

**DEMOCRATIC AND POPULAR REPUBLIC OF  
ALGERIA**

**MINISTRY OF HIGHER EDUCATION AND  
SCIENTIFIC RESEARCH**

**ECOLE SUPÉRIEURE DE COMMERCE**

**A Dissertation Submitted in Partial Fulfillment of the Requirements for Master's Degree in  
Commercial Sciences, Specialty: Marketing and Communication**

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**THE CONTRIBUTION OF  
GAMIFICATION TO CONSUMER'S  
MOTIVATION AND INVOLVEMENT**

---

**Case Study: Allégorie Group**

**Submitted by:**  
Lamis RAHMOUNE

**Supervised by:**  
Dr. Yahia BOUKERCH

**Host Company Address: Bd du 11 Decembre 1960, El Biar**

**Internship Period: 11/02/2024 to 30/05/2024**

**2023-2024**



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## DEDICATIONS

*I dedicate this dissertation with heartfelt gratitude to my parents, who have been my unwavering pillars of support and encouragement since my earliest days.*

*To my sisters Yamouna, Adane, and Nour, whose presence has been my constant source of strength, joy, and courage.*

*I honor the memory of my grandmother, may she rest in peace, for her enduring love and wisdom.*

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## Abstract

This dissertation delves into how gamification impacts consumer involvement and motivation outside of gaming contexts. It employs a mixed-methods approach to gather data, combining quantitative surveys measuring consumer involvement and motivation with qualitative interviews. The findings suggest that well-designed gamification elements can significantly enhance consumer participation, satisfaction, and loyalty. Rewards like points, badges, and leaderboards bolster feelings of competence and achievement. Social features foster community, while challenges and progress tracking promote autonomy and personal growth. Qualitative interviews provide deeper insights into how gamified elements influence long-term involvement. Participants often feel more connected to brands employing effective gamification, suggesting the potential for stronger consumer-brand relationships. This research emphasizes the importance of thoughtful gamification design to positively impact consumer behavior and business success.

**Keywords:** Gamification, involvement, motivation, consumer behavior, user experience

## ملخص

هذه المذكرة تتفحص عن كثر تأثير اللعب على انخراط وتحفيز المستهلكين في سياقات غير لعبية، حيث تسعى إلى فهم عميق لكيفية تأثير عناصر تصميم الألعاب على تفاعل المستخدمين خارج البيئة اللعبية. يعتمد البحث على نهج مختلط يدمج بين الطرق الكمية والنوعية لجمع البيانات، حيث يقوم التحليل الكمي بقياس مستويات الانخراط والتحفيز لدى المستهلكين، بينما يقدم التحليل النوعي رؤى عميقة من خلال المقابلات الشاملة والشبه المنظمة. وتشير النتائج إلى أن العناصر الملعبة المصممة بشكل جيد يمكن أن تعزز بشكل كبير مشاركة المستهلكين ورضاهم وولائهم، حيث توفر مكافآت فورية إضافة إلى التعرف الفوري، مما يعزز المشاعر الشخصية للكفاءة والإنجاز. وبالإضافة إلى ذلك، تعزز الميزات الاجتماعية والشعور بالانتماء، بينما تقدم التحديات وتتبع التقدم الشعور بالنمو الشخصي. ويكشف التحليل النوعي العميق عن رؤى أكثر تعمقاً حول تأثير العناصر الملعبة على الاستجابات العاطفية والانخراط على المدى الطويل. وعموماً، يقدم هذا البحث رؤى قيمة للموسيقين والمصممين الذين يسعون للاستفادة من اللعب لخلق تجارب عملاء أكثر جاذبية وتحفيزاً، مما يساهم في تحقيق نتائج تجارية محسنة ورضا العملاء.

**الكلمات المفتاحية:** اللعب، المشاركة، التحفيز، سلوك المستهلك، تجربة المستخدم

## Résumé

Ce mémoire examine l'impact de la ludification sur l'engagement et la motivation des consommateurs dans des contextes hors-jeu. Elle adopte une approche mixte, combinant des méthodes quantitatives et qualitatives pour évaluer l'influence des éléments de conception de jeux. Les enquêtes quantitatives analysent l'engagement et la motivation des consommateurs, tandis que les entretiens fournissent des perspectives qualitatives. Les résultats soulignent l'importance des éléments ludifiés pour renforcer la participation, la satisfaction et la fidélité des consommateurs. Cette recherche offre des insights précieux pour les professionnels du marketing et les concepteurs, visant à améliorer les expériences client et à optimiser les performances commerciales.

**Mots-clés :** Ludification, engagement, motivation, comportement du consommateur, expérience utilisateur

## GENERAL INTRODUCTION

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In today's consumer interaction globe, businesses are continuously looking for new ways to attract the interest and loyalty of their intended market. Among several approaches, one has emerged as highly promising: gamification. Gamification's strategic application, defined as the incorporation of game components and concepts into non-game contexts, is a dynamic and diverse approach to affecting consumer behavior and building meaningful relationships between businesses and customers.

Gamification isn't merely about adding points, badges, and leaderboards. It is an advanced design philosophy that takes into account the psychological predispositions that drive human behavior. Gamification motivates and engages individuals by combining elements such as competition, achievement, and rewards to transform everyday activities into interesting and exciting experiences. It is a clever combination of game design features aimed at improving user experience and engagement, resulting in a narrative that captures and maintains consumer interest in a market that is growing increasingly competitive.

Gamification is highly significant for consumer engagement. In a digital ecosystem packed with stimuli competing for customers' attention, gamification emerges as a symbol of creativity, allowing businesses to create fascinating tales and engaging experiences that tap into consumer psychology. It highlights the power of play and its widespread influence in a range of fields, like education, health, marketing, and more.

Several researchers have worked to discover the complexity of gamification, providing significant insights into its possible uses and impacts in a variety of domains. Jane McGonigal, an acknowledged expert in the field, has undertaken substantial studies on how games may be used to solve real-world problems and encourage individual collaboration. Her work focuses on the transformative potential of gaming experiences in developing perseverance and problem-solving skills.

In parallel, Yu-Kai Chou's contribution to gamification, including the invention of the Octalysis paradigm, has been important in understanding the underlying rewards that drive engagement in gamified systems. Chou's framework presents a thorough methodology for examining gamification's fundamental aspects and how they affect user behavior, as well as practical recommendations for designers and operators.

## GENERAL INTRODUCTION

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Likewise, Sebastian Deterding's research into "gameful design" has broadened his comprehension of how to create engaging and meaningful experiences that connect with consumers on a psychological level. Deterding's research into the inherent motives that support involvement with gamified systems has contributed to the discussion of user interaction and experience design.

Researchers have considerably enhanced the comprehension of gamification, providing the framework for future investigation and invention in this dynamic field. Their efforts continue to inspire and teach practitioners, educators, and academics looking to harness the power of gamification in a variety of settings.

Despite increasing interest in and adoption of gamification in business, there is still a need for a deeper understanding and empirical evidence of its effect on customer behavior. This thesis aims to add to the growing body of knowledge regarding gamification and its effects on consumer behavior by doing a thorough assessment of the existing research and presenting unique empirical findings. By shedding light on the intricacies of gamification's effect on motivation and involvement, this study intends to aid strategic decision-making and inspire further research into this intriguing and ever-expanding area.

### 1. Main Research Question

The research aims to address the following issues:

« **To what extent does gamification contribute to motivation and involvement?** »

#### 1.1. Sub-questions

In order to gain a deeper understanding of the problem at hand, the following sub-questions have been formulated:

- How does increased familiarity with gamification impact consumer involvement in activities?
- What role does consumer involvement play in shaping their motivation within gamified contexts?
- How do consumers' interactions with gamified elements and their level of involvement jointly impact their motivation?

## 1.2. Hypotheses

These hypotheses have been reformulated for conciseness and clarity:

- **H1:** Increased familiarity with gamification positively affects consumer involvement.
- **H2:** Higher levels of consumer involvement positively influence consumer motivation.
- **H3:** Consumers need both familiarity with gamification and active involvement in activities to become motivated.

## 2. Reasons for Choosing the Topic

The choice of research to study the impact of gamification on customer motivation and involvement was driven by its increasing relevance in modern contexts. With the widespread adoption of digital platforms and interactive technologies, businesses are increasingly using gamification methods to engage customers and encourage involvement. This theme is highly interdisciplinary, covering fields such as marketing, psychology, and user experience design.

A comprehensive understanding of how gamification affects customer behavior will provide significant insights into effective engagement tactics, product development strategies, and brand loyalty cultivation. Furthermore, in the context of changing consumer preferences in the digital era, a thorough examination of the motivating components of gamification provides an opportunity to improve consumer experiences and establish long-term connections between businesses and their target audience.

Researchers seek to discover beneficial insights from this subject that will help businesses use gamification strategies to encourage meaningful consumer interactions.

## 3. Importance of the Research

Research on the impact of gamification on consumer motivation and involvement is critical across industries. To begin, understanding how gamification influences consumer behavior is essential in marketing for creating more effective campaigns and increasing brand loyalty.

Furthermore, insights gained from such research can help create products and services that match consumer preferences, increasing engagement and satisfaction. Furthermore, businesses that properly use gamification can gain a competitive advantage by providing unique and captivating experiences that attract and retain clients in an overcrowded market.



## GENERAL INTRODUCTION

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Furthermore, in education, incorporating gamification principles can transform learning by making it more interactive and engaging, hence increasing student engagement and knowledge retention. Beyond practical applications, research in this field provides vital insights into the fundamental psychological principles of human motivation and behavior, which transcend consumer situations.

Finally, addressing ethical concerns about gamification usage ensures its appropriate deployment, limiting risks like privacy invasion, addiction, and manipulation. Overall, research on the consequences of gamification goes beyond marketing, affecting product creation, education, and the broader understanding of human behavior, as well as directing ethical practices in its implementation.

### **4. Research Objective**

The aim of this research is to look into the role and impact of gamification on customer motivation and involvement. Gamification, or the incorporation of game mechanics and design aspects into non-game contexts, has received significant interest in a variety of sectors, most notably marketing and consumer psychology.

This study intends to provide insights into the effectiveness of gamification tactics in increasing consumer participation while encouraging positive brand experiences by studying how gamification approaches influence customers' motivation, engagement levels, and brand interactions.

This research uses empirical analysis and theoretical frameworks to reveal the underlying mechanisms by which gamification influences customer behavior, ultimately leading to the advancement of marketing strategies and consumer engagement techniques.

### **5. Previous Research**

Researchers from different disciplines, including marketing, psychology, and computer science, have taken an interest in gamification and consumer behavior research. Pioneering experts such as Kevin Werbach and Dan Hunter, in their landmark work "For the Win: How Game Thinking Can Revolutionize Your Business," lay the framework for understanding the application of game dynamics in non-game contexts and its implications for consumer engagement. Their

## GENERAL INTRODUCTION

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findings about the persuasive power of gamification have prompted additional research into its effects on consumer behavior.

Studies by Juho Hamari and Jonna Koivisto have investigated the psychological mechanisms underpinning gamification and its effects on user motivation and involvement. Their findings have shed light on the significance of intrinsic rewards, social connections, and meaningful experiences in increasing consumer participation and loyalty.

In addition, researchers like Sebastian Deterding have studied the design aspects of gamification, looking at how game components and mechanics influence user experiences and behaviors. Their study has helped to advance the understanding of how components such as points, badges, and leaderboards might impact consumer decision-making and brand interactions.

Furthermore, researchers such as Kai Huotari and Juho Hamari have investigated the moderating impact of individual characteristics on the effectiveness of gamified therapies. Their research underlined the need for personalization and customization when developing gamification techniques that appeal to a wide range of consumer categories.

Overall, academics in this subject have worked together across disciplines to deepen the understanding of the complex interplay between gamification and consumer behavior, clearing the way for novel tactics that increase consumer motivation and involvement.

### **6. Research Methodology**

The empirical research of this work will be conducted through an online questionnaire in a non-probabilistic method of research due to the lack of time and budget to conduct a proper probabilistic survey. The questionnaire will be in Two languages so that respondents can choose the language they're most comfortable using in an attempt to limit misunderstanding of the questions and to provide the most accurate answers possible.

The survey will aim to measure the motivation and involvement of the respondents and their contribution to gamification on these two components.

SPSS version 26 will be used for data treatment and analysis. One-sample t-test , simple multiple regression analysis will be used to test the research hypotheses to then confirm or refute them.

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For the qualitative study, an interview guide will be distributed to four employees in various roles, each with a strong background in the topic at hand. This technique seeks to increase the trustworthiness of the responses and their contribution to the research.

## **7. Research Structure**

The research will be divided into three chapters. The first two will concentrate on the theoretical aspects. Chapter One will cover the principles of gamification in two sections to provide a thorough overview of the subject. The second chapter will focus on two variables: motivation and involvement. The first section will look at gamification's main theories, principally motivational ones, and the second will look at involvement and its relationship to gamification and consumer behavior.

The empirical study will be discussed in the third chapter, which will be divided into three sections. It will begin with a presentation of the hosting organization, followed by an overview of the research approach. Finally, the data analysis of the hypotheses will be seen .

# **CHAPTER 01**

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# **UNDERSTANDING GAMIFICATION**

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## **INTRODUCTION**

Gamification is a concept that has been gaining popularity across several industries, using game mechanics to encourage and engage individuals. Much work has been done in the last few years to better understand the foundations, components, and possible consequences of gamification. In addition to discussing the darker sides and moral dilemmas surrounding its application, this chapter seeks to delve into the principles of gamification by examining its definitions, essential elements, and dynamics.

Gamification has been extensively defined in previous research as the employment of game mechanics and elements in non-gaming situations to influence user behavior and engagement. The components, mechanics, dynamics, and reasons for gamification have all been recognized by academics. These components are essential to creating successful gamified experiences because they affect user engagement and motivation.

Furthermore, there is rising recognition of the possible negative aspects of gamification, even though it presents exciting chances to improve user motivation and involvement. There have been ethical questions raised about gamification activities, namely about privacy, psychological well-being, and manipulation. Designing gamified systems that are acceptable to society requires an understanding of these ethical considerations.

The attention will be shifted to the application of gamification techniques in the second section of this chapter. The functions of psychology and marketing in gamification will be examined, emphasizing how they help create gamified experiences that are both successful and engaging, the idea of the "gameful experience" will be discussed, and it emphasizes how gamification can improve user behavior and overall well-being.

Further, Yu-kai Chou's comprehensive gamification framework will be presented, Octalysis. Octalysis offers an organized method for designing gamification, integrating eight basic drives that influence human conduct. The nuances of these fundamental motivations and the Octalysis strategy dashboard, which provides a useful instrument for gamifying the execution of plans.

To sum up, this chapter provides an in-depth examination of the principles of gamification and the many approaches used to apply them. Researchers and practitioners can create and implement

## CHAPTER 01: UNDERSTANDING GAMIFICATION

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gamified experiences that effectively engage and inspire users by grasping the fundamental ideas and frameworks covered here.

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**SECTION 01: FUNDAMENTALS OF GAMIFICATION**

In this section, an analytical exploration of the phenomenon of gamification will be discussed, a concept that combines gaming elements with real-world applications to amplify involvement and motivation. Commencing with a historical review, the developmental trajectory of gamification is traced, elucidating its evolutionary path from nascent game design principles to its contemporary omnipresence across diverse domains.

Subsequently, a systematic deconstruction of gamification is undertaken, delineating its constituent elements and mechanics with precision. Additionally, various typologies of gamification are examined, ranging from educational platforms to health-oriented applications, elucidating their operational modalities and efficacy. However, this examination is not devoid of critical appraisal; the potential consequences of gamification, encompassing both its adverse effects and ethical quandaries, are confronted. By navigating this nuanced landscape, the aim is to furnish the reader with a comprehensive understanding of gamification, thereby facilitating informed discourse and strategic deployment within academic, professional, and societal realms.

**1.1. Background**

Gamification has become one of the new, emerging methods of working that have resulted from the digitalization of business. Numerous fields, including information studies, education, health, and human-computer interaction, are showing promise for gamification applications.

Interaction, and the business sector—the key focus of this study (Robinson et al. Seaborn & Fels, 2015). In an attempt to stimulate emotions like flow, mastery, and intrinsic drive in order to get the best performance out of an individual, gamification plays to people's natural tendencies (Koivisto & Hamari, 2014). Gamification of processes is an established idea in and of itself.

Yet, there is still a long way to go until gamification is fully incorporated into corporate workflows (Seaborn & Fels, 2015). Other terms that are used in the study that have a similar connotation to "gamification" include "edutainment," "gameful design," "gameful thinking," "games with purpose," and "motivational design" (Domínguez et al., 2013; Studies et al., 2015). In spite of the various interpretations,

Currently, the term "gamification" is used primarily to describe the process of incorporating game aspects into non-gaming contexts (Koivisto & Hamari, 2019). In the realm of business,

gamification has some of the most appealing uses in that its application increases work satisfaction and consumer engagement (Robson et al., 2016a).

These results have been supported by Bahr et al. (2021), who claim that gamification in the context of businesses can have positive effects on employee engagement, morale, productivity, enforced competitiveness, accuracy, and more.

Lastly, the development of talents. Education is not unconnected to business, even if it is seen as a different field. Employee education and training is one of the most popular uses of gamification in business to date.

Additionally, using gamification as a corporate approach might increase overall productivity inside the business (Gerdenitsch et al., 2020). There should be a small word of caution, even though the benefits of gamification appear to be numerous.

Although the term "gamification" is still relatively new, it is already accessible. There is a dearth of academic research. Additionally, research tends to focus on a particular area or use, including health and education (Seaborn & Fels, 2015).

Despite gamification research in these domains producing encouraging results, these findings are unable to simply be applied to the business domain because business is distinct and will likely present different implementation obstacles for gamification. In view of this, there are multiple avenues for future investigation concerning the implementation of gamification in a business environment.

Future research should focus on determining how gamification theory is applied in the actual world of business, discovering any unintended consequences of gamification, and discussing the best gamification design for businesses.

## **1.2. Defining Gamification**

Gamification is the incorporation of game mechanics into a non-game context to create a game-like experience (Deterding et al., 2011). The main aim of creating and integrating gamification into multiple types of services or applications (including customer-oriented applications and online services) is to increase consumer engagement, enjoyment, and loyalty.

Seaborn and Fels (2015) elaborate on this description by introducing two additional components: employing game elements for non-entertainment purposes and obtaining inspiration from games without constituting a fully developed game.



Gamification is an approach to enhancing a service by providing opportunities for gameful experiences to help users create overall value (Huotari & Hamari, 2012).

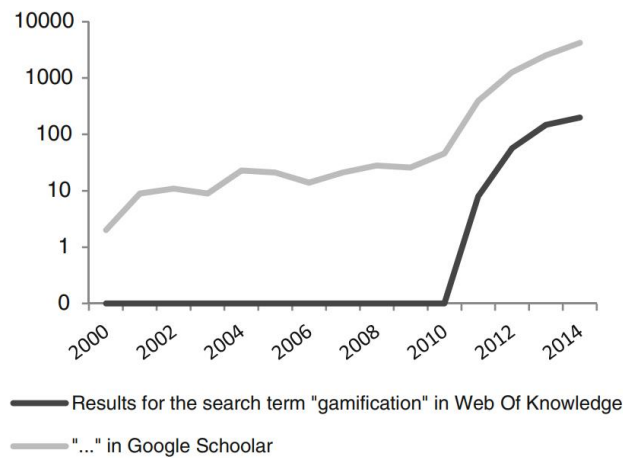
Researchers and professionals have used the phrase funware, which was first described by Zichermann and Linder as "the art and science of turning your customers's everyday interactions into games that serve your business purposes" (Zichermann and Linder 2013, p. 51).

Furthermore, the authors emphasize the potential goal of gamification as serving a business purpose' and argue that gamification can be utilized to achieve a business purpose.

The term "gamification" originally appeared in late 2010, and it has since been enhanced by different business players. Furthermore, being a relatively new emerging research word, gamification is still debated, and many game and user experience designers have developed alternative concepts such as gamefulness and gameful design. Yet it is critical to differentiate between several words that may be related or called in the context of gamification. One of these is the contrast between playing (paidia, 1938) and gaming (ludus,1938), which are two separate types of activities.

According to Caillois, playing comprises free-form, non-rule-based, and emotive actions, whereas gaming is a rule-based, goal-oriented form of play. He defines the game concept as an activity that is voluntary and entertaining, apart from the real world, uncertain, unproductive in that it does not produce any items of external value, and controlled by rules (Caillois 1961).

