Education: A Systematic Literature Review. *Smart Learning Environments*, 10(10). <https://slejournal.springeropen.com/articles/10.1186/s40561-023-00227-z>.
- Randles, C. (2012). Phenomenology: A Review of the Literature. *Update: Applications of Research in Music Education*, 30(2), 11-21. <https://journals.sagepub.com/doi/10.1177/8755123312436988>.
- Robson, K., Plangger, K., Kietzmann, J.H., McCarthy, I., & Pitt, L. (2015). Is It All A Game? Understanding The Principles Of Gamification. *Business Horizons*, 58(4), 411-420. <https://www.sciencedirect.com/science/article/abs/pii/S000768131500035X>.
- Rose, J., & Johnson, C. W. (2020). Contextualizing Reliability And Validity In Qualitative Research: Toward More Rigorous And Trustworthy Qualitative Social Science In Leisure Research. *Journal of Leisure Research*, 51(4), 432–451. https://www.researchgate.net/publication/339151731_Contextualizing_reliability_and_validity_in_qualitative_research_toward_more_rigorous_and_trustworthy_qualitative_social_science_in_leisure_research.
- Saniyah, S.M. (2023). Duolingo and Learner Autonomy: Investigating The Role of Personalization and Gamification in Promoting Self-directed Language Learning. *ENJEL: English Journal of Education and Literature*, 2(02), 141–147. <https://jsr.unuha.ac.id/index.php/ENJEL/article/view/529>.
- Sensor Tower. (2023). *Duolingo: Monetizing Through Product Stickiness Monetization Mastery Report Series / How App Publishers Are Saving Budgets And Finding New Revenue*. <https://sensortower.com/How-Duolingo-Is-Maximizing-Profits>.
- Viega, M. T., & Napitupulu, T. A. (2020). Impact Analysis Of Experience On Gamification Marketing Activities, Social Media Marketing, And Other Factors Toward Brand Loyalty In Online Marketplace Application. *Journal of Theoretical and Applied Information Technology*, 98(20). <https://www.jatit.org/volumes/Vol98No20/8Vol98No20.pdf>.

Werbach, K., & Hunter, D. (2020). For the Win, Revised and Updated Edition: The Power of Gamification and Game Thinking in Business, Education, Government, and Social Impact. Wharton School Press

Worang, F. G., & Holloway, D. A. (2007). Corporate Governance In Indonesian State-Owned Enterprises: Feeding With Western Ingredients. *Corporate Ownership and Control*, 4(2).
<https://virtusinterpress.org/CORPORATE-GOVERNANCE-IN-INDONESIAN.html>.

Xi, N., & Hamari, J. (2020). Does Gamification Affect Brand Engagement And Equity? A Study In Online Brand Communities. *Journal of Business Research*, 109, 449–460.
<https://www.sciencedirect.com/science/article/abs/pii/S0268401218307436>.

Xu, Z. (2023). Research on the Influence of Gamification Marketing Mechanism and User Participation Intention. *Advances in Economics Management and Political Sciences*, 18(1), 290-294.