**Figure 1.1.** Published articles per year according to databases



**Source:** Matallaoui, A., Hanner, N., & Zarnekow, R. (2016). Introduction to gamification: Foundation and underlying theories (p. 4).

In order to improve on the preceding definition of the game concept, McGonigal (2011) proposed four major features a game must have in order to fit into this classification of ludus and paidia:

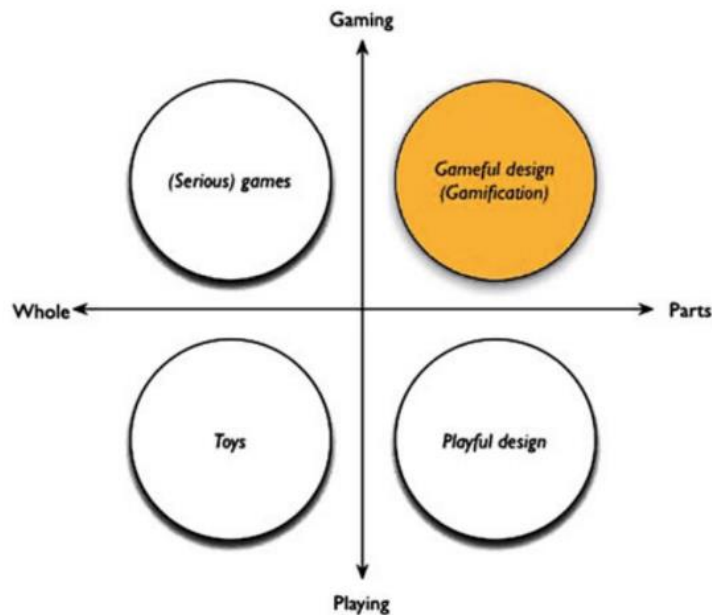
- stated goals that provide players with a purpose for playing the game;
- clearly defined rules that outline the limitations and boundaries of how to achieve the given goals;

- A consistent feedback system that ensures the players that the goals can be reached if the game rules are respected;

- Players have the choice to participate in the game and follow its rules to achieve their goals.

Gamification, according to Deterding et al. (2011), is the implementation of game design features in non-gaming circumstances. This definition distinguishes gamification from other related concepts on two levels. The term "whole versus parts" refers to the extent to which a product or service includes gaming aspects.

**Figure 1.2.** Gamification serious games, toys and playful design



**Source:** Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness (p. 13).

The subsequent table, curated by Mark Klaiber and Michiel de Kok, under the guidance of Tutor Ryan Rumble, offers a comprehensive summary of the principal definitions pertinent to Gamification.

**Table 1.1.** Overview of the definitions for gamification

<b>Authors:</b>	<b>Field:</b>	<b>Definition of gamification</b>
(Deterding, 2015)(Deterding, 2015)	Human-computer interaction	"... <i>gamification, the use of game design elements in non-game contexts.</i> "
(Huotari & Hamari, 2017)	Service marketing	"... <i>the process of enhancing a service with affordances for gameful experiences in order to support users' overall value creation.</i> "
(Robson et al., 2015)	Business	"... <i>the application of lessons gathered from the gaming domain into a non-game environment.</i> "
(Seaborn & Fels, 2015)	Human-computer studies	"... <i>the intentional use of game elements for a gameful experience of non-game tasks and contexts.</i> "
(Kapp, 2012)(Kapp, 2012)	Education, leadership	" <i>game-based mechanics, esthetics and game thinking to engage people, motivate action, promote learning, and solve problems.</i> "
(Mendiola et al., 2015)	Health	" <i>feature that offers points, badges, or movement through levels as a health objective is achieved or the more a patient is engaged.</i> "
(Brown et al., 2020)	Education, Health	" <i>The application of game design elements to engage and motivate users.</i> "
(Schmidt-Kraepelin et al., 2020)	Economics and management	" <i>overall proliferation of games in culture, society, and technology</i> "

**Source :** Klaiber, M., & de Kok, M. (2022). Gamification use intention (p. 16).

In this framework, researchers have constructed their own definitions of the gamification concept, primarily based on the application domain and the contribution of strategy. From a personal standpoint, I believe that gamification encompasses all strategies used to promote a product or service while eliciting positive psychological effects on consumers, all within a context of enjoyment and enhancing the brand experience.

### 1.3. Types of gamification

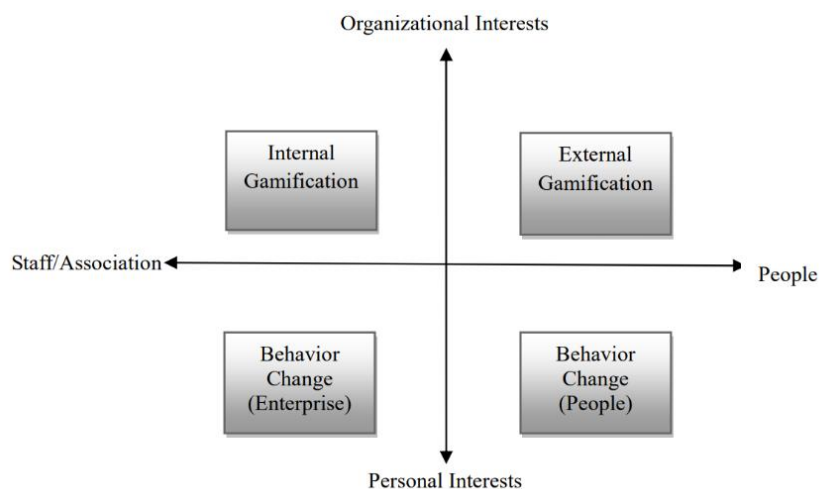
There are three ways that gamification can be applied in non-gaming situations: internal Gamification; external Gamification and behavior Change Gamification (Werbach & Hunter, 2012). "Enterprise gamification" is another term for internal gamification. Techniques of game design may additionally be employed by small businesses to increase productivity.

This insight highlights two key points: first, players are an integral element in every organization; in fact, the organization identifies its players, and these individuals engage with one another according to predetermined principles. Second, systems for rewards and current management in an organization must interact with gamification-motivating frameworks.

External gamification targets both present and prospective users and participants. This is frequently associated with the marketing objectives of the company. Gamification serves as a strategy in this instance to enhance user-provided service relationships. It also means that it will eventually boost an organization's efficiency by increasing player engagement and loyalty.

Gamification of behavior change aims to establish in target audiences new, beneficial habits. This comprises everything that could make people's lives better. Overall, these new behaviors result in positive social outcomes such as decreased obesity, lower healthcare costs, improved system efficiency in schooling, and enhanced financial decision-making. Governments and charitable organizations have also endorsed the use of gamification to improve behavior.

**Figure 1.3.** The relationship between various steps of gamification



**Source :** Klaiber, M., & de Kok, M. (2022). Gamification use intention (p. 13).

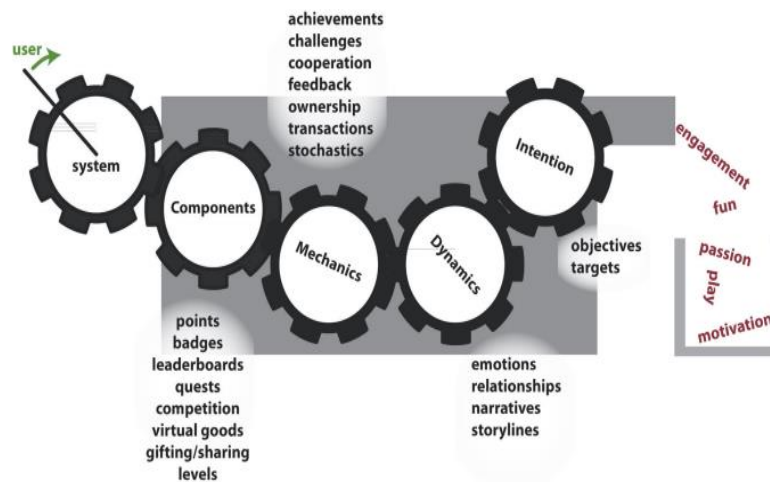
## 1.4. Elements of gamification

One of the most popular misconceptions about gamification is that it is as simple as integrating points, badges, or leaderboard-based systems (PBLs) into existing activities.

However, by incorporating these aspects into existing processes, particular user behaviors can be affected and modified. This is no assurance that the intended behavioral change will be achieved.

For example, leaderboards often show a snapshot of the most recent results. While an additional round with an empty leaderboard and equally skilled participants is likely to result in healthy competition, an unbalanced group or pre-existing perfect scores may have an unintended effect of preventing entrants due to the substantial gap between the leaders. As a consequence, the various components and mechanisms must be adequately created and planned so that they complement the design dynamics of the company.

**Figure 1.4.** Key Elements of Gamification



**Source:** Khosrow-Pour, M. (Ed.). (n.d.). Encyclopedia of Information Science and Technology (3rd ed., p. 11). Information Resources Management Association, USA.

These dynamics must be linked with significant business operations and desired results. The following presentation of 'components', 'mechanics', and 'dynamics' is based on the framework by (Werbach and Hunter, 2012).

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### 1.4.1. Components

The system's aim and purpose, the target user group, and the involved software tools all affect the component selection process. However, implementing the devious use of these components to properly meet the designer's goals is more difficult and requires thoughtful consideration. The initial leaderboard may be disappointing because the way to the top ranks is out of sight. Introduced handicaps take into account skill and experience levels, allowing beginners to take on experts while also motivating them to decrease their handicaps.

Alternatively, direct comparisons might be made with opponents who share direct (social) relationships, such as colleagues or friends. Instead of challenging everyone on the leaderboard above your standing, only the next known opponent on the list receives consideration for improvement. A comparable solution may be to display the next known person down the list, together with the gap and an estimate of when the person will reach the top on the leaderboard, thus tackling engagement and motivation to stay ahead.

- **Points:** For monitoring and providing a summary of success.
- **Badges:** To indicate accomplishment and pre-defined achievements, badges are flexible and can be used alongside leaderboards to measure success. The possible badges are often known ahead of time to encourage users to achieve personal goals without competing directly.
- **Leaderboards:** to illustrate users growth and relative success in contrast to their opponents.
- **Quests:** Whenever a user completes a task in order to achieve a particular objective with the expectation of a reward, Quests are defined by objectives (which may include waypoints or milestones) that should be specific, understandable, and brief.
- **Competition or challenge:** between two users who try to compete with one another.

### 1.4.2. Mechanics

The mechanics are significantly more abstract than the components, and they frequently refer to the continuing nature of how certain components grow over time or how users interact with the framework. The mechanics are notions that define probable user actions and states, particularly guidelines that determine how the game advances, what reactions are available to an occurring

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event, and what affects the user's behavior in what ways. The following list illustrates several potential game mechanics:

- Achievements are goals for users that signify storyline landmarks. Achievement might be the completion of a product, an activity over a specific time period, or the gathering of a number of resources. A badge of honor can be used to recognize a successful achievement.
- challenges that require user effort, such as riddles or additional tasks. Challenges are defined by an array of objectives that must be met.
- Collaboration between users to achieve a purpose that is not feasible alone, such as building heavy machinery.
- Feedback, given via leaderboards, notifications, or other visual or informational gadgets to allow a user to assess their performance and promote additional actions.
- ownership of resources that can be purchased, used, or exchanged.
- Storyline progression, including an outline of the user's progress through an activity.
- Progress can be generated to keep the user from feeling dissatisfied when they are uncertain about what to do. This can be accomplished through suggestions, environment modifications, or proactively executing the activity for the user.
- Transactions that allow users to exchange resources.
- stochastic components, in which unpredictability and chance provide a sense of uncertainty and enjoyment.

The advantageous integration of mechanics includes the availability of feedback, algorithms for analysis, and comparison of results to objectives, all of which may quantify progress and success. Furthermore, the algorithms must respond instantly or extremely quickly in order to easily facilitate the system's gamification, demonstrating a high necessity for an effective information system to support the gamification process.

### 1.4.3. Dynamics

The dynamics are the subsequent behaviors and interactions between users that are motivated by the components and mechanics stated. They are determined by the users traits and prior experience. The introverted user with a fear of risk behaves differently from someone who enjoys exploring risky scenarios, such as risking a long game period shortly before accomplishing an objective to gain some rewards. Hence, the design of game dynamics must consider users qualities, which must be updated as they expand through the gamified system.

- Emotions experienced by users include a sense of curiosity or competitiveness, which can be taken advantage of or generated to meet system goals.
- Relationships are interactions that create emotional bonds in users, such as solidarity and status.
- Narratives and stories are elements taken directly from many successful video games. They provide an ongoing and appealing visual that gives purpose and meaning to user interactions and adventures (Reiners, Wood, & Dron, 2014).
- The plot progresses through several stages or levels.

#### **1.4.4. Intention**

Gamification needs to take place within a larger framework, with specific results that the system creators hope to encourage and support. In businesses, this may be primarily connected to revenue, customers, or the use of specific internet tools. Social engagements might entail people physically visiting an establishment or joining in more chats. The objectives, resulting in the desired main outcomes, must be clearly defined in advance. Failure to do so may result in the development and rollout of various game-based components that encourage some users to become more engaged inside a specific portion of the system while pushing other users away or prohibiting others from participating in the system.

#### **1.5. The disadvantages of gamification**

Although the majority of recent studies have focused on the positive effects of gamification, it is essential to keep in mind that every coin has two sides, and gamification is no exception. Besides the positive aspects, some negative components have been linked to addiction, unhealthy competition, and off-task behavior (Toda et al., 2018). When designing a game or platform that uses gamification techniques, one of the primary goals is to keep people in a state of "flow." This state of deep concentration, termed "optimum experience flow," happens whenever users become so preoccupied with their tasks that they lose track of time and self-awareness.

According to the findings, flow feelings given in gamification might be considered an addictive component, raising serious concerns in gamified contexts. This happens as users shift their focus from learning to other components supplied by the system, such as points and rewards.

Toda et al. (2018) acknowledge that terrible design features contribute to a higher state of flow and distract from gamification's primary goal. In addition, Marczewski (2017) contends that



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gamification can become immoral when random rewards are used to create addictive experiences with the primary goal of tricking users into performing tasks that are not in their own best interests.

Unhealthy competition is another sensitive topic that has been identified as one of the main criticisms of gamification. For example, leaderboards are an ordinary instrument for boosting competitiveness and have been linked to unfavorable outcomes.

In this context, Toda et al. (2018) revealed in their study that users with low performance and self-efficacy are motivated to compete with top users, affecting their sense of competence and decreasing engagement and interest. When exploring off-task behavior, the application of gamification, particularly in the educational sector, can be a distraction for consumers. One example is the introduction of resources that are not helpful to the learning experience and may potentially lead to immersion in repetitive duties (Toda et al., 2018).

Markopoulos et al. (2015) completed a literature analysis in the educational area and discovered that poorly designed gamification applications can reduce an individual's natural desire to learn. When it comes to gamification ethics, the primary point of contention is who should be considered accountable for how users utilize the system and whether or not that responsibility begins and ends with the layout of the system.

The matter has been widely explored in academic literature; however, no mutual agreement has been reached because definitions of ethics in gamification vary depending on the perspective and context in which they are used. Chou (2019) claims that in order to assess the ethics of human-focused designs, two questions must be answered with a "yes." "Is the design's intended function clearly stated? Additionally, "does the user implicitly or explicitly opt into the system?" (p. 355). He goes on to say that deceptive claims, a lack of genuine transparency, and reclining are the most common precursors to unethical encounters. In the opinion of Marczewski (2019), the primary discussion point is the system's ability to provide consumers with options to choose from.

## **1.6. Ethics in gamification**

Based on a strategic and organizational standpoint, 'excellent' gamification is successful gamification. The firm provides an engaging experience to achieve the intended behavioral outcome. In marketing, a successful outcome is often associated with economic gain for the business, which might involve targeted users purchasing more of the firm's products or services.

Although users are aware of their involvement, the gamification process nonetheless includes significant buried action. Users might be unaware that aspects of the experience have the goal of influencing behavior, for example. Indeed, these forces function effectively when they are as inconspicuous and undetectable as possible. Also, corporations may purposefully conceal the desired consequence from users.

From a consequentialist point of view, the ethics of the total system is decided by the relative number of individuals who fall into a pair of separate categories: users and those affected by the intended outcome (shareholders, employees, host communities, etc.).

Enhanced revenue, for example, could result in favorable outcomes like profit sharing, increased stock value, or individual career progress. While such benefits might not balance the 'cost' to consumers, the principle of doing the best for the most people remains crucial. As a consequence, if the amount of 'good' for stakeholders exceeds that for users, covert persuasion and an indirect purpose are not only true but also represent the most ethical course of action: tricking a comparative few to benefit the majority is more ethical.

The problem is that, based on consequences, ethical decisions are dependent on expected outcomes (Sidgwick 1907). Organizations are currently failing to fully realize the promise of gamification. They frequently believe design components are empirically unsupported. They focus, for instance, on user or 'player' typologies that have lost trust (Deterding 2015).

However, progress is accelerating, suggesting that 'how-to' templates are in flux and will remain so as businesses respond to an increasingly engaged body of research to improve the persuasive power of gamified systems.

Presently, this unpredictability renders forecasting outcomes difficult and devalues a consequentialist perspective, as businesses can only assess the largest benefit for the greatest number subsequently, and even then only numerically. Deontologists are those who reject both the quantitative and qualitative basis of 'good' as justifications for harm. This would include gamification fraud. What is 'just' and 'good' are identical, and moral judgment is focused on the means to an end (Kant, 1785/2005).

Furthermore, a company can avoid dishonesty entirely while preserving the potential for increased sales by using other, more transparent techniques, such as repositioning its brand, adjusting its pricing strategies, or investing in R&D. Developing basic standards that specify acceptable restrictions simplifies any policing efforts. Yet, it removes the individual's moral obligation. For virtue ethics, this is a concern.

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Individuals throughout firms each define their own moral framework, which varies in the level of features such as wisdom, fairness, and honesty. Moral action should be dictated by them, not by generalizable principles. The emphasis on uniqueness reminds us that various people perform different roles in the 8-step gamification creative process, which includes the initial choice, design, implementation, evaluation, and further stages.

In conclusion, the exploration of gamification has revealed a complex interplay of historical evolution, structural components, and diverse applications. From its humble beginnings rooted in game design principles to its pervasive presence across various domains, gamification has emerged as a powerful tool for enhancing engagement and motivation.

By dissecting its core elements and mechanics, insights into the underlying mechanisms driving user behavior and interaction have been gained. Moreover, the examination of different types of gamification has showcased the versatility and adaptability of this approach across educational, health, and other contexts.

However, the inquiry has also underscored the importance of considering the potential pitfalls and ethical implications associated with gamification, urging for responsible implementation and critical evaluation. Moving forward, a nuanced understanding of gamification will undoubtedly inform future research and practice, guiding efforts toward maximizing its benefits while mitigating its risks.

To sum up, section one has presented a thorough examination of the principles of gamification, providing significant insights into this dynamic notion. Starting with a contextual background, the historical evolution and significance of gamification were contextualized across multiple disciplines. The specific description of gamification sheds light on its basic concepts and objectives, paving the way for a deeper examination. Studying gamification's components, mechanics, dynamics, and underlying intents resulted in a more comprehensive understanding of its structure and functionality.

Furthermore, a thorough examination of potential disadvantages highlighted the need to properly handle obstacles. Ethical considerations underlined the importance of following responsible practices when applying gamification tactics.

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## SECTION 02: GAMIFICATION IN BUSINESS

In this section, research into how gamification intersects with marketing, psychology, and strategic frameworks will be conducted. We commence by examining the Role of Marketing in Gamification, uncovering how gamified strategies are tactically utilized to enhance brand engagement and customer loyalty.

The role of psychology in Gamification will be seen next, exploring the psychological mechanisms that drive user motivation and behavior within gamified contexts. Additionally, the effects of demographics on the interaction of consumers with gamified activities will be explored. the concept of the gameful experience, where elements of play seamlessly integrate into daily interactions to foster intrinsic motivation and sustained engagement will be discussed.

Finally, an introduction to the Octalysis framework, a seminal model by Yu-kai Chou, which identifies eight core drives influencing human behavior in gamified environments. Through this comprehensive analysis, the aim is to provide a nuanced understanding of the diverse dimensions of gamification and its significant implications for marketing strategy and user engagement.

### 2.1. Role of marketing in gamification

Implementing a gamification strategy necessitates an in-depth knowledge of marketing fundamentals such as brand management, customer acquisition, and user engagement. As a product manager, you must collaborate closely with marketing teams to ensure that products are released and advertised to optimize user acceptance and market share.

As the product manager who leads the vision and knows consumer's difficulties, gains, and motivations, you should be the key to unlocking the marketing team's communication potential. You might apply the message to address the user's pain points or motives; explain how the game mechanics function and why people are inclined to use them.

Marketing is crucial for the success of a gamification strategy due to how it promotes the product and motivates people. Gamification relies heavily on marketing to increase user acquisition and engagement while also promoting the product's unique features and benefits.

User acquisition is one of the most significant ways that marketing may assist a gamification approach. Marketing can increase awareness and interest in a product by promoting its gamified elements via specific promotions, social media, and other channels. Your marketing plan matters in the early stages of a product launch when creating an initial user base is essential.

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In addition to user acquisition, marketing is able to help consumers stay engaged with the product by promoting ongoing gamification events and features. For example, through advertising challenges, leaderboards, and incentives, marketers can encourage consumers to maintain their use of the product and interact with its gamified features. Focusing your marketing effort on the enjoyable features of your game mechanics may increase user retention and encourage ongoing involvement with the product.

Brand building is an additional vital component of marketing in a gamification approach. Marketing may help set up the product's brand by promoting its gamified components and unique attributes, resulting in a strong and engaging reputation that connects with users. The strategic promotional focus can help to differentiate the product from competitors and establish a loyal user base that is inclined to remain with it over time. Remember that you, as the product manager, are also the brand. So what you do on social media impacts the brand of the product you promote.

Marketing can also collect consumer feedback on gamification strategies and product features. Product executives can enhance their gamification strategy by partnering with the marketing department to track user feedback and sentiment. The findings from this collaboration clearly show areas in which product executives could improve the existing gamified experience or add new features. Marketing can share this information with the product development team to help guide future iterations and improvements.

Finally, marketing may assist in measuring important metrics such as user engagement, acquisition, and retention. Monitoring these indicators allows companies to assess the success of their gamification strategy and make data-driven decisions about how to alter and optimize it over time.

## **2.2. Role of psychology in gamification**

Psychology is the brain beneath gamification. It is the most important skill to understand when to create a gamification strategy. When you begin to learn about your users' psychology, the ability to understand the concepts of persuasion and influence and be able to incorporate these principles into the product design and experience to drive user engagement and acceptance ethically.

When interacting with marketing and advertising teams, the must to be acquainted with the subtle art of persuasion is primordial. One of the best books on the subject is Robert B. Cialdini,

Ph.D.'s Developing Influence, which is deeply referenced and taught in product management and consulting. The six main ways that people are impacted are as follows:

- **Reciprocity:** According to the principle of reciprocity, people are more inclined to comply with requests if they receive something of value first. In simple terms, if you do something for someone else, they are more likely to return the favor.

- **Authority:** according to this concept, people are more likely to comply with requests or demands from someone they perceive as an authority figure. This figure could symbolize someone with certain knowledge, experience, or qualifications.

- **Commitment and consistency:** implies that people are more likely to comply with requests or demands if they have previously fulfilled an agreement or taken a position consistent with the request. For example, if someone has previously made a minor commitment to a cause or idea, they are more likely to make more of an effort in the future.

- **the social proof principle:** individuals are more likely to fulfill requests if they observe others doing the same. In simpler terms, the acts and attitudes of others impact people's decisions to take or not take specific actions.

- **Liking:** This concept says that people are more likely to comply with requests from people they like or find beautiful, which is why the influencer position is popular on social media. This "influencer" could be someone who is similar to them, has praised them, or has built a rapport with them.

- **Scarcity:** According to the concept of scarceness, individuals are more willing to comply with requests if they perceive an opportunity as rare, unusual, or precious. In general, people are motivated to act when they believe they have to scoop up something desired or limited in availability.

As a whole, these six fundamental tendencies reflect the main methods by which people are influenced and persuaded into complying with requests or demands. Understanding these patterns allows individuals to come up with more successful techniques for persuasively persuading others, which leads to the fundamental objective of developing a gamification strategy: motivation.

### **2.3. Effect of Demographics**

The current research on the effects of demography on the adoption of technology and system usage intentions indicates that differences exist based on age and gender. Furthermore, gameplay

research has studied and identified potential changes in gameplay behavior due to user factors such as demographics (Koivisto and Hamari, 2014; Williams & Caplan, 2008).

Yet, the effect of demographics (i.e., gender and age) on usage intentions was neglected in basic applicable theories such as TAM. The absence of relevant, well-founded hypotheses in this context creates a research gap for scholars. According to the empirical studies on the adoption of technology and gameplay behavior detailed in the following paragraphs, two significant demographics, namely age and gender, appear as prospective factors influencing use intentions and behavior.

Given the disparities in technology adoption between older and younger users, as well as the differences in game behavior between the two genders, it is logical to expect gender and age group differences in gamified systems that incorporate game features and new technologies.

The next paragraphs present appropriate research and their conclusions to shed light on potential disparities between males and females, as well as age groups. Currently, the younger population has been exposed to new technologies and digital mediums at a young age, resulting in a digital divide between generations (Morris & Venkatesh, 2000).

Older users have lower acknowledged knowledge of technology; hence, simplicity of use is of greater significance to them when evaluating a system's utility. Various studies found that perceived system usefulness was more relevant for younger users than older individuals in determining usage intentions (Venkatesh, Morris, Davis, & Davis, 2003).

Furthermore, social influence was thought to have a greater impact on older users' intents than on younger internet users. The literature also contains contradicting results in studies wherein age had no noteworthy impact on the simplicity of use or effectiveness of systems of information.

Current research reveals gender variations in the adoption of technology and the use of computers. In an information systems setting, it has been demonstrated that men's behavioral intentions are more significantly affected by the usefulness of technology than women's (Venkatesh & Morris, 2000). Women, on the other hand, are more interpersonally oriented and vulnerable to societal factors than men. Gender disparities in gaming behavior have also been identified by research.

A lower ability might help explain why simplicity of use was discovered to have been more influential in women's information technology utilization (Venkatesh & Morris, 2000). However, inconsistent data exist regarding this distinction as well. Nysveen et al.'s (2005) study on individual reasons for media consumption found no gender differences in ease of use.

In line with research on technology adoption, studies on game-play behavior show disparities among genders. Women are mainly driven by social considerations and immersion, whereas men are more achievement-oriented (Koivisto & Hamari, 2014; Williams et al., 2008). Furthermore, gender has been shown to moderate game addiction and gaming behavior.

#### **2.4. The gameful experience**

The gameful experience is a customer-engagement experience that includes structures and regulations typically associated with games (Huotari and Hamari 2017). These frameworks and constraints limit the resources that the client can use to achieve established objectives. Gamification frameworks and regulations make it difficult to achieve goals by limiting the resources that customers can use (Malone, 1981). This uncertainty creates a stressful environment for clients (Anselme 2010). As a result, customers tend to take action and invest resources in order to decrease stress and gain control of the situation (Costikyan 2013).

Customers appreciate having control over an uncertain situation (Anselme 2010). Customers can create actions, emotions, and interactions connected with games, referred to as gameplay, to meet the structures and regulations, as well as their associated resource constraints (Berger et al., 2017; McGonigal, 2011). Each player gets a unique gameplay experience (Medler, 2011).

Within a contest, players may feel challenged as they seek to achieve a specific goal, but they can additionally feel socially integrated as they compete against or work alongside other players. Although techniques, structures, and rules established by designers can influence gaming, it is still subjective and derives from individual experiences (Huotari and Hamari 2017; Robson et al. 2015).

Hence, while gameplay has been researched in the setting of video and typical games, it also occurs in nongame contexts, such as marketing, in which clients encounter uncertainty when engaging with technologies, companies, or peers (Zichermann and Linder 2013). For example, while participating in an innovation contest within an online community, competitors may submit well-designed solutions without first considering comments or expected feedback from the community.

In this regard, they see community members as possible competitors. Other participants, on the other hand, will propose revised ideas and invite community members to collaborate on their projects with the expectation of benefits.



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As a consequence, when challenged with a similar gamification mechanism, such as a contest, some participants will compete while others will cooperate. Their experiences will turn out very differently. Previous research has highlighted that customer gameplay contributes to genuinely rewarding experiences through better cognitive absorption.

Cognitive absorption refers to an individual's intense focus on an event they are experiencing. It has been considered a great approach for understanding the high levels of involvement associated with games through the incorporation of the five elements of temporal distortion, focused immersion, intrinsic delight, control, and curiosity.

Time distortion is the inability of customers to recognize the passage of time while interacting with the focal object. Focused immersion relies on customers' complete engagement, neglecting other attentional demands. Intrinsic happiness describes the pleasure brought about by the interaction. The control component emphasizes customers' perceptions of being in control of the interaction.

Finally, curiosity is defined as the degree to which an event piques sensory and cognitive curiosity (Malone, 1981). Combining the voluntary aspect of playing games with the structures that games provide, gameplay generates a gameful experience that supports the five traits of cognitive absorption—time distortion, focused immersion, intrinsic delight, control, and curiosity. Thus, the term 'gameful' refers to an experience in which clients play within structures and rules to achieve a certain goal (Koster 2013).

Playing involves not only immersion and pure joy but also a sense of freedom that fosters curiosity and temporal distortion (Malone 1981). The frameworks and rules-related components provide customers with a sense of control over the situations they face (McGonigal 2011).

Designing a game full experience with an appropriate balance of control and perceived uncertainty produces a state known as 'flow', which refers to total immersion in an activity to the point where any additional concerns are pushed to the periphery of consciousness (Berger et al. 2017; Csikszentmihalyi 2014). Customers in a state of flow feel simultaneously happy and cognitively efficient.

Gamification's intrinsic enjoyment and cognitive efficiency have a corresponding impact on customer emotions and satisfaction. These result in the kind of experiential engagement referred to as true love (high emotion/high satisfaction), indicating the highest level of engagement, i.e., the feelings and experiences of customers who are interested in the relationships they establish and keep with focal items.

## 2.5. Octalysis- Gamification framework

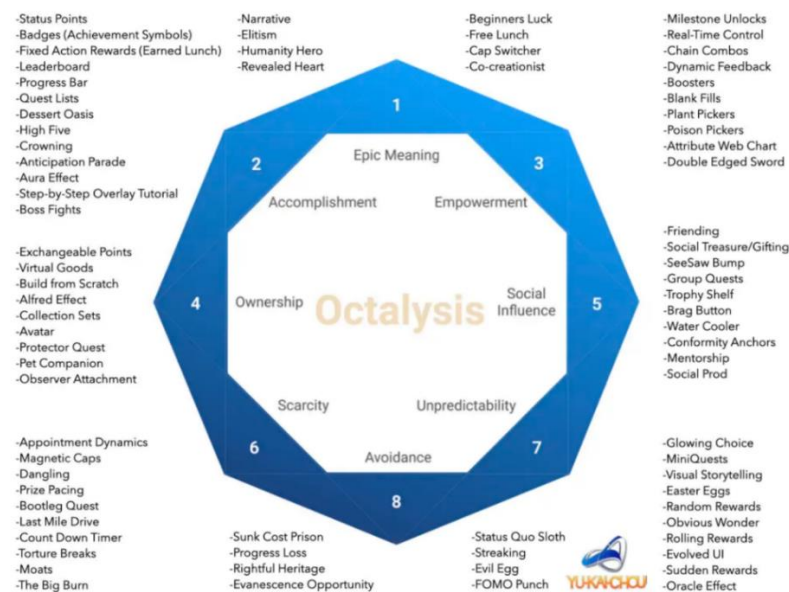
This section presents an informal overview of the Octalysis framework, based on a literature review. Yu-Kai Chou was in charge of building an extensive structure for gamification that included all the components of gamification.

Octalysis refers to the main drivers and elements that make up gamification, represented by 8 main drives on each side having an octagonal shape.

He states "Since games have spent decades learning how to master motivation and engagement, we are now learning from games, and that is why we call it gamification." (Chou 2015) This paradigm puts the user's motivation at the center of the design. (Copens, 2014). According to him, gamification is a design that focuses on human motivation throughout the process.

In essence, it provides a human-focused design. The strategy is based on an octagon shape, with each side corresponding to eight core drives: epic meaning and calling, development and accomplishment, creativity and feedback, ownership and possession, social influence and relatedness, scarcity and impatience, unpredictability and curiosity, and loss and avoidance.

**Figure 1.5 . Octalysis Framework**



**Source:** <https://yukaichou.com/gamification-examples/octalysis-complete-gamification-framework/> (20/04/2024 ,01:00)

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### 2.5.1. The eight-core drives by Yuki Chou

**Core Drive 1: Epic Meaning and Calling:** The following is the Core Drive in which a user believes they are achieving something greater than themselves or that they have been "chosen" to perform something significant. Great instances of CD1 in action are when a user invests time in maintaining a forum (Wikipedia) or when a user contributes to an entire community (Open source projects) without expecting any sort of recompense.

**Core Drive 2: Developments and Accomplishment:** is the drive within to make progress, acquire skills, and eventually overcome obstacles. The word "challenge" is crucial in this context, as a badge or prize without a challenge is pointless. This is also the easiest fundamental drive to design for, considering it is where the majority of PBLs (points, badges, and leaderboards) focus.

**Core Drive 3: Empowerment of Creativity and Feedback:** This happens when users engage in a creative process that requires them to continuously figure things out and attempt alternative combinations. People demand not only opportunities to express their creativity but also the ability to observe the consequences of their creativity, receive feedback, and respond in turn.

**Core Drive 4: Ownership and Possession:** This is the drive that motivates users because they assume they own something. When a player feels ownership, they have an intrinsic desire to improve what they own. Besides being the primary motivator for accumulating money, this deals with a variety of digital goods or currencies within systems. In addition, if a person spends a significant amount of time customizing their profile or image, they will experience a greater sense of ownership over it. Finally, this is the driving force behind the enjoyment of collecting stamps and puzzle pieces.

**Core Drive 5: Social Influence and Relatedness:** This drive encompasses all of the social components that motivate humans, including mentorship, acceptance, social responses, fellowship, competitiveness, and envy. When you see a friend who excels in talent or has something extraordinary, you are motivated to achieve the same level. It also encompasses the need to connect with people, places, or events. If you find a product that makes you nostalgic for your childhood, you are more likely to buy it. This Core Drive is also reasonably widely studied, as many businesses today prioritize optimizing their online social strategy.

**Core Drive 6: Scarcity and Impatience:** This is the desire to want things that you can't have. Many games use appointment dynamics (come back in 2 hours to collect your prize); the fact that individuals can't get something right away induces them to think about it all day. This is the Core

Drive that Facebook used when it originally launched; it was primarily for Harvard. Then it expanded to include a few more famous schools, and eventually all colleges. When it finally went open to the public, many people wanted to join because they had previously been denied entry.

**Core Drive 7: Unpredictability and Curiosity:** Generally, this is a pleasant desire to find out what happens next. If you don't know what's going to happen, your brain is engaged, and you think about it frequently. This impulse motivates many people to watch movies or read novels. However, this urge is also the primary cause of gambling addiction. In addition, this fundamental drive is used when a corporation runs a sweepstakes or lottery program to engage users. The highly contentious Skinner Box tests, in which an animal repeatedly pulls a lever due to unexpected results, are exclusively about the basic drives of predictability and curiosity.

**Core Drive 8: Loss and Avoidance:** This core drive is motivated by the desire to stop something unfavorable from happening. On a smaller scale, it may be to avoid losing earlier work. On a bigger scale, it could be to avoid admitting that all that you've accomplished up to this point was pointless since you're quitting. Also, possibilities that are fading have a high utilization of this Core Drive, since people believe that if they do not move swiftly, they will lose the opportunity to act forever.

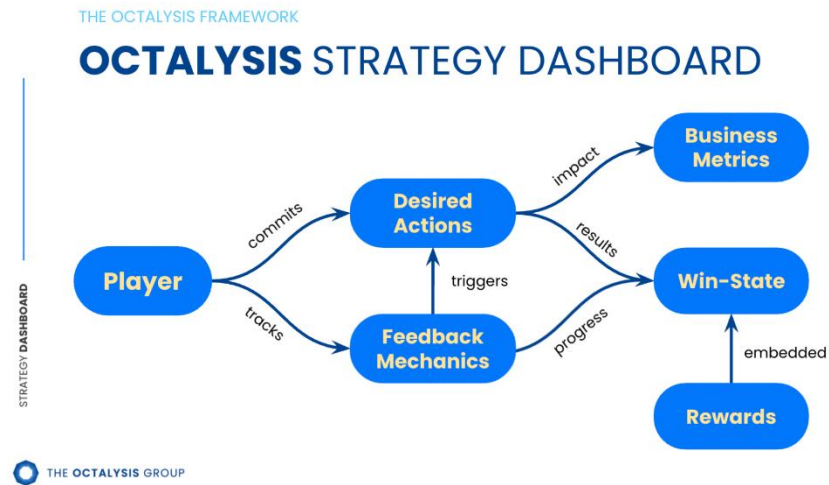
### **2.5.2. Octalysis Strategy Dashboard**

Octalysis Strategy Dashboard. In his book, *Actionable Gamification Beyond Points, Badges, and Leaderboards*, Chou states "that at the beginning of every gamification campaign, the first thing to do is define five items"(Yu-Kai Chou.2015):

- Business metrics lead to game objectives ;
- Users lead to players;
- Desired actions resulting in win-states;
- Feedback Mechanisms That Lead to Triggers;
- Incentives lead to rewards.

All of these individuals come together to form the Octalysis Strategy Dashboard:

Figure 1.6. Octalysis Strategy Dashboard



**Source:** <https://yukaichou.com/gamification-study/the-strategy-dashboard-for-gamification-design/> (20/04/2024 ,02:52)

To summarize, this section has offered a thorough review of the many aspects of gamification strategy in business. The critical roles of marketing and psychology in using gamification to increase customer involvement and promote desired behaviors have been discussed. Furthermore, the impact of demographics on the effectiveness of gamified interventions, underscoring the necessity of recognizing and appealing to different customer groups was examined. Furthermore, the concept of a gameful experience was discussed, emphasizing the need to design immersive and enjoyable interactions for users. Finally, the Octalysis framework, explains Yu-kai Chou's eight key motivations and how the Octalysis Strategy Dashboard can be used to create appealing gamification strategies.

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## CONCLUSION

Eventually, a thorough analysis of gamification's foundations will reveal its complex structure and wide-ranging effects on user interaction and experience design. Over the course of this research, we have examined a number of gamification-related topics. To put its rise in the larger context of digital interaction, we began by deeply examining the history of the notion.

An essential component of the research was defining gamification, which offered a conceptual framework for outlining its main goals and principles. This fundamental knowledge is essential for clarifying how gamification mechanisms affect user behavior and enabling the creation of techniques that increase motivation and engagement.

Furthermore, researchers also looked into the fundamentals of gamification, such as its complex dynamics, underlying goals, and intricate mechanics. By analyzing these crucial elements, they were able to learn more about the psychological foundations that influence user responses and the mechanisms underlying gamified experiences.

However, as the examination of gamification's darker sides made clear, it is critical to recognize the intricate interplay and possible hazards that come with it. A detailed comprehension of these obstacles is necessary for appropriate implementation and practice, including addiction issues and ethical considerations about user manipulation.

In the not-so-distant future, gamification techniques will present both practitioners and marketers with exciting options. Through the application of knowledge gained from behavioral economics and marketing psychology, they are able to create experiences that deeply connect with users, encouraging long-term engagement and brand loyalty.

Moreover, the term "gameful experience" offers a persuasive paradigm shift in experience design, emphasizing the significance of developing gratifying and pleasurable interactions that draw in and motivate users.

Ultimately, it turns out that the Octalysis framework is a useful analytical tool for dissecting and applying gamification tactics. Through the clarification of the eight fundamental motivational drivers and the use of strategic frameworks, including the Octalysis Strategy Dashboard, professionals acquire significant knowledge for creating engaging experiences that align with user preferences and motivations.

In summary, the study of gamification principles and tactics highlights the transformative power of gamification in influencing user behavior and improving the overall experience. The use

## CHAPTER 01: UNDERSTANDING GAMIFICATION

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of gamification principles is set to transform engagement and interaction across several domains as the changing landscape of digital is traversed interaction, opening the door to a more impactful and immersive user experience.

# **CHAPTER 02**

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# **MOTIVATION AND INVOLVEMENT IN GAMIFICATION**



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## INTRODUCTION

In an era of technology where attention is a valuable commodity, understanding what motivates people to interact with materials and systems is essential. Gamification, an emerging field at the crossroads of psychology, technology, and design, depends on the motivation behind user actions to ensure effective implementation.

This chapter looks into the theoretical foundations that support the motivating dynamics observed in gamified experiences. From fundamental concepts of motivation theory to subtle examinations of user engagement, research is conducted to understand what drives people to participate, remain, and prosper in gamified environments.

In the beginning, motivation theory will be explored, specifically the distinction between intrinsic and extrinsic motivation. From there, a study of the diverse landscape of self-determination theory, including the Theory of Basic Psychological Needs, Organismic Integration Theory (OIT), Cognitive Evaluation Theory (CET), Causality Orientations Theory (COT), and Goal Content Theory (GCT). These frameworks provide a complete lens through which to study the various motivational variables that influence human behavior in gamified contexts.

Following this study, the taxonomy of player types will be presented, which sheds light on the various identities that arise inside gaming communities. Furthermore, the complexities of achievement goal theory, providing insights into how goals affect behavior and drive performance in gamified systems will be discussed.

Finally, user experience, including flow theory and its implications for developing immersive and engaging experiences will be analyzed. Understanding the relationship between motivation, involvement, and user experience lays the framework for successful gamification tactics that fascinate and inspire users.

The mutually beneficial link between motivation and involvement, revealing how gamification acts as a catalyst for developing meaningful interactions between users and digital platforms.

The impact of gamification on consumer involvement, dissecting its effects on consumer behavior, brand loyalty, and overall satisfaction will be seen. Through empirical evidence and theoretical insights, the nuanced dynamics that govern the relationship between gamification and consumer engagement will be clarified, offering practical implications for marketers and designers alike.

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## SECTION 01: MOTIVATIONAL FOUNDATIONS: THEORETICAL FRAMEWORKS IN GAMIFICATION

Understanding what motivates people to participate in activities and persist in their efforts is critical to the research on motivation. Motivation is an important aspect of influencing how and why people pursue specific activities, persevere in their efforts, and attain their objectives. In this section, numerous motivation theories and their applications will be discussed, including a thorough examination of intrinsic and extrinsic motivators, as well as the Self-Determination Theory (SDT) and its components. This section also looks at diverse player types, achievement goal theory, and the concept of flow in the user experience, all of which provide unique insights into the complex nature of human motivation and involvement.

### 1.1. Motivation theory

Since motivation influences human behavior, it is important to take it into account while gamifying (Nicholson 2012). Several studies have examined the relationship between motivation and behavior throughout history, and a variety of hypotheses have been developed to explain motivation and its influence on behavior.

Designing gamification services and applications requires an understanding of how behavior develops. This is helpful in the development of successful gamification that can alter consumer behavior and promote learning as well as behavior modification in healthcare settings. Incentives, particularly extrinsic incentives, are the subject of numerous gamified applications and services accessible today (Sudan 2013).

However, as stated by Koivisto and Hamari (2014), extrinsic incentives alone are insufficient to produce a long-lasting gamification effect. Thus, while creating gamified services and applications, it's vital to comprehend the distinction between extrinsic and intrinsic incentives. Motivation is the driving force for initiating an activity in gamification.

After completing a task, users may come to understand its intrinsic value and desire to continue without external incentives or rewards. It is essential to note that behavior modification cannot be only achieved through the use of material rewards or extrinsic motivation. This is due to the fact that extrinsic motivation varies based on personal traits (Hamari et al., 2014).

Consequently, a person's behavior might change momentarily before returning to how they were previously acting. As an illustration, people might lose the desire for these results even when

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they are initially inspired to exercise and seek out beneficial consequences. The outcomes of the behavior modification are thus lost when a person's behavior returns to its pre-changed state.

### 1.1.1. Intrinsic motivation

When people are intrinsically motivated, they behave out of enjoyment or challenge rather than in response to rewards or pressure from others. Persistence, performance, and satisfaction are enhanced by intrinsic motivation, which is an innate propensity for mastery, discovery, and impulsive curiosity (Ryan & Deci, 2000; Deci et al., 1999). According to SDT, people have an innate desire for intrinsic drive, which will grow under the right circumstances.

A sub-theory of self-determination theory called cognitive evaluation theory contends that conditions must satisfy the basic psychological demands for competence and autonomy in order to foster intrinsic motivation (Ryan & Deci, 2000). According to Ryan and Deci (2000), competence is the degree to which one believes that their own activities are responsible for the intended outcomes in their own environment. Competence grows when one receives honest and encouraging feedback.

However, in order to preserve or improve intrinsic drive, people need to feel both that their behavior is self-determined and that they are competent. Accordingly, unless feelings of competence are combined with a sense of autonomy, they will not boost intrinsic motivation (Ryan & Deci, 2000).

Competence and autonomy are seen as the most important requirements, but relatedness and curiosity are other needs that can be met to help promote intrinsic motivation. Contextual factors like favorable performance reviews and the freedom to choose one's own path might help to foster feelings of competence and autonomy. Furthermore, an individual's enduring inner resources—their persistent sense of competence and autonomy—can also provide some support.

Regretfully, contextual factors including threats, deadlines, competitive pressure, and imposed goals can as easily impair the demand for autonomy and competence (Ryan & Deci, 2000). Most importantly, it has been demonstrated time and time again that expected material incentives that are conditional on job performance reliably reduce the urge for autonomy (Deci et al., 1999). This information was first discovered in a well-recognized 1999 meta-analytic analysis by Deci et al., who analyzed studies looking at how extrinsic rewards influenced intrinsic motivation.

They discovered that "all rewards, all tangible rewards, and all expected rewards significantly undermined free-choice intrinsic motivation, as did engagement-contingent, completion-contingent, and performance-contingent rewards." Self-reported interest was similarly substantially weakened by engagement- and completion-contingent rewards, as well as by all tangible and expected rewards. Both self-reported interest and free-choice behavior were enhanced by positive feedback. In summary, they discovered that even when tangible prizes were provided as measures of excellent performance, they consistently reduced the intrinsic need for engaging in attractive activities.

When the rewards were unanticipated and/or not dependent on task completion, this was not the case. Intrinsic motivation remained unchanged in these situations. Verbal positive feedback was shown to be the only kind of "reward" that increased intrinsic motivation. Deci et al. (1999) According to the Causality Orientation Theory, another sub-theory of SDT, feedback can either encourage or inhibit the fulfillment of an individual's demand for autonomy, depending upon their causality orientation.

Research indicates that individuals differ in the degree to which they believe their activities are self-determined, and this affects whether they view criticism as directive or helpful. Thus, even constructive criticism may be interpreted as dominating by a control-oriented person, diminishing their desire for competence rather than fostering their need for autonomy.

In conclusion, Ryan and Deci (2000) discovered that, whereas conditions that restrict conduct stifle the expression of intrinsic motivation, circumstances that promote autonomy and competence consistently foster it. It is imperative to prevent those fundamental needs from being undermined in order to boost intrinsic motivation.

### **1.1.2. Extrinsic motivation**

The goal of gamification is to support intrinsic motivation, the majority of human activities are not, in and of themselves, intrinsically motivated (Ryan & Deci, 2000). The majority of actions are driven, at least in part, by external factors; these motivations are collectively referred to as extrinsic motivation.

Extrinsic motivation is frequently thought to be driven mostly by the desire to gain rewards and stay away from penalties; this is why it is considered less perfect for people's actual well-being than intrinsic motivation. SDT suggests that extrinsic motivation can vary widely in its level of

## CHAPTER 02: MOTIVATION AND INVOLVEMENT IN GAMIFICATION

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autonomy and that the more autonomous forms of extrinsic motivation can also result in greater experienced well-being as well as increased performance, despite the fact that they may not be as ideal as intrinsic motivation (Ryan & Deci, 2000).

To explain the various types of extrinsic motivation and the contextual elements that enable or hinder the internalization and integration of the regulation for these behaviors, a sub-theory within SDT known as Organismic Integration Theory was introduced (Ryan & Deci 2000; Vansteenkiste 2010). Refer to Figure 2. An individual is more likely to perceive motivation as internally caused and, hence, as more autonomous and self-determined, the more integrated and incorporated the extrinsic incentive is.

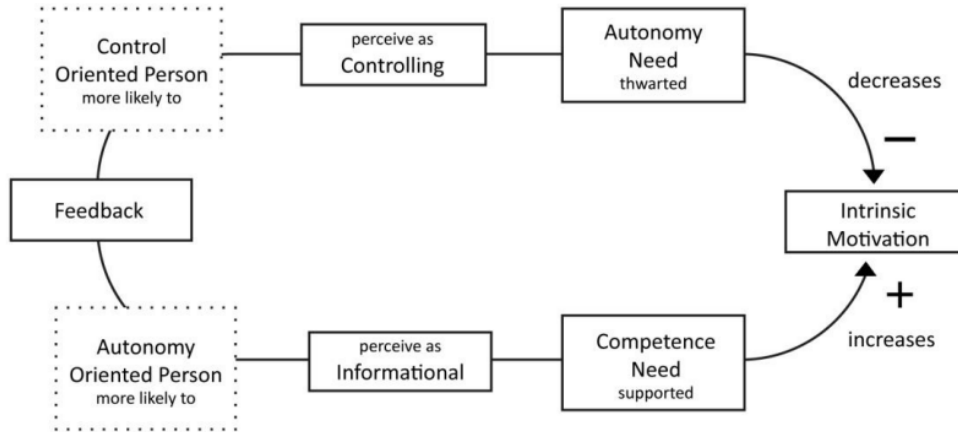
For instance, a youngster who completes their homework out of concern for punishment from their parents is motivated by external factors rather than internal ones. An extrinsically motivated student will also feel more in control than one who completes their schoolwork because they believe it will help them in their chosen career. For the latter student, self-regulation of behavior is achieved since the extrinsic motive for doing tasks has been internalized and incorporated into their goals and identity.

There is a far greater chance that this type of extrinsic motivation will improve the student's perceived well-being (Ryan & Deci, 2000). Parallel to intrinsic motivation, environments that support competence and autonomy have been shown to promote better integration and internalization of regulatory behaviors than environments that obstruct the achievement of these demands (Ryan & Deci, 2000). This suggests that both internalized types of extrinsic motivation and intrinsic motivation are facilitated by promoting the requirements for competence and autonomy.

In conclusion, SDT claims that the problem with extrinsic rewards is that they can make it harder for people to take charge of their own motivation or self-control, which will have a detrimental impact on how autonomous they feel. Both sustaining intrinsic motivation and growing in self-determination about extrinsic motivation rely on contextual factors that reinforce one's sense of competence and autonomy (Ryan & Deci, 2000). However, it should be highlighted that Deci et al. clearly refer to material incentives that are expected and/or contingent upon task performance when they use the term "extrinsic rewards" in their 1999 review. Positive reinforcement can also

increase intrinsic motivation, but this only happens when it is viewed as informing rather than controlling.

**Figure 2.1** : Controlling vs Informational feedback depending on causality orientation



**Source:** Dahlstrøm, C. (n.d.). Impacts of gamification on intrinsic motivation (p. 4). Norwegian University of Science and Technology.

**1.1.3. Self-determination Theory**

Richard M. Ryan and Edward L. Deci created self-determination theory over the course of the last 50 years (2000a). It relies on Maslow's 1943 Hierarchy of Needs and has roots in humanistic psychology. The satisfaction of fundamental human needs, as outlined in the SDT, is a resource for mental well-being and personal development.

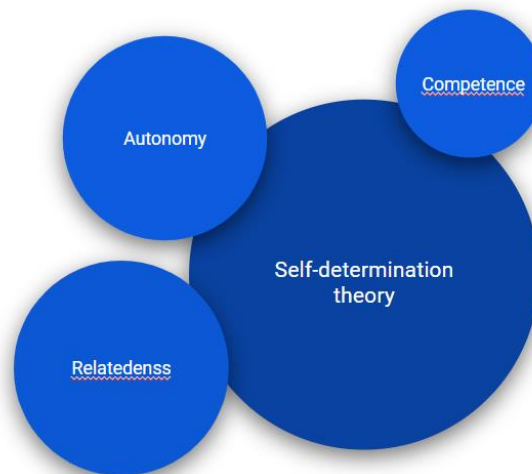
Every human being seeks to acquire as much autonomy over their own behavior and judgments as is feasible, according to Ryan and Deci (2000a). Humans also aspire to be competent in both their environment and their behaviors. These two demands are fundamental, but since learning activities frequently take place in social settings, like classrooms, a third element—relatedness is recommended.

Research has demonstrated that parental or educational environments that provide a child with a sense of safety, warmth, and autonomy promote intrinsic drive and exploratory behavior (Anderson, Manoogian, & Reznick, 1976; Grolnick & Ryan, 1989).

The satisfaction of the three fundamental needs competence, autonomy, and relatedness—depends more on subjective impression than on objective assessment. These demands, however

unfulfilled, constantly compel us to take action in life and serve as the basis for intrinsic motivation. In SDT, motivational quality—rather than strength—is what matters most (Ryan & Deci, 2000a).

**Figure 2.2.** Fundamental Needs of Self-Determination Theory



**Source:** Personal efforts based on Self-Determination Theory

According to Ryan and Deci's idea (2000a), there are in fact two kinds. 1. Amotivation: the absence of any motivation 2. Extrinsic motivation: controlled by outside forces 3. Internally regulated intrinsic motivation It is thought that rather than being distinct categories, these three portions form a component of a continuum. In addition, SDT has five sub-theories that help characterize and make sense of the motivation study results (Ryan & Deci, 2000a).

### 1.1.3.1. Theory of Basic Psychological Needs

The three psychological necessities stated above, autonomy, competence, and relatedness, are considered to be universal; however, they vary differently depending on goals and direction, developmental stages, and cultural differences. Competence is defined as the perceived amount to which one's own activities create desired outcomes in the world around one (Ryan & Deci, 2000a). Competence can be improved by direct and positive feedback, optimum tasks, and the absence of degrading judgments (Ryan & Deci, 2000b).

According to Vallerand and Reid (1984), a sense of competence does not increase intrinsic motivation unless it is seen to be internally caused. If the center of causality is viewed internally, the ensuing conduct is considered autonomous. Even feelings of competence will not improve intrinsic motivation when people have an impoverished level of autonomy (De Charms, 1968). This demand for autonomy can be fulfilled by free choice and alternatives to action.

Based on research, choice, acknowledgment of feelings, and potential for self-direction promote perceived autonomy and thus intrinsic motivation (Ryan & Deci, 2000b). The desire to interact with, connect with, and look after others is known as relatedness.

### **1.1.3.2. Organismic Integration Theory (OIT)**

Ryan and Deci's OIT (2000a) aims to explain the mechanisms that govern motivation. Depending on what is considered the point of causality of activity (between the poles of external/impersonal and internal), this theory differentiates six types of control.

Amotivation refers to a person's lack of intention to act. Typically, such a person would do absolutely nothing or behave without intent. Amotivation may happen when you do not value an activity, do not feel competent to undertake it, or do not expect it to produce the desired outcomes. External regulation corresponds to the simplest meaning of extrinsic motivation.

Individuals who consider themselves to be externally regulated do not identify with the objective of an action and hence act simply for conformity, external rewards, or to avoid external punishment. These activities are the least autonomous, and people generally feel controlled or alienated in these situations. Ryan and Deci (Ryan & Deci, 2000a) claim that operant theories (e.g., Skinner, 1938) focus on this type of motivation.

An additional sort of regulation is introduced. People in such circumstances act to retain their self-esteem and prevent feelings of guilt or fear. They may also act out of selfishness or pride. The behavior is internally motivated, but the locus of causality is not perceived as part of the self. Identified regulation, on the other hand, is a type of extrinsic motivation that relies on the conscious value of a behavioral aim or regulation.

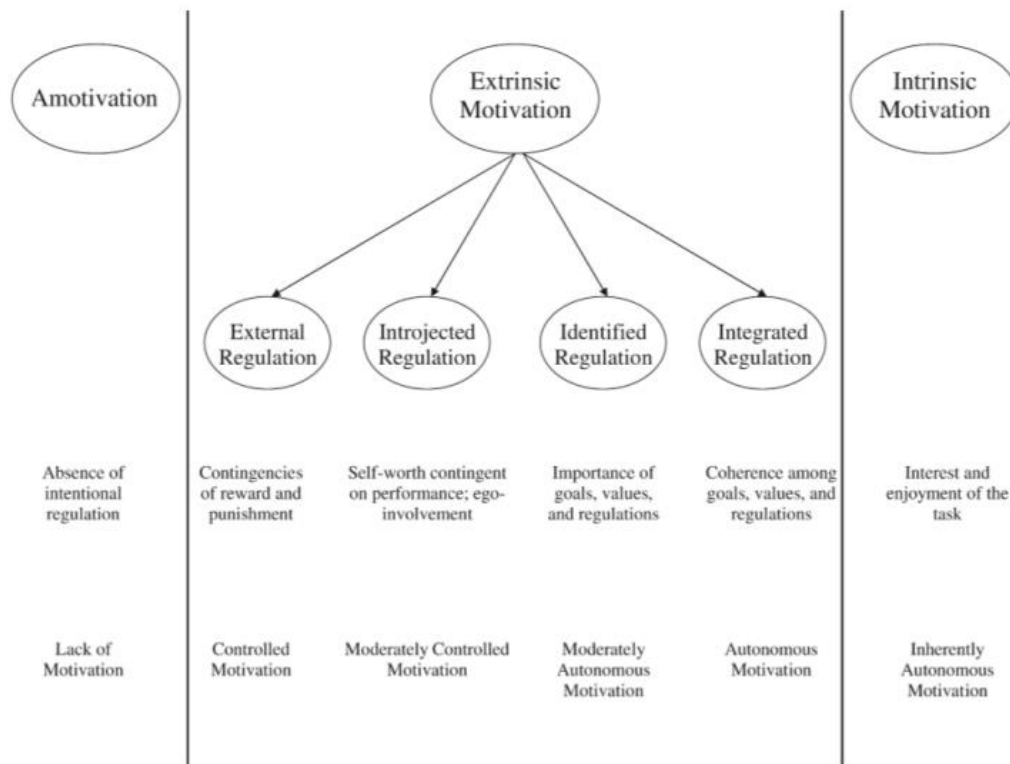
The action is regarded as personally important. Extrinsic motivation through integrated regulation takes place when identified regulations are completely incorporated into the self. In that instance, the regulations have been analyzed and adapted to align with one's values and needs. This type of regulation is remarkably similar to intrinsic regulation. It is only distinguishable in the



domain of control, where integrated regulation is still driven by a goal, as opposed to intrinsic regulation, where the behavior is motivated by the enjoyment of the action.

The six types of regulation are not meant to constitute developmental steps but rather distinct places on a continuum where any point on the spectrum can be a starting or ending point, based on prior experiences and current situational conditions. Still, research suggests that regulation styles may become more internalized with increasing age, cognitive capacity, and ego development (Chandler & Connell, 2011)

**Figure 2.3.** The continuum of self-determination theory



**Source:** Brühlmann, F. (2013). Gamification From the Perspective of Self-Determination Theory and Flow (p. 8).

### 1.1.3.3. Cognitive Evaluation Theory (CET)

As to the CET, the impacts of external events on intrinsic motivation are mediated by an individual's perspective of how these events affect their competence and self-determination. Events that encourage self-determination are more likely to boost intrinsic drive.

Furthermore, events that promote competence improve intrinsic motivation if they are regarded as self-determined. Other external events that fall under CET include evaluations, deadlines, competition, externally imposed goals, interpersonal settings, and, of course, incentives. Rewards and their impact on intrinsic motivation have been widely challenged (Cameron & Pierce, 1994).

Deci, Koestner, and Ryan (2001) stated that rewards can have both informative and controlling effects. For example, surprise rewards should not weaken intrinsic drive because they are probably to be regarded as controlling. Rewards can have both informative and controlling components, but if the controlling aspect exceeds the informational, the reward is likely to have a negative impact on intrinsic motivation (Deci et al., 2001).

External occurrences can primarily satisfy the desire for competence or autonomy by reinforcing the concept of an internal locus of control (Deci, Koestner, & Ryan, 1999). Deci et al. (2001) distinguish between verbal and tangible rewards. Verbal rewards are viewed as giving explicit positive performance feedback, and they are also mediated by the interpersonal environment, such as when verbal rewards are used in a controlling or informative manner. Research indicates that informative verbal incentives enhance intrinsic motivation more than controlling verbal rewards (Deci et al., 2001).

According to CET, physical rewards such as money should reduce intrinsic motivation because they are widely perceived as controlling. Tangible rewards do not reduce intrinsic motivation when they occur unexpectedly (Deci et al., 2001).

Deci and Ryan divide tangible rewards into three types: task non-contingent, task contingent, and performance contingent rewards. Task non-contingent rewards are given for reasons other than completing the task, such as just participating in the experiment. Task contingent benefits are those that are awarded for either participating in a task or completing it. As a consequence, this category can be separated into two types of rewards: engagement contingent and task contingent. The third group includes performance-based awards, which are predicted to be the most common in the actual world.

Deci et al. (1999) discovered evidence that every type of incentive has a detrimental impact on intrinsic motivation, with the exception of task-independent rewards. However, according to CET, performance-dependent rewards may have a positive effect on intrinsic motivation if the recognition is viewed as a sign of competence, hence having an informative nature.

It is believed that people who outperform others or achieve a specific objective will not experience a drop in intrinsic motivation; however, research suggests otherwise. For example, if people do not perform outside of the top 20%, which is likely more common in the real world, performance-contingent rewards significantly reduce their intrinsic motivation (Deci et al., 2001). This study suggests that rewards other than verbal information or unexpected tactile advantages pose an important risk to intrinsic motivation.

#### **1.1.3.4. Causality Orientations Theory (COT)**

According to the COT, the extent to which individuals experience their acting as self-determined differs inter-individually (Vansteenkiste, Niemiec, & Soenens, 2010). People who are high on the autonomy orientation are more likely to act according to their own interests and values, interpret external events as informational rather than controlling, and are expected to regulate their behavior autonomously (Vansteenkiste et al., 2010).

Those who are highly control-orientated act more likely because of external or internal demands, perceive external events as pressuring, and regulate their behavior with an experience of control. A third proposed group is people who tend to interpret events as beyond personal control and thus have feelings of helplessness, ineffectiveness, and passivity.

These people are impersonally oriented. Asendorpf and Van Aken (2003) proposed a clear distinction between causality orientations and personality traits. Causality orientations are expected to be more dynamic and shaped by socialization experiences. The COT states further that all three causality orientations exist in varying degrees in each of us and situational factors determine which causality orientation is more salient although one is expected to be the predominant motivational orientation. Causality orientation affects the influence of external events on intrinsic motivation.

Autonomy-oriented causality orientation protects people from the negative effect of completion-contingent rewards on intrinsic motivation. Results indicate that control-oriented participants in their experiment showed a desired behavior only as long as rewards were given. A study by Amabile, Hill, Hennessey, and Tighe (1994) showed that a more autonomy-oriented

causality orientation predicts higher levels of intrinsic motivation compared to control-oriented and impersonal-oriented causality orientations. Yet little is known about the distribution of these orientations among the general population.

### **1.1.3.5. Goal Content Theory (GCT)**

The GCT distinguishes intrinsic goals such as personal growth, close relationships, community contribution, and physical health from extrinsic goals such as money, fame, and image (Ryan, Sheldon, Kasser, & Deci, 1996). Whereas intrinsic goals support the perception of a task as being satisfying on its own, extrinsic goals serve an external purpose.

It is important to note that it is possible to strive for both intrinsic and extrinsic goals for either autonomous or controlled reasons. Vansteenkiste et al. (2010) used the example of a retiree who may volunteer either because he would feel guilty for not contributing to society (controlled motivation) or because he really likes volunteering (autonomous motivation).

Studies (e.g., Deci & Ryan, 2012; Kasser & Ahuvia, 2002; Williams, Niemiec, Patrick, Ryan, & Deci, 2009) have shown that intrinsic goal setting supports learning, well-being, and satisfaction. Critiques argue that intrinsic goals are valued more than extrinsic goals in our society and thus the value of the goal determines dedication to the task at hand (Kasser & Ahuvia, 2002). A number of studies (Vansteenkiste et al., 2004) have compared three conditions with manipulated goal content: intrinsic goal framing, extrinsic goal framing, and dual-goal framing where the participants have been informed about both possible goals.

Results show that having just an intrinsic goal framing still led to a better performance than having both, intrinsic and extrinsic goal framing. SDT can explain this result with the possible impairment of intrinsic goals with extrinsic goals, depending on the participants own task orientation (Ames, 1992).

## **1.2. Player Types**

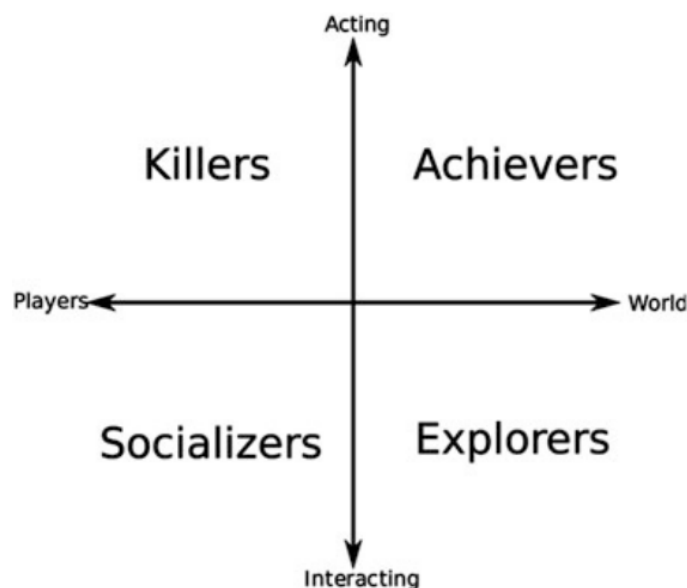
Bartle (1996) created four distinct archetypes of video game players, each representing a different set of motivations. Various education and learning-related works (Kim and Ko 2013; Hawlitschek and Köppen 2014a, b; Liu and Liu 2005) have, for example, relied on Bartle's categorization. It is vital to note that it is uncommon to encounter a single user representing only one type; most users represent multiple types. It is also common for users to alternate between

archetypes throughout their learning experiences. Bartle (1996) describes these categories in the following manner:

- Killers are competitive users who enjoy challenging and beating their opponents. Triumph is the primary aim killers pursue.
- Achievers are the type of users whose primary incentive is to accumulate points, level up, and achieve better rankings;
- Socializers are users who use the application to connect and communicate with other users. The community is an important source of motivation for this type of user.
- Explorers are users who want to learn about the program and its boundaries.

Exploring the application is the user's primary motivation. Bartle superimposed the previously mentioned archetypes onto a diagram:

**Figure 2.4.** Players type



**Source:** Bartle, R. (1996). Hearts, clubs, diamonds, spades: players who suit MUDs. *Journal of MUD Research*, 1(1), (p. 11).

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### 1.3. Achievement Goal Theory

It is a very new and increasing component in gamified systems and serious games. These methods constitute a meta-game, providing the target group with additional goals that are distinct from the core goals.

As a result, gamification designers believe that these meta-games could be an effective way to increase user engagement. They, however, had to be carefully integrated and categorized in order to produce the desired behavior. Taking into account the different player types established above, these sorts of achievements are identified:

- Instructors guide individuals during the learning process. They ensure that users master the offered actions so that they can proceed through the learning experience. The benefits of providing these types of achievements include encouraging users to comprehend and interact with the system, as well as motivating them from the start to acquire the necessary information and skills (for example, through on-board training).

- Users can unlock quests by completing key tasks. A quest is typically rewarded whenever the relevant circumstances are met for the first time. The primary purpose of such achievements is to keep people interested at all times.

- The Content Discovery achievements encourage users to explore the application. They ensure that users are aware of and have reviewed all of the existing modes and features offered by the application in question.

- Socializer achievements are provided when users complete specific tasks within the community. This style of achievement fosters collaborative learning, which enhances the overall performance of the users.

- Grinder achievements are unlocked if a task is finished a certain number of times. They offer an easy-to-implement sort of achievement and are used to incentivize users to master specific behaviors that are considered critical for future application use.

- Herculean tasks are a type of praise that is awarded to users who complete relatively tough and time-consuming tasks. These accomplishments, which require decent talent, can be unlocked only by talented users.

- Trophies are only granted to a few users in the community since they have the goal of preventing other users from winning them.

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- Loyalty achievements are rewarded to users who demonstrate genuine loyalty to the application. Although it encourages players to spend real money on the game, this type of achievement is highly valued by the application community.

#### **1.4. User Experience: Flow Theory**

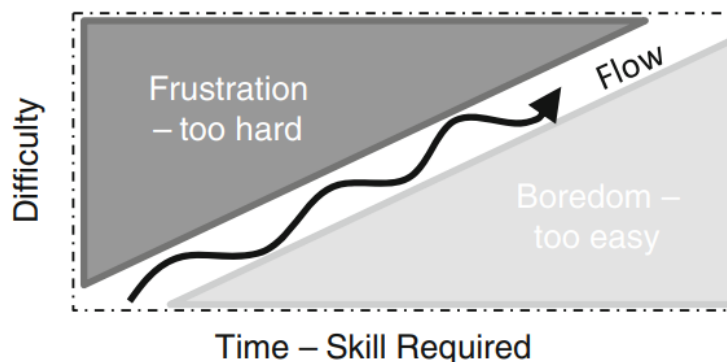
Flow theory is based on the concept of positive psychology, which emphasizes inner qualities. Seligman and Csikszentmihalyi (2000) define it as "the study of positive emotion, positive character, and positive institutions." Csikszentmihalyi, a pioneer in the field of positive psychology, was captivated by the fact that some people, despite their enormous losses during the war, were still joyful and showed it, while others could not.

He subsequently developed the Flow Theory, which views happiness as a positive, personal state of being. Csikszentmihalyi (2008) defined happiness in the context of task completion as the absence of weariness and anxiety.

He moved on to say that flow theory is a theory of optimal experience based on the concept of flow a state in which people are so immersed in an activity that nothing else seems to matter. The event itself is so enjoyable that people will pay a high price just to do it (Csikszentmihalyi 2008). He recognized various aspects of flow. The following are closely related to motivation and engagement and should be considered while developing gamification:

- Skill-testing activity;
- combination of action and awareness;
- Focus on the work at hand.
- Clear objectives and feedback.

Figure 2.5. Flow Theory



**Source:** Introduction to Gamification: Foundation and Underlying Theories by Amir Matallaoui, Nicolai Hanner and Rüdiger Zarnekow (p.15)

Csikszentmihalyi referred to flow as the autotelic experience, which implies doing something for its own sake (Brühlmann, 2013). It has a similar connotation to intrinsic motivation in self-determination theory. This theory has many aspects known as "conceptual elements," as follows:

- The flow concept relies heavily on balancing challenge and competence. To feel the flow, both the situational challenge and the ability to overcome the task must be at a high individual level (Jackson, 2012).
- Jackson (2012) defines action-awareness merging as the experience of connection with the activity.
- Clear goals and unambiguous feedback: With unambiguous feedback, people can track their progress on a task at any time (Brühlmann, 2013). These two characteristics have to do with SDT competence.
- Concentration on task refers to maintaining mental order while avoiding distractions.
- Brühlmann (2013) defines a sense of control as a feeling of freedom from fear of failure and empowerment.
- Loss of self-consciousness: Flow permits complete absorption in the action, reducing the need to evaluate oneself or others (Jackson, 2012).



- Time transformation: Some people feel time to slow or stop, whereas others sense time to move quicker than usual (Jackson 2012).
- Jackson (2012) describes autotelic experience as one that is so pleasurable that one desires to repeat it.

## SECTION 02: GAMIFICATION AND CONSUMER INVOLVEMENT

This section discusses customer involvement, including its relationship to motivation, gamification, brand engagement, and consumer advantages. The study looks into the function of motivation in driving consumer behavior as well as how gamification improves engagement and evaluates its impact. Furthermore, the relationship between gamification and consumer involvement is examined, brand engagement is investigated, and the benefits that consumers gain from gamified experiences are reviewed, providing insights for marketers looking to develop compelling consumer interactions.

### 2.1. Motivation and involvement

Motivation and involvement are interconnected concepts that frequently overlap in domains such as intrinsic motivation and cognitive engagement. Despite the close relationship between motivation and involvement, the two terms are not synonymous, and the presence of one is not always indicative of the presence of the other. According to Brooks and Goldstein (2012), motivation is related to psychological factors that influence behavior and decision-making. Russell, Ainley, and Frydenberg (2005) define engagement as "energy" that relates to various actions and tasks (p. 1).

Appleton, Christenson, Kim, and Reschly (2006) underlined the relevance of both motivation and engagement in learning but viewed them as distinct types. Although the difference between motivation and engagement is an "ongoing issue" (Brooks et al., 2012, p. 548), there are some situations where the relationship between the two is ambiguous.

According to Griffiths, Lilles, Furlong, and Sidhwa (2012), engagement has grown to include psychological inner processes as well as their manifestation in human behavior in the form of task, affective, and cognitive involvement. Willms (2003) presented an operational definition of engagement that highlighted the relationship between psychological attitudes and participation in

school activities. Other researchers focused on observable components of engagement, such as learners' actions, effort and attention to academics, and levels of involvement and attendance (Ryan 2000).

Motivation and involvement are frequently distinguished by their occurrence across time. Intrinsic motivation and previous learning attitudes can lead to higher task engagement and participation. Participation may function in the reverse manner, modifying unfavorable prior attitudes. The combination of strong motivation and high task engagement resulted in an effective learning experience (Davis & McPartland 2012). Prior attitudes, or "beliefs," as Ryan (2000) termed them, motivate engagement as a visible positive behavior (i.e., participation in school activities).

Skinner and Belmont (1993) defined involvement as emotional and passionate participation in participating in and completing learning activities. Kuh (2009) identified the evolution of the engagement construct throughout history, from meaning the time learners spend on a task to the outcome and achievement of learning, the quality of students' dedication, student interaction, and immersion in the learning experience, and, finally, according to his definition, the quality and effort learners invest in a genuine activity.

The visible aspect of involvement, as shown by learners' behavior and the quality and time they invest in the learning task, is a common thread across all definitions Kuh (2009) studied.

However, comparing engagement to time on task does not capture the entire meaning of this expression. Involvement is more than just time on work; it is "the enthusiasm and diligence" for completing the task that makes the engagement a reality. Csikszentmihalyi (1997) pointed out the relationship between task engagement and learners' overwhelming deep interest that crosses time and space.

## **2.2. Customer Involvement and Gamification**

Many survey studies conducted on the role of customer involvement in gamification (Robson et al., 2015) pointed out the importance of customer engagement, they gave evidence that the achievement of engagement is linked with the level of motivation, behavior, performance, completion of task, and reward collection. (Robson et al., 2015) discussed that Gamification is a tool for behavior change, and it can increase customer involvement if it is implemented properly.

Furthermore, they discussed two types of individuals in a psychological context who engaged in gamified experience, players (customers) and designers. Designers are marketers and play an important role in attracting players. Moreover, they argued the challenges that faced gamified designers to engage customers. One challenge is to understand: how different age group customers would be motivated.

Likewise, in (Rodrigues, Oliveira, and Costa, 2016) study It is found that customer sense of social interaction is improved by gamification which strongly affects customer intention to use the application, and this increased customer engagement is beneficial for businesses.

Furthermore, through entertainment, brand involvement, challenges, and repeat experiences, gamification can lead businesses toward success. Additionally, consumers engage in gamified systems when they give intrinsic and extrinsic rewards, fun & enjoyment, competition, social interaction, and recognition.

(Hamari and Koivisto, 2013) in utilitarian, hedonic, and social interaction; hedonic and social interaction are strong predictors of attitude and intention to use or customer engagement. For how gamification is perceived and intent to continue use, social factors are strong predictors. (Koivisto and Hamari, 2014) discussed that the recognition of users received might not directly affect their behavior and attitudes toward gamification.

The results indicate that attitude toward a Gamification service is a strong determinant of one's intentions to continue using the service as well as of intentions to recommend the service to others. Furthermore, (Koivisto and Hamari, 2014; Lucassen and Jansen, 2014) results show that perceived enjoyment and perceived usefulness of gamification decline with use. They argued that users become bored or fed up with the experience of service use.

Moreover, the ease of use of gamification services is reduced with the passage of time and age. (Partners et al., 2012; Deterding and Deterding, 2016) argued that norms become diffuse by social activities of sharing and recognizing in challenge completion. Particularly, the results pointed out that user engagement in gamification is an essential part of value chains, user-led innovation, and word-of-mouth advertisement. So marketers should motivate customers toward loyalty and continued use.

However, motivation and flow are very important for user engagement as (R. Ryan and Deci, 2000; Seligman and Csikszentmihalyi, 2000) argued in self-determination and flow theory that intrinsic and extrinsic rewards both are essential to motivate the customers and flow mean

challenge should not be difficult nor so easy because so difficult task can fed-up the players and so easy task can bore them.

So, for continued engagement intrinsic and extrinsic reward as well as flow is important for sustainability. Clear goals are also one of the main dimensions of flow theory (Csíkszentmihalyi, 1990) which predicts that having clear goals and immediate feedback supports the emergence of a flow state, where the user's skills and the challenge of the task are optimally balanced.

### **2.3. The impact of gamification on involving consumers**

Customer involvement is always focused on a certain thing (for example, community, brand, or activity). In accordance with the game studies literature, games promote engagement by delivering an engaging experience (McGonigal 2011). However, this engagement is restricted to the game's components and does not last beyond its conclusion (Caillois 1961; Huizinga 1975; Salen and Zimmerman 2004).

In this regard, the current study focuses on gamification as an effective strategy to increase engagement. However, gamification attempts to expand customers' participation beyond gamification to include engagement in other focal objects or purposes (Hamari and Koivisto 2015a).

As a consequence, gamification can generate significant profits for participants if their involvement is focused on components of the effective environment rather than just the gamification features. This idea underlines that gamification should not be viewed as an end goal but rather as a process for engaging people with something in particular (Lucassen and Jansen 2014). Furthermore, depending on their motives, customers can engage multiple focal objects via gamification.

Prior research has delved into the impact of gamification on customer engagement with an array of focal objects, such as sports (Hamari and Koivisto 2015b), social networks (Harwood and Garry 2015), brands (Berger et al. 2017), healthcare services and online communities. Each person might show varying levels of involvement with these unique objects.

However, these multiple forms of involvement may be connected and work together or against one another. In this sense, the negative consequences of losing a contest are mitigated when customers actively engage in an activity and have a high level of engagement with the associated community.

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#### 2.4. The relationship between gamification and engaging consumers

Gamification is frequently defined as the use of game design features in non-game settings (Deterding et al., 2011). Huotari and Hamari (2017) criticize definitions based on mechanical and game design approaches, such as those proposed by Deterding et al. (2011) and Werbach (2014). Gamification, on the contrary, should be viewed as a service that allows customers to participate in a game-like experience.

In this sense, games played while consuming are inevitably co-created by the consumer and producer. While the producer provides frameworks, rules, and game goods using various design components, the consumer participates by engaging in play with other players (Huotari & Hamari, 2012).

Gamification is fundamentally linked to engagement, as its use is usually explained by its positive effects on involvement (e.g., Hofacker et al., 2016; Jang et al., 2018; Lounis et al., 2013; Lucassen & Jansen, 2014; Mulcahy et al., 2018; Teotónio & Reis, 2018; Zichermann & Cunningham, 2011; Xi & Hamari, 2019).

A significant number of gamification studies have focused on studying the relationship between various game design aspects and engagement, resulting in numerous classifications of game design features and their interconnections with engaging users. The most recent research by Xi and Hamari (2019) provides one way to classify game design characteristics based on gaming motivations: immersion, achievement, and sociability (e.g., Yee, 2006).

Immersion-related aspects such as avatars, storytelling, and roleplay entice users to lose themselves in the game mechanics. Achievement-related features like badges, challenges, goals, and leaderboards are designed to boost users' sense of success. Social-related features seek to improve users' social interactions, such as by providing chances for collaboration.

Achievement and social factors were found to be positively related to all dimensions of brand engagement (emotional, cognitive, and social), whereas immersive-related features were only positively related to social brand engagement (Xi & Hamari, 2019).

Similarly, Lucassen and Jensen (2014) observed that marketing executives associate achievement-related aspects, such as competitions and leaderboards, with engagement, as well as social-related features (e.g., assisting a colleague, and feeling part of the group).

Gamification principles have been proposed to increase consumer involvement by leveraging the psychological processes involved in hope and compulsion experiences (Eisingerich et al., 2019). Gamification may additionally be accomplished by categorizing various game design

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features. In this context, elemental Tetrad Model, covering story, mechanics, aesthetics, and technology, is a well-known framework for game creation, and Hofacker et al. (2016) propose adjusting it to gamification.

According to Hofacker et al. (2016), the story provides context to the game and meanings for the gaming experience; design refers to the look or feel of the game, such as the use of visual imagery to create immersion; and technology refers to the way the medium itself, such as a mobile device, creates possibilities for different gaming experiences.

Werbach and Hunter (2012, 2015) provide a similar paradigm, categorizing game design aspects into three groups that act at distinct levels of game design: dynamics, mechanics, and components. Although these two frameworks have rather different viewpoints on game design aspects, they are linked, particularly in terms of mechanics, as all three elements by Werbach and Hunter (2012, 2015) can be viewed as belonging to Schell's mechanics.

Thus, in Werbach and Hunter's (2012, 2015) classification, dynamics are the more advanced aspects of the gamified system that are managed when developing the game, such as the player connections (e.g., teams) and development during the gaming experience, and mechanics are methods to achieve the desired dynamics (e.g., Werbach). These include the system's rules and the strategies used in the gamification process, such as challenges, feedback, and player competition, in addition to the reward distribution based on these.

Mulcahy et al. (2018) discovered that feedback promotes knowledge formation, while challenges and giving points influence both enjoyment and knowledge creation in the context of gamified encounters. Components are the practical game design pieces needed to generate the chosen mechanics (e.g., points and levels for progression, and avatars for self-image) (Teotónio & Reis, 2018; Werbach & Hunter, 2012, 2015).

Mulcahy et al. (2018) revealed that personalized avatars increase immersion and perceived value, facilitating player participation in the early phases. After the user has successfully acclimated to the experience, the challenge becomes increasingly critical for retention over time.

In a similar vein, Nicholson (2015) categorizes the use of gamification features into two types: reward-based gamification for immediate changes and significant gamification for possibly long-term changes. Reward-based gamification includes obvious game components such as badges, levels, leaderboards, awards, and points, while meaningful gamification recognizes that play is optional and not everyone will participate (Nicholson, 2015).

Berger et al. (2018) discovered that when consumers are required to participate in a gamified experience, they do not become involved with the brand, and time constraints in gaming reduce cognitive brand engagement. Instead, significant gamification, such as stories or development, offers scenarios in which willing participants can find significance in the activity, perhaps increasing internal motivation to participate in it deeper (Nicholson, 2015).

Gamified interactions, which are highly engaging and ideally difficult for the player, have been shown to be favorably associated with both affective and cognitive aspects of engagement with the brand (Berger et al., 2018). To create positive brand engagement, gamified elements should be seamlessly integrated into the consumer's buying process (Louis et al., 2013), and participation ought to remain voluntary (Huotari & Hamari, 2012), as failed gamification can result in uncomfortable consumer experiences (Robson et al., 2014).

## **2.5. Consumer brand involvement and its interconnections to consumer benefits**

Gamification research often considers involvement as a given notion; yet, in the marketing profession, the concept of engagement is not so straightforward, as evidenced by an abundance of recent theoretical clarifications on engagement-related variables. The interest comes from realizing the importance of understanding customer engagement that extends beyond purchase—the different ways consumers engage with a brand without buying or planning to acquire it (Vivek et al., 2012).

Involvement originates from lived brand encounters in the consumer's daily activities, particularly the incorporation of brands into the consumer's life story .

Involvement is based on good consumer-brand interactions, which, at best, result in a relationship in which the engaging brand is compared to a "life mate". This recognition has resulted in the emergence of some overlapping concepts (Hollebeek et al., 2019), such as customer involvement (Vivek et al., 2012; Harwood & Garry, 2015), customer engagement behaviors (Brodie et al., 2011; Harwood & Garry, 2015), and customer engagement with brands (Hollebeek et al., 2014; Hollebeek et al., 2011).

Similarly, the digitalization of marketing processes has revealed related concepts, such as brand community involvement and involvement in brand platforms (Ramaswamy & Ozcan, 2018). Consumer engagement (CE) refers to the emotional, mental, and behavioral effects of an interactive encounter with a company (Hollebeek et al., 2014; Hollebeek et al., 2011; Hollebeek et al., 2019).



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The cognitive dimension of consumer brand engagement is "a consumer's level of brand-related thought analysis and elaboration in a specific consumer/brand interaction" (Hollebeek et al., 2014, p. 154), while the emotional dimension is "a consumer's degree of favorable brand-related affect in a specific consumer/brand interaction" (Hollebeek et al., 2014, p. 154). The emotional dimension has been associated with consumer involvement through variations in service experience (Kumar et al., 2019).

The cognitive dimension of consumer brand engagement is "a customer's level of brand-related believed processing and elaboration in a particular consumer/brand interaction" (Hollebeek et al., 2014, p. 154), whereas the emotional dimension is "a consumer's degree of favorable brand-related affect in a particular consumer/brand interaction" (Hollebeek et al., 2014, p. 154). The emotional dimension has been linked to consumer involvement through variations in the experience of service (Kumar et al., 2019).

In Hollebeek et al.'s (2019) thesis about consumer engagement with a brand, they emphasize its multiple dimensions, context-dependency, and spontaneous and dynamic aspects. With an emphasis on direct and physical consumer brand interaction, customer brand engagement is conceptualized as "the level of an individual customer's motivational, brand-related, and context-dependent state of mind that includes specific levels of cognitive, emotional, and behavioral activity in direct brand interactions" (Hollebeek, 2011a, p. 790).

To highlight the experiential component of the come-across, customer brand engagement is described as "a consumer's positively valenced branding-related cognitive, emotional, and behavioral activity during or associated with focal consumer/brand interactions" (Hollebeek et al., 2014, p. 154).

Involvement occurs when a brand engages with a consumer and multi-activates—not just conceptually and emotionally but also materially. For example, different gamification aspects enable consumer activation in different ways, resulting in distinct dimensions of customer loyalty (Xi & Hamari, 2019; Berger et al., 2018). Consumers directly or indirectly generate and get a variety of benefits when they devote significant amounts of resources (time, expertise, etc.) to engaging with a brand (Harwood & Garry, 2015).

Benefits therefore serve as drivers for brand community engagement and usage of gamified mobile applications (Jang et al., 2018), as well as outcomes of customer involvement with the brand (Hollebeek et al., 2019) and consumer engagement in digital gamified platforms (Harwood & Garry, 2015). To demonstrate, they found that connecting with a brand community is related to a



variety of positive and significant advantages. Hollebeek et al. (2019, p. 169) further explore the conceptual interconnections, noting that while some benefits appear only after engaging with the brand, others may occur throughout the contact.

In addition, advantages and brand engagement are inextricably linked, as benefits typically emerge over time as a result of many contacts with the brand, inducing future interactions and strengthening consumer loyalty to the company (Hollebeek et al., 2019). As a result, existing research appears to show that consumers' brand-related involvement is inextricably linked to consumer advantages.

## **2.6. Consumer advantages and their relationship to gamification**

One of the classic marketing concepts is advantages, which refers to the idea that consumers buy goods based on the benefits they receive from purchasing or utilizing the goods. As previously noted, modern talks about advantages have connected them to both consumer brand involvement and gamification, for example, discovered that various gamified consumer advantages increase behavioral engagement levels. Gamification is mostly seen as a means of providing non-monetary incentives to consumers (Hofacker et al., 2016), consequently inducing interaction with the brand.

A lot of the discussion around benefits has focused on developing typologies for various types of benefits. Researchers conducted a review of existing studies and identified learning benefits (e.g., intentional, functional, cognitive, and problem-solving support-related advantages), social advantages (e.g., interpersonal connectivity, social integrative rewards), self-esteem benefits (e.g., social improvement, self-enhancement, personal integrative benefits), and hedonic advantages (e.g., entertainment benefits).

Previous studies have shown that social benefits, including reciprocal gains from utilizing gamification, significantly predict how a user perceives gamification and whether (s)he is inclined to continue using it (Hamari & Koivisto, 2014). On the other hand, use the uses and gratifications theory to classify benefits as intellectual (i.e., increasing knowledge and comprehending), social integrative (i.e., boosting relationships with others), and private integrative (i.e., increasing credibility and social status, among other things). Interestingly, they discovered that all three types of advantages are positively connected with involvement; nevertheless, personal integrated benefits were the most prominent factor driving increased engagement.

Hofacker et al. (2016) think that gamification mechanics can promote epistemic and social benefits by promoting the consumer's skill development and learning, as well as social interactions. Furthermore, reversal findings demonstrate the role of benefits when the setup of the gamified brand platform fails to give expected rewards to consumers, resulting in a decrease in consumer engagement (Harwood & Garry, 2015).

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**CONCLUSION**

In concluding this chapter, a comprehensive study of the main motivational theories of gamification has been undertaken, unveiling the intricate interplay between psychological theories, user engagement, and practical implementations within digital realms. Through a meticulous exploration of motivation theory, the fundamental drivers of human behavior, spanning intrinsic and extrinsic motivations, alongside the intricate constructs of self-determination theory, have been scrutinized.

The taxonomy of player types and the Achievement Goal Theory have further enriched our understanding, offering insights into the diverse motivations and objectives shaping user interactions within gamified contexts. Additionally, an in-depth analysis of User Experience, particularly through the lens of Flow Theory, has underscored the significance of crafting immersive and captivating experiences that optimize user enjoyment and satisfaction.

Bolstered by these theoretical foundations, the study of user involvement has revealed the profound impact of gamification on consumer behavior and brand interaction. Supported by empirical evidence and theoretical insights, the dynamic interplay between gamification and consumer involvement has been elucidated, offering actionable insights for marketers and designers alike, seeking to harness gamification's potential to captivate and inspire their intended audience.

In essence, this chapter aims to motivate academics, practitioners, and policymakers to acknowledge the pivotal role of motivation in shaping user experiences within digital realms. By unraveling the underlying psychological mechanisms steering user behavior, the stage is set for the creation of gamified experiences that not only captivate and engage users but also foster meaningful interactions and drive positive outcomes. The evolving landscape of gamification, remains resolute in the commitment to leverage these insights, forging experiences that enrich and empower individuals in the digital era.

## **CHAPTER 03**

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# **THE IMPACT OF GAMIFICATION ON CONSUMER'S INVOLVEMENT AND MOTIVATION**

## **INTRODUCTION**

Following an exhaustive review of various concepts and theoretical constructs aimed at acquiring a comprehensive understanding of gamification, involvement, and motivation, this chapter transitions to the operational dimension of the study.

In today's digital epoch, marketers are compelled to grasp the nuanced determinants of consumer behavior to aptly tailor their marketing endeavors. Consequently, this study endeavors to scrutinize the intricate interplay between gamification, involvement, and motivation. Initiating with an introduction to the host organization, Allegorie Group, the subsequent sections expound upon the intricate details of the research methodology. This elucidation encompasses a thorough delineation of the selected approach, which integrates both quantitative and qualitative analysis methods.

Subsequently, the culmination of this chapter entails an in-depth analysis of data gleaned from questionnaires and interviews. Through this meticulous examination, the aim is to rigorously test the formulated hypotheses and address the overarching research question. By adopting this holistic approach, the chapter seeks to furnish invaluable insights into the profound impact of gamification on consumer engagement and motivation.

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**SECTION 01: HOST ORGANISM PRESENTATION**

**1.1. Presentation of Allégorie Group**

Founded in 2010 by Toufik LERARI and Marhoun ROUGAB, Allégorie is a pioneer in the field of communication consulting in Algeria. With a team of over 180 professionals covering various aspects of communication such as creation, consulting, advertising, production, media, studies, and digital, the group offers unprecedented expertise in the local market. By capitalizing on a deep understanding of the Algerian market and a creative approach to digital, they are committed to supporting the growth of emerging economic actors, both in the national and international markets.

Their clients include decision-makers, companies, and brands to whom they offer personalized communication and marketing advice and solutions aimed at increasing their influence and performance.

For fifteen years, their strategic approach, named STRATIVITY, has been guiding their thoughts and advice in an organized manner. Symbolizing the union between strategy and creativity, STRATIVITY goes beyond mere concepts. It enables them to incorporate creativity at the core of corporate or commercial strategy (what they call commercial creativity). Through a thorough analysis of consumer behaviors, they explore the most innovative ideas to effectively implement the product throughout its marketing journey.

They have developed MIDWAR, their tool for initiating strategic thinking upstream of campaigns. MIDWAR enables each of their collaborators to ask the right questions and comprehensively and structured approach to their client's challenges. Organizing the reflection into three components: STRATEGIC, CREATIVE, and MEDIATIVE. MIDWAR serves as an essential guide for developing effective communication strategies.

**1.2. The values of the Allégorie Group**

**1.2.1. Creativity**

Creativity at Allégorie is an essential pillar, as it serves as the engine of innovation and differentiation in a competitive environment. Communication professionals within Allégorie must

constantly develop original ideas and innovative approaches to capture the public's attention and achieve the objectives set by their clients.

### **1.2.2. Responsibility**

At Allégorie, the value of responsibility is defined by their commitment to fully assume their actions, decisions, and commitments to their clients, team, society, and the environment. This means acting ethically, transparently, and in accordance with current professional and legal standards.

### **1.2.3. Excellence**

The value of excellence within a communication agency implies constantly aiming for superior quality in all aspects of work. At Allégorie, this translates to a commitment to surpassing client expectations, seeking innovation, and maintaining high standards of professionalism and performance. In other words, excellence at Allégorie means delivering exceptional work at every stage of the process, thereby ensuring remarkable results and maximum client satisfaction.

### **1.2.4. Authenticity**

The value of authenticity within a communication agency involves staying true to its values, identity, and mission while acting with transparency and honesty in all interactions. At Allégorie, this translates to a commitment to reflect the true essence of the agency in all its activities, to communicate sincerely with its clients and partners, and to create campaigns that are authentic and representative of the company's values.

### **1.2.5. Solidarity**

The value of solidarity within a communication agency entails fostering a spirit of unity, collaboration, and mutual support within the team. At Allégorie, this translates to a commitment to work together towards a common goal, to share knowledge and resources, and to support team members during challenging times.

### 1.3. Organizational Structure of the Allégorie Group:

The consulting agency Allégorie brings together Algerian talents from various backgrounds, domains, and cultures, all driven by a common passion for creation and innovation. With its four subsidiaries, the Allégorie group offers comprehensive expertise in image consulting, communication, and advertising, providing support to decision-makers, brands, and companies active in the Algerian market.

Figure 3.1. Representation of the organizational structure of the Allégorie group



Source: Organizational documents

#### 1.3.1. Fifty4

The media agency Fifty4 provides advice to Algerian advertisers regarding their media planning strategy and space purchasing to optimize their marketing investments. With a deep understanding of local media and extensive buying capacity, Fifty4 develops the most effective and adaptable media plans in the Algerian market. Additionally, the agency regularly organizes roundtable discussions bringing together Algerian marketing decision-makers and media representatives to discuss current trends in the media industry.

#### 1.3.2. Jow Radio

Jow is a multichannel digital platform entirely focused on youth and positivity, launched in 2018. It generates and broadcasts innovative content through its audio channels, specifically its



mobile application and website, and also shares positive video content on social platforms such as Facebook, Instagram, and YouTube.

### **1.3.3. Tada Research**

The marketing research and survey institute Tada Research possesses the expertise required to conduct strategic studies and recruit participants (often hard-to-reach) in remote rural areas. With the assistance of a national network of field agents and qualified supervisors, it utilizes an innovative survey management application offering unmatched responsiveness and quality in Algeria. Tada Research has conducted numerous studies on consumption trends in Algeria. The insights obtained have strategic value for all entities within the Allégorie group as well as for the clients it advises.

### **1.3.4. Tequilarapido**

Tequilarapido is among the top five independent digital agencies in France in terms of performance. It focuses on accelerating the digital transformation of businesses and counts 18 companies of CAC 40 and renowned brands among its clients. Tequilarapido provides expertise in strategy and activation, social media intelligence, technology, and creation. Thanks to its position in the French market, Tequilarapido encourages the development of strong synergies around the Mediterranean basin and shares within the group a vigilant watch on new practices and innovation.

### **1.3.5. Allégorie**

Allégorie is much more than a traditional communication agency. They are a dynamic and versatile team offering a comprehensive range of services to meet their client's needs.

- Their advertising expertise enables them to create impactful and memorable campaigns that capture the audience's attention and effectively convey the brand message.
- They also provide in-depth strategic advice to help their clients develop effective communication strategies and achieve their business goals.
- Through their brand platform, they assist their clients in developing a consistent brand identity and creating memorable experiences for their customers.
- Their advertising creation services combine innovation and creativity to produce high-quality visual and written content that engages audiences.

- Finally, their expertise in press relations and events allows them to organize memorable events and effectively manage their clients' media reputations. At Allégorie, they are committed to providing their clients with integrated and superior-quality communication solutions to help them achieve both their communication and business goals.

#### **1.4. Advisory Department**

The advisory department plays a crucial role in creating value for clients. Its responsibilities include:

- **Understanding client issues and challenges:** The advisory department is committed to first understanding the issues and challenges faced by the client, as well as the characteristics of its target audience, before formulating appropriate solutions and transforming them into concrete objectives.

- **Development of communication strategies:** Based on the client's issues and challenges, the advisory department develops effective communication strategies to achieve the set objectives.

- **Advice and recommendations:** It provides informed advice and recommendations on communication, taking into account market trends.

- **Internal coordination:** The advisory department coordinates the various teams within the agency to ensure that the communication strategy is implemented effectively and coherently.

- **Evaluation of results:** After the implementation of campaigns, the advisory department evaluates the results obtained and recommends adjustments if necessary to improve future performance.

##### **1.4.1. Description of Responsibilities and Functions of Each Position in the Advisory Department**

- **Client Director**

Acting as the agency's ambassador to the clients they manage, the Client Director assumes roles such as business developer, advisor, coordinator, manager, and administrator. Their responsibility is to initiate and plan strategic initiatives on behalf of both the client and the agency.

• **Advertising Manager**

This role is pivotal in the conception, planning, and implementation of effective advertising campaigns for the agency's clients. Working closely with the management team and clients, they develop strategic advertising strategies considering business objectives, target audience, and market positioning. Supervising the creation of messages and visuals, they ensure that campaigns are impactful and aligned with client needs. A Skilled project manager, coordinates various stages of the process from setting timelines to performance tracking.

• **Advertising executive**

Serving as the operational interface between clients and the agency, the Advertising Coordinator ensures that client needs are understood and respected throughout the process. Responsibilities include coordinating various stages of campaign creation and execution, and regularly communicating with clients to keep them informed of project progress.

• **Content executive**

Responsible for daily management with clients, which includes developing and implementing schedules, creating reports and content, and overseeing creation through briefing and debriefing. They also conduct competitive monitoring and analyze results. Additionally, they actively contribute to discussions and reflections on ongoing campaigns and projects.

• **Influence Manager**

Responsible for developing and managing influencer marketing strategies for agency clients. Their role involves identifying, contacting, and collaborating with relevant influencers in different fields to promote clients' products, services, or brands. They develop customized campaign plans based on each client's objectives, selecting the right influencers, and building strong partnerships.

## **SECTION 02: RESEARCH METHODOLOGY**

### **2.1. Main Research Question**

The empirical research aims to thoroughly investigate the following research question:

**"To what extent does gamification contribute to motivation and involvement?"**

To gain a deeper understanding of this issue, several sub-questions have been developed to guide the inquiry.

#### **2.1.1. Sub-questions**

- How does increased familiarity with gamification impact consumer involvement in activities?
- What role does consumer involvement play in shaping their motivation within gamified contexts?
- How do consumers' interactions with gamified elements and their level of engagement jointly impact their motivation?

#### **2.1.2. Hypotheses**

To address the problem statement and the sub-questions, the following hypotheses will be formulated:

- **H1:** The increased familiarity with gamification positively affects consumer involvement.
- **H2:** Higher levels of consumer involvement positively influence consumer motivation.
- **H3:** Consumers need both familiarity with gamification and active involvement in activities to become motivated.

### **2.2. Research Design**

To conduct the research and test the hypotheses, interviews were chosen, which proved to be the appropriate method for the qualitative approach aimed at providing an empirical dimension to the research study. Additionally, a questionnaire for the quantitative approach will be included to

complement and strengthen the results of the research. Online questionnaires have become the preferred method for data collection due to their ease of creation, use, and analysis.

### **2.2.3. Questionnaire Design**

At the start of the questionnaire, an option to choose the language respondents were most comfortable with was presented: French, and English.

Questions were structured according to the objective of the research; Two eliminatory questions, 5 questions measuring familiarity with gamification elements, 10 questions measuring motivation and involvement, and 3 demographic questions.

The questionnaire includes various question forms:

- Closed-ended questions:
- Single choice questions;
- Seven-point Likert scale questions;
- Yes/No questions.
- Identification questions

#### **2.2.3.1. Questionnaire Pilot-testing**

Pre-testing the questionnaire is a crucial phase in its development, aiming to assess its validity and reliability. Initially, the questionnaire was distributed to friends and relatives to evaluate the coherence and quality of the questions.

Online questionnaires offer numerous advantages:

- Convenience
- Speed
- Cost-effectiveness
- Rapid analysis
- Flexibility
- Potential for automation
- Anonymity

#### **2.2.3.2. Final Questionnaire**

The final questionnaire was adapted to the results of the pilot testing. Therefore, examples were added to better explain the questions. After the filtering questions of whether the respondents have ever participated in activities or used products/services that offer rewards or incentives and if they are familiar with the concept of gamification. The first five (5) questions were related the familiarity with gamification elements;

The next section includes five (5) questions, asking respondents to indicate to which extent they agree/disagree with each statement (question) on a seven-point Likert scale. These questions aim to measure the involvement of the respondents.

The following section includes five (5) questions, asking respondents to indicate to which extent they agree/disagree with each statement (question) on a seven-point Likert scale. These questions aim to measure the motivation of the respondents.

The final section included three (3) demographic questions: age group, gender, and employment status.

#### **2.2.3.3. Mode Of Administration**

The questionnaire was distributed online to respondents, offering accessibility and convenience. This method facilitated widespread participation and efficient data collection for analysis.

#### **2.2.3.4. Sampling**

The non-probabilistic sampling technique Quota was used for this study. The technique was chosen due to its practicality, accessibility, low cost, effectiveness, and rapidity of data collection.

#### **2.2.3.5. Preliminary Analysis**

After the data was collected and treated, it will be analyzed using the computer software SPSS version 26.

Referring to the hierarchical regression principle, to examine the hypothesis. This method allows for the exploration of the incremental contribution of predictor variables to the variance in the outcome variable, providing a structured approach to hypothesis testing.

To test the first hypothesis, H1, the Student Test was used to test whether the mean value is superior to the test-value 4 for familiarity with gamification. Then a simple linear regression was used to test the influence the familiarity with gamification on involvement:

- Dependent Variable: Involvement.
- Independent Variable: familiarity

To test the second hypothesis, H2, the Student Test was used to test whether the mean value is superior to the test-value 4 for motivation. Then a simple linear regression was used to test the influence of involvement on motivation.

- Dependent Variable: motivation.
- Independent Variable: involvement.

To test the third hypothesis, H3, Multiple Linear Regression was used:

- Dependent Variable: Motivation
- Independent Variables: familiarity and involvement

#### **2.2.4. interview**

The interview method was chosen for the qualitative study because it allows for in-depth exploration of participants' perspectives and experiences. Interviews facilitate a rich, detailed understanding of the subject matter by enabling open-ended questions and follow-up probes, which can uncover nuanced insights that other methods might miss. This approach aligns with the objective of providing an empirical dimension to the research, as it allows us to gather firsthand information and contextual data directly from individuals. By fostering a face-to-face dialogue, we can also build rapport and trust, encouraging participants to share more openly and candidly, thereby enhancing the validity and reliability of the findings.

Specifically, semi-structured interviews were used. In this type of interview, the interviewee responds to questions with a somewhat limited degree of freedom, providing precise answers based on the explanations and arguments requested by the researcher, without deviating from the framework of each question. The goal is to gather information and verify specific points related to certain hypotheses.

#### **2.2.4.1. interviews process**

For each organized interview to last no more than twenty minutes in French since the interviewees were comfortable with this language. However, this time was significantly exceeded due to the workload during that period.

The interviews were conducted on the following dates: two on 16/05/2024, one on 19/05/2024, and the last one on 21/05/2024. These dates were arranged in advance according to each responsible availability.

The interviews took place in each manager's office. This setting allowed the managers to remain in their professional roles, thereby enabling them to provide well-articulated and often rich responses on the various topics discussed.

#### **2.2.4.2. The moral aspect of the interview**

During interviews, adhering on:

- Presenting the thematic context and the purpose of the study before beginning the interview.
- Maintaining the anonymity of the interviewees.
- Keeping the transcripts related to interviewees available to them.
- Thanking interviewees for their collaboration.

#### **2.2.4.3. Sample Selection Criteria**

Regarding the qualitative study, the criteria that determined the choice are, of course, the positions held by these individuals, which are related to the research topic, their ability to answer research questions, and their experience in the field of marketing.

#### **2.2.4.4. Structure of the Interview Guide**

the guide was structured into axes as follows:



**Table 3.1.** Interview Guide structure

Axes	Objective
Identification and description of the interviewee's profile	The objective of this section is to understand the interviewees' roles and responsibilities in detail. By identifying and describing their functions and tasks, we can better assess the relevance and added value of their insights to the study.
Understanding gamification	This section contains a series of questions designed to deepen the understanding of gamification. The questions focus on how individuals perceive and interact with gamification elements, their level of familiarity with these concepts, and their overall experience with gamified systems.
Impact of gamification on involvement	This section focuses on the contribution of gamification to user involvement and how to measure its impact. The questions aim to explore how gamification elements enhance user participation and engagement in activities. Additionally, the section delves into methods for evaluating the effectiveness of these elements.
Impact of gamification on motivation	In this section, the role of gamification in influencing motivation and discuss methods for measuring its impact. The questions aim to uncover how gamification elements stimulate users' drive to engage in activities.
The final word: conclusions, development perspectives.	These closing questions aim to highlight the interviewee's overall impression of the interview, as well as their perspectives.

**Source:** Personal efforts based on interviews guide

### **SECTION 03: DATA ANALYSIS**

In this section, we will first present and analyze the data collected through the online questionnaire using SPSS version 26. Out of the 253 responses collected, we have accepted 164 for this research to address the main question: to what extent does gamification contribute to consumer involvement and motivation?

We will begin by analyzing the demographic characteristics of the respondents. Following this, we will perform a deeper analysis of the collected data using a One-Sample t-test, and then simple and multiple regression to test the hypotheses.

Next, we will analyze the results of the interviews to gain a deeper understanding of the theme and study hypotheses. This combined approach will allow us to comprehensively explore how gamification influences consumer involvement and motivation.

#### **3.1. Quantitative analysis**

In this section, data analysis of the data collected through the online questionnaire using SPSS version 26 will be presented.

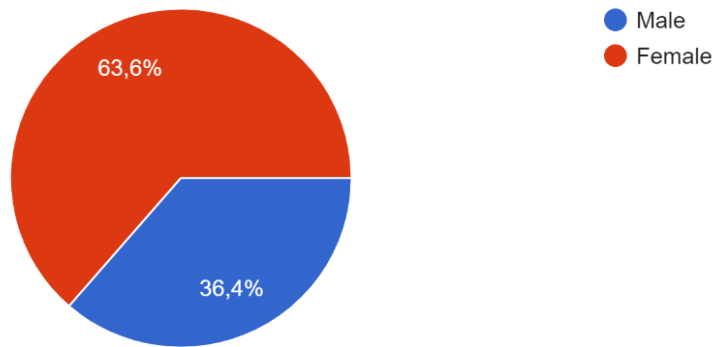
253 answers from which 164 answers were accepted for this research to answer the main question: **To what extent does gamification contribute to motivation and involvement?**

First, the demographic characteristics of the respondents will be analyzed. Next, we will conduct a comprehensive analysis to test the hypothesis. We begin with a one-sample t-test to determine whether the attributes exceed the test value, thereby confirming their usefulness for the analysis. Following this, hierarchical regression will be used, a statistical method that involves adding variables to a regression model in steps to assess their impact incrementally. This approach allows us to test these three hypotheses by applying linear regression to each one.

### 3.1.1. Demographics

The questionnaire includes a series of questions designed to identify the target population.

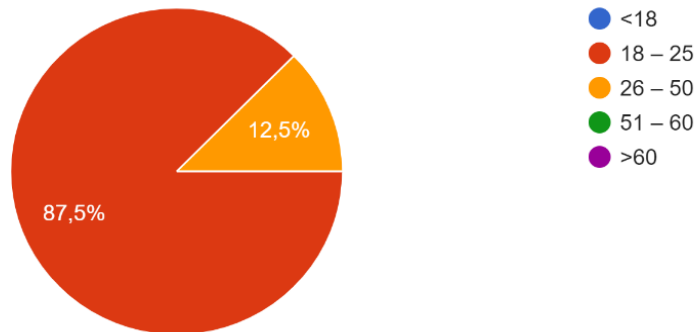
**Figure 3.2.** Respondents Gender



**Source:** Personal efforts using the questionnaire

The research sample includes 253 respondents, 80 are males (36,4% of the sample), and 173 females (63,6% of the sample).

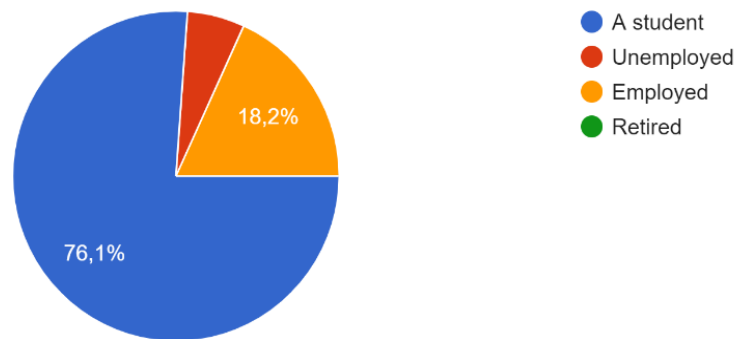
**Figure 3.3.** Respondents Age



**Source:** Personal efforts using the questionnaire

87,5% of respondents are aged between 18 and 25, 12,5% are aged between 26 and 50.

Figure 3.4. Respondents Employment Status



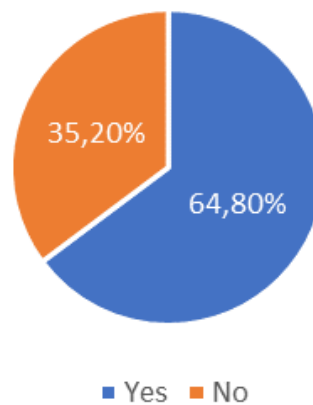
Source: Personal efforts using the questionnaire

76,1 % of the respondents were students. 18,2 % of them were employed. The rest were unemployed (5,7 %).

### 3.1.2. Eliminary Question

At the beginning of the questionnaire, the respondents were asked to indicate whether they have ever participated in activities or used products/services that offer rewards or incentives.

Figure 3.5. Eliminatorv Ouestion



Source: Personal efforts using the questionnaire

164 (64,8 %) of respondents answered yes while 89 (35,2 %) answered no.

**3.1.3. Statements Data Treatment**

The research questionnaire included ten (15) questions aiming at measuring the respondents' familiarity with gamification, motivation, and involvement; five (5) of these questions were dedicated to measuring involvement, and five (5) of them were dedicated to measuring motivation.

Before any hypothesis testing begins, the mean of the motivation statements (M1, M2, M3, M4, M5) was calculated, making it the variable "motivation" in this study. The same was done to the involvement statements (I1, I2, I3, I4, I5,) becoming the variable "involvement".

We used the same approach for familiarity with gamification (F1, F2, F3, F4, F5,) becoming the variable "familiarity\_ave".

**3.1.4. Hypothesis H1 Testing**

To test the first hypothesis which stipulates "**Increased familiarity with gamification positively affects consumer involvement**", a one-sample t-test was conducted on the questions measuring familiarity with gamification:

- H0:  $\bar{X} \leq 4$ ;
- H1:  $\bar{X} \geq 4$ ;

**Table 3.2. One Sample Test – H1**

	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
1-I'm familiar with the points system (Receiving points for a specified action )	2.824	163	.005	.40854	.1228	.6942
2-I'm familiar with badges ( visual symbols or representations awarded to users for accomplishing specific tasks , e.g: Super fan badge)	6.058	163	.000	.87805	.5919	1.1642
3-I'm familiar with challenges on digital plateformes	5.988	163	.000	.92073	.6171	1.2243
4-I'm familiar with rewards	7.169	163	.000	1.06707	.7732	1.3610
5-I'm familiar with leadboards	10.028	163	.000	1.37195	1.1018	1.6421

**Source:** Personal efforts using SPSS 26

**Sample Size (N)**

Each of the five measurements is based on 164 observations, ensuring a robust sample size for statistical testing.

**Statistical Significance**

The t-values indicate the strength of the difference between the sample mean and the test value (4). Higher t-values represent stronger evidence against the null hypothesis (which states that the sample mean is inferior or equal to the test value).

The p-values (Sig. (2-tailed)) for all five measurements are less than 0.05, indicating that all differences are statistically significant at the 0.05 significance level.

**Mean Differences and Confidence Intervals**

The mean differences (ranging from 0.4085 to 1.3720) represent how much the sample means exceeds the test value of 4.

The 95% confidence intervals for the mean differences do not include 0 for any of the measurements, which further supports the statistical significance of the results.

**Table 3.3.** One-Sample Statistics – H1

	N	Mean	Std. Deviation	Std. Error Mean
1-I'm familiar with the points system (Receiving points for a specified action )	164	4.4085	1.85292	.14469
2-I'm familiar with badges ( visual symbols or representations awarded to users for accomplishing specific tasks , e.g: Super fan badge)	164	4.8780	1.85611	.14494
3-I'm familiar with challenges on digital plateformes	164	4.9207	1.96904	.15376
4-I'm familiar with rewards	164	5.0671	1.90618	.14885
5-I'm familiar with leadboards	164	5.3720	1.75197	.13681

**Source:** Personal efforts using SPSS 26

The one-sample t-tests show that the sample means for all five familiarity statements are significantly higher than the hypothesized population mean of 4. This suggests that respondents

are generally more familiar with each of these features (points system, badges, challenges, rewards, and leaderboards) than a neutral baseline level.

After applying simple regression on involvement and familiarity with gamification, we interpret the results as follows:

**3.1.4.1. Significance of the model**

**Table 3.4. ANOVA – H1**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	92.120	1	92.120	74.495	.000
1 Residual	200.329	162	1.237		
Total	292.450	163			

**Source:** Personal efforts using SPSS 26

The F-statistic of 74.495 with a p-value of .000 indicates that the regression model is statistically significant. This means that "Familiarity\_Ave" significantly predicts the "Involvement" variable.

**3.1.4.2. Usefulness of the model**

To interpret the usefulness of the model, we need to compare the calculated F-statistic (74.495) with the critical F-value (3.8). The calculated Fisher value must be 4 to 5 times superior to the critical Fisher value.

$$74.495 / 3.8 = 19.60$$

Since the calculated F-statistic is significantly greater than the critical F-value, the model is likely to be highly useful for predicting the values of the dependent variable (Involvement).

**3.1.4.3. Examination of Parameters (Coefficients)**

**Table 3.5. Coefficients – H1**

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
(Constant)	1.942	.307		6.335	.000
1 Familiarity_Ave	.515	.060	.561	8.631	.000

**Source :** Personal efforts using SPSS 26

The standardized coefficient (Beta) provides a clear indication of the significance and direction of the influence of Familiarity\_Ave on Involvement.

With a positive Beta value of 0.561, Familiarity\_Ave significantly and positively influences Involvement, with higher levels of familiarity leading to higher levels of involvement.

**3.1.4.4. Strength of the Association**

**Table 3.6. Model Summary – H1**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.561	.315	.311	1.11203

**Source:** Personal efforts using SPSS 26

The R Square value of 0.315 indicates that 31.5% of the variance in Involvement can be explained by Familiarity\_Ave. While this represents a moderate amount of explained variance, it implies that other factors beyond Familiarity\_Ave also contribute to Involvement.

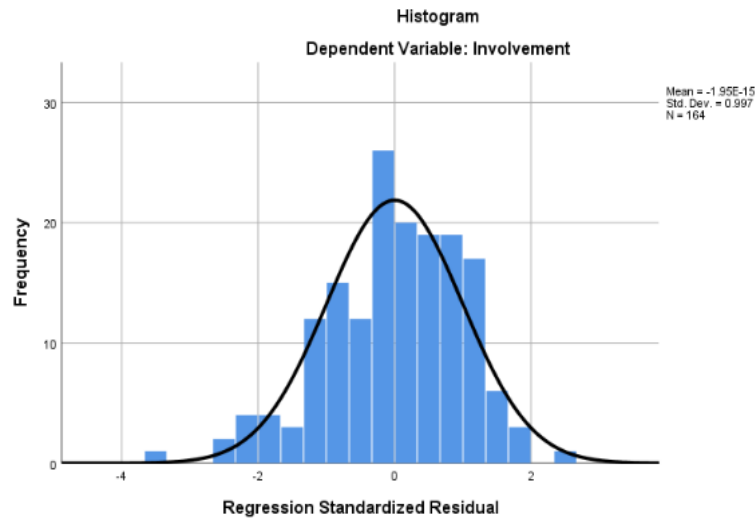
**3.1.4.5. Regression Equation**

$$\text{Involvement} = 1.942 + 0.515 \text{ Familiarity\_Ave}$$



3.1.4.6. Normality of Residua

Figure 3.6. Residuals Normality Histogram – H1



Source: Personal efforts using SPSS 26

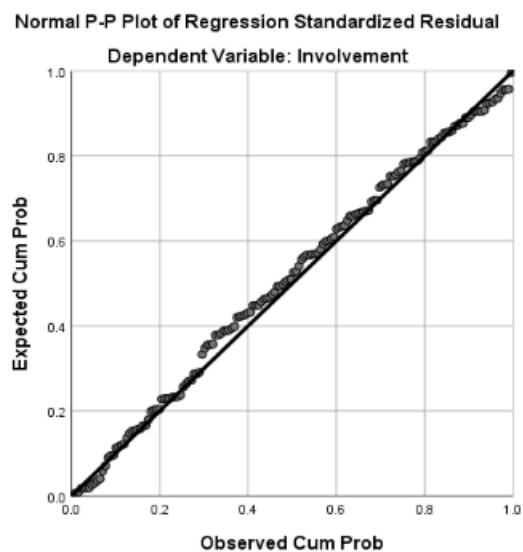
residuals histogram showing a bell-shaped curve centered around zero provides evidence that the regression model's residuals are normally distributed. This strengthens the credibility of the model's predictions and enhances the reliability of statistical inferences drawn from it.

All residuals are extremely close to the diagonal line, i.e. the residuals form a straight line. This indicates that the assumption of normality of residuals is checked.

3.1.4.7. Hypothesis-testing Sum-Up

A simple regression analysis was conducted to examine the impact of familiarity with gamification on consumer involvement. The results demonstrated that the regression model was both statistically significant and useful in predicting consumer involvement based on familiarity with gamification. Consequently, the initial hypothesis, positing that increased familiarity with gamification positively influences consumer involvement, is supported and accepted. This suggests that as consumers become more familiar with gamification elements, their level of involvement increases.

Figure 3.7. Residuals Normality Test – H1



Source: Personal efforts using SPSS 26

### 3.1.5. Hypothesis H2 Testing

To test the second hypothesis stipulating “**Higher levels of consumer involvement positively influence consumer motivation**”, a one-sample t-test was conducted on the questions measuring motivation:

**Table 3.7.** One Sample Test – H2

	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
1- It is important for me to receive rewards	6.362	163	.000	.95122	.6560	1.2465
2- It is important for me to earn points	7.136	162	.000	1.03067	.7455	1.3159
3- It is important for me to earn badges	3.913	163	.000	.57927	.2869	.8716
4- It is important for me to participate in challenges on digital plateformes	1.605	163	.110	.25000	-.0576	.5576
5- It is important for me to be ranked to track my achievements	4.575	163	.000	.71951	.4090	1.0300

**Source:** Personal efforts using SPSS 26

**Sample Size (N)**

Each of the five measurements is based on 164 observations, ensuring a robust sample size for statistical testing.

**Statistical Significance**

- The t-values indicate the strength of the difference between the sample mean and the test value (4). Higher t-values represent stronger evidence against the null hypothesis (which states that the sample mean is equal to the test value).
- The p-values (Sig. (2-tailed)) for four of the five measurements are less than 0.05, indicating that the differences between the sample mean and the test value is statistically significant at the 0.05 significance level.
- The p-value for the fourth item, "It is important for me to participate in challenges on digital plateformes," is 0.110, which is greater than 0.05, indicating that this difference is not statistically significant.

**Mean Differences and Confidence Intervals**

The significant mean differences (ranging from 0.57927 to 1.03067) suggest that participants consider these aspects of gamification to be important.

The confidence intervals for these significant items do not include zero, confirming the statistical significance of the results. The non-significant result for participating in challenges indicates a more neutral stance towards this aspect.

**Table 3.8.** One-Sample Statistics – H2

	N	Mean	Std. Deviation	Std. Error Mean
1- It is important for me to receive rewards	164	4.9512	1.91476	.14952
2- It is important for me to earn points	164	5.0307	1.84399	.14443
3- It is important for me to earn badges	164	4.5793	1.89602	.14805
4- It is important for me to participate in challenges on digital plateformes	164	4.2500	1.99501	.15578
5- It is important for me to be ranked to track my achievements	164	4.7195	2.01390	.15726

**Source:** Personal efforts using SPSS 26

The one-sample t-tests show that the sample means for all five statements regarding the importance of gamification elements are significantly higher than the hypothesized population mean of 4. The results indicate that respondents generally value the elements of gamification, such as receiving rewards, earning points, earning badges, and being ranked, more than a neutral level. Participation in challenges is viewed with a slightly higher importance than neutral. This reflects a generally positive perception of these gamification features.

After applying simple regression on involvement and familiarity with gamification, we interpret the results as follows:

**3.1.5.1. Significance of the model**

**Table 3.9.** ANOVA – H2

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	145.011	1	145.011	92.005	.000
1 Residual	255.332	162	1.576		
Total	400.343	163			

**Source:** Personal efforts using SPSS 26

The F-statistic of 92.005 with a p-value of .000 indicates that the regression model is statistically significant. This means that "Involvement " significantly predicts the "Motivation" variable.

**3.1.5.2. Usefulness of the model**

To interpret the usefulness of the model, we need to compare the calculated F-statistic (92.005) with the critical F-value (3.8). The calculated Fisher value must be 4 to 5 times superior to the critical Fisher value.

$$92.005 / 3.8 = 24.211$$

Since the calculated F-statistic is significantly greater than the critical F-value, the model is likely to be highly useful for predicting the values of the dependent variable (Motivation).

**3.1.5.3. Examination of Parameters (Coefficients)**

**Table 3.10.** Coefficients – H2

Model	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	1.553	.343		4.525	.000
1 Involvement	.704	.073	.602	9.592	.000

**Source:** Personal efforts using SPSS 26

The standardized coefficient (Beta) provides valuable insight into the strength and direction of the relationship between the predictor variable (Involvement) and the dependent variable (Motivation). In this case, a Beta value of 0.602 indicates a moderate positive influence of Involvement on Motivation.

This suggests that increasing levels of Involvement in gamification activities are associated with higher levels of Motivation among participants.

**3.1.5.4. Strength of the Association**

**Table 3.11.** Model Summary – H2

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.602	.362	.358	1.25544

**Source:** Personal efforts using SPSS 26

The R Square value of 0.362 indicates that 36.2% of the variance in motivation can be explained by involvement. While this represents a moderate amount of explained variance, it implies that other factors beyond involvement also contribute to motivation.

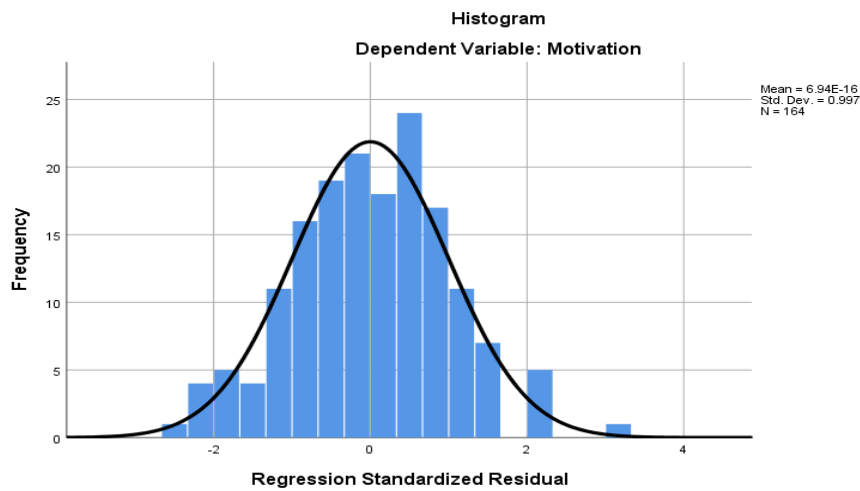
**3.1.5.5. Regression Equation**

$$\text{Motivation} = 1.553 + 0.704 \text{ Involvement}$$

3.1.5.6. Normality of Residuals

A residual histogram showing a bell-shaped curve centered around zero provides evidence that the regression model's residuals are normally distributed. This strengthens the credibility of the model's predictions and enhances the reliability of statistical inferences drawn from it.

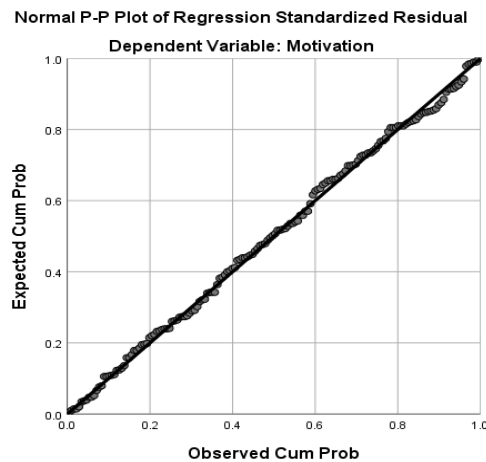
Figure 3.8. Residuals Normality Histogram – H2



Source: Personal efforts using SPSS 26

All residuals are extremely close to the diagonal line, i.e. the residuals form a straight line. This indicates that the assumption of normality of residuals is checked.

Figure 3.9. Residuals Normality Test – H2



Source: Personal efforts using SPSS 26

### 3.1.5.7. Hypothesis-testing Sum-Up

A simple regression analysis was conducted to examine the impact of involvement on consumer motivation. The results demonstrated that the regression model was both statistically significant and useful in predicting consumer involvement based on familiarity with gamification. Consequently, the initial hypothesis, positing that higher levels of consumer involvement positively influence consumer motivation, is supported and accepted. Therefore, participants who exhibit higher levels of involvement in gamification activities are expected to have higher levels of motivation.

### 3.1.6. Hypothesis H3 Testing

To test out the third hypothesis stipulating “**Consumers need both familiarity with gamification and active involvement in activities to become motivated**”, Multiple Linear Regression will be conducted on the 164 respondents who have already participated in gamified activities, where the dependent variable is “**motivation**” and the independent variables are “**familiarity with gamification**” and “**involvement**”.

#### 3.1.6.1. Data Screening

##### 3.1.6.1.1. Sample size

Since the equation includes two independent variables, the appropriate sample size should be at least  $15 \times 2 = 30$ .

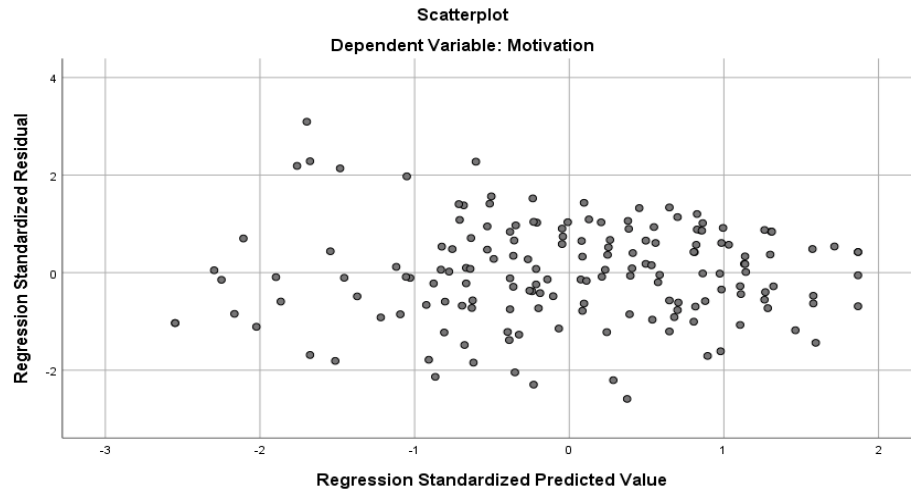
This sample's size is  $164 \gg 30$ . The assumption is verified; thus, the final equation is reliable.

##### 3.1.6.1.2. Outliers

To verify this assumption, MAH values must be compared to the chi-square value. All MAH values are inferior to the criterion value of chi-square of 13.82; outliers are inexistent in this data.



Figure 3.10. Outliers Test – H3



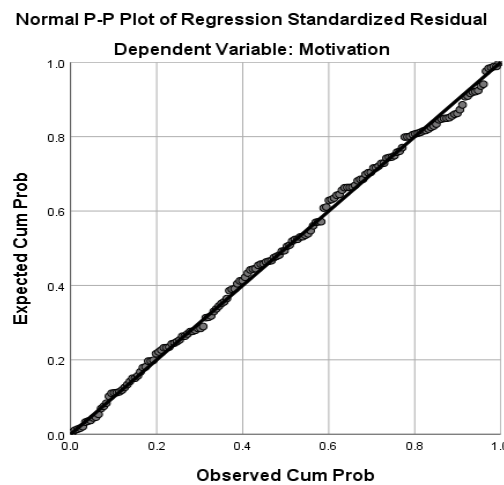
Source: Personal efforts using SPSS 26

Since all points form a rectangle, it confirms that the model does not contain any outliers.

### 3.1.6.1.3. Normality of Residuals

The residuals form a straight line; all residuals are extremely close to the diagonal line. This indicates that the assumption of normality of residuals is checked.

Figure 3.11. Residuals Normality Test – H3



Source : Personal efforts using SPSS 26

**3.1.6.1.4. Autocorrelation**

The calculated Durbin-Watson value is 1.640 which is inferior to the Durbin-Watson upper criterion value of 1.760 and the Durbin-Watson lower criterion value of 1.706.

Thus, the null hypothesis stipulating the existence of autocorrelation is accepted, which suggests that the errors in the model are not independent and may be correlated with each other over time or across observations.

**3.1.6.1.5. Multi-collinearity**

Multi-collinearity refers to high correlations between independent variables. The Tolerance statistics in both models are superior to 0.1 indicating the absence of multicollinearity. This phenomenon does not cause a problem in the study.

**Table 3.12.** Coefficients Tolerance – H3

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
Familiarity_Ave	1.000	1.000
2 (Constant)		
Familiarity_Ave	.685	1.460
Involvement	.685	1.460

**Source:** Personal efforts using SPSS 26

**3.1.6.2. Interpretation of the Model**

**The significance of the model**

The first model is significant given that the calculated Fisher value is 18.736 which is superior to the critical Fisher value of 3.89, which leads to rejecting the null hypothesis stipulating  $r^2 = 0$ .

The second model is significant given that the calculated Fisher value is 45.791 which is superior to the critical Fisher value of 3.04, which leads to rejecting the null hypothesis stipulating  $r^2 = 0$ .

**Table 3.13.** ANOVA – H3

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	41.501	1	41.501	18.736	.000
1 Residual	358.841	162	2.215		
Total	400.343	163			
Regression	145.157	2	72.578	45.791	.000
2 Residual	255.186	161	1.585		
Total	400.343	163			

**Source:** Personal efforts using SPSS 26

**The usefulness of the model**

To interpret the usefulness of the first model, we need to compare the calculated F-statistic (18.736) with the critical F-value (3.89). The calculated Fisher value must be 4 to 5 times superior to the critical Fisher value.

$$18.736 / 3.89 = 4.81$$

Since the calculated F-statistic is greater than the critical F-value, the model is likely to be highly useful for predicting the values of the dependent variable (motivation).

For the second model, we need to compare the calculated F-statistic (45.791) with the critical F-value (3.04):

$$45.791 / 3.04 = 15.06$$

Since the calculated F-statistic is greater than the critical F-value, the model is likely to be highly useful for predicting the values of the dependent variable (motivation).

**Interpretation of the Parameters**

**Table 3.14.** Coefficients – H3

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	Collinearity Statistics	
	B	Std. Error				Tolerance	VIF
1	(Constant)	3.004	.410				
	Familiarity_Ave	.346	.080	.322	4.328	.000	1.000
2	(Constant)	1.607	.388		4.145	.000	
	Familiarity_Ave	-.025	.082	-.023	-.304	.762	.685
	Involvement	.719	.089	.615	8.087	.000	1.460

**Source:** Personal efforts using SPSS 26

In the first model, the standardized coefficient (Beta) provides valuable insight into the strength and direction of the relationship between the predictor variable familiarity with gamification and the dependent variable (Motivation). In this case, a Beta value of 0.322 indicates a moderate positive influence of familiarity on Motivation.

Once involvement was added to the model, the influence of familiarity diminished to -0.23, indicating that people rely more on involvement to be motivated. This is supported by the significant impact of involvement, which is 0.615.

This suggests that increasing levels of Involvement in gamification activities are associated with higher levels of Motivation among participants.

**Strength of association**

**Table 3.15.** Model Summary – H3

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.322	.104	.098	1.48831	
2	.602	.363	.355	1.25897	1.640

**Source:** Personal efforts using SPSS 26

In the first model, familiarity explains only 9.8% of the variation in motivation, which is quite minimal.

In the second model, the two independent variables, namely “Familiarity\_Ave” and “involvement” explain 35.5% of the variation of the dependent variable “motivation”. The adjusted r-square of this model is relatively moderate (35.5%).

### **Regression equation**

$$\text{Motivation} = 1,607 - 0,025 \text{ Familiarity\_Avg} + 0,719 \text{ Involvement}$$

### **3.1.6.3 Hypothesis-testing Sum-Up**

It can be concluded that people rely on their involvement with gamified activities to become motivated, but they need to be familiar with these activities first. Therefore, our third hypothesis is accepted.

## **3.2. Qualitative analysis**

The analysis of our interview results will be conducted axis-by-axis to clarify each step and synthesize the findings.

### **3.2.1. Identification and description of the interviewee's profile**

In this part, the first axis will be addressed:

Our respondents come from diverse backgrounds, each bringing a unique set of skills and experiences that significantly enhance our research. Their involvement in advising and supporting client portfolios, developing comprehensive 360° strategies, and managing teams provides valuable insights into effective organizational practices.

Additionally, their expertise in identifying relevant influencers, managing collaborations and contracts, and crafting engaging marketing copy offers a comprehensive view of current industry standards and innovative approaches. This collective knowledge and experience greatly contribute to the depth and relevance of our study, allowing us to draw more informed and robust conclusions.

**Table 3.16.** Interviewees profiles

Interviewee	Experience	Missions	Date and place
<b>Account Director</b>	6 months	<ul style="list-style-type: none"> <li>• Advising and supporting a client portfolio.</li> <li>• Developing and brainstorming 360° strategies in advance.</li> <li>• Crafting strategies and campaigns aligned with client briefs &amp; objectives.</li> <li>• Managing teams comprised of Project Managers and Content Managers.</li> </ul>	Allegorie Group 19/05/2024
<b>Project Manager</b>	6 months	responsible for training and overseeing teams associated with each client, negotiating services with suppliers, and monitoring the development of each project (client needs, deliverables, acceptance criteria).	Allegorie Group 21/05/2024
<b>Influence Manager</b>	1 year	Identifying relevant influencers for each campaign, managing collaborations, handling contracts, as well as invoicing and payment processing.	Allegorie Group 16/05/2024
<b>Copywriter</b>	10 years	<p>Crafting compelling and engaging copy for various marketing materials, such as advertisements, websites, and social media posts.</p> <p>Conducting research to understand target audiences, market trends, and competitor strategies to inform writing strategies.</p> <p>Collaborating with marketing teams and clients to develop creative concepts and messaging that align with brand guidelines and campaign objectives.</p>	Allegorie Group 16/05/2024

**Source:** Personal efforts using the interview guide

### 3.2.2. Gamification

The second axis primarily focuses on questions related to respondents' expertise in gamification, their comprehension of the concept, and its practical application.

The first respondent defined the concept of gamification as the implementation of game mechanics on social networks or through Below-The-Line (BTL) activations, which encourage consumers or the target audience to interact with the brand. He stated that they primarily use gamification in digital communication through contests that offer prizes and incorporate

mechanisms that enhance social media impact. Their main objective is to stimulate cognitive behavior, encouraging users to try the product and visit physical stores ("drive to store").

The second respondent defined the concept as follows: Gamification involves integrating playful elements into non-playful contexts to stimulate engagement and motivation. He confirmed using it by stating that they utilize gamification to create interactive experiences, challenges, and rewards to encourage consumer interaction with their clients' brands. Additionally, they have launched campaigns where customers accumulate points by performing specific actions to win exclusive rewards, which has strengthened their engagement and loyalty.

The third respondent defined the concept as follows: In marketing, gamification involves integrating game elements into marketing strategies to increase engagement and stimulate sales. He confirmed using it by stating that they integrate contests on client digital platforms, as well as feedback and engagement mechanisms.

For the last respondent, he defined the concept in a simplified manner as a method of assigning tasks for gratification. He used it in a challenge points system to earn trophies and recharge credits for the client's phone SIM card.

In conclusion, this axis has provided valuable insights into respondent's knowledge, understanding, and practical usage of gamification. Across the responses, a consistent recognition of gamification's role in enhancing consumer engagement was observed, driving behavior change, and achieving marketing objectives. From implementing contests and interactive experiences to utilizing feedback mechanisms and points-based systems, respondents have demonstrated diverse approaches to leveraging gamification in their respective domains.

These findings underscore the significance of gamification as a powerful tool for fostering customer interaction, and loyalty, and ultimately, achieving business success. Moving forward, further exploration and analysis of these insights will allow us to gain a deeper understanding of the impact and effectiveness of gamification strategies in different contexts.

### **3.2.3. Involvement**

In this axis, the responses of respondents to questions regarding the impact of gamification on consumer engagement will be examined.

The first respondent emphasized that gamification revolves around contests, which inherently involve incentives or rewards. The greater the reward, the more willing fans are to engage with the brand according to its various rules and conditions. As consumers become increasingly interactive, they adopt the brand's products and exhibit strong loyalty, evident in their messaging and comments. Over time, this fosters a strong sense of closeness between them. The measurement of this phenomenon through social media Key Performance Indicators (KPIs) such as interactions, reach, and engagement rates, as well as the number of contest participations.

The second respondent highlighted how gamification can enhance engagement by making interactions more enjoyable and rewarding, thereby encouraging consumers to remain involved. They observed an increase in consumer interaction and loyalty, utilizing indicators such as participation rates, feedback, and behavioral data to measure engagement.

The third respondent emphasized the benefits of gamification, including content diversification, customer retention, and data collection and feedback. They noted heightened engagement and strong customer loyalty resulting from these strategies.

The last respondent underscored the psychological aspect of gamification, emphasizing its role in providing consumers with unique and enjoyable experiences. They suggested that engagement can be measured through indicators such as social media presence, positive feedback, and consumer requests for repeat gamified actions.

In conclusion, the insights provided by the respondents underscore the significant impact of gamification on consumer engagement and loyalty. From contests to interactive experiences, gamification has proven to be a powerful tool for fostering meaningful interactions between brands and consumers. Respondents highlighted the effectiveness of gamification in incentivizing consumer participation and driving behavior change, ultimately leading to increased brand loyalty and customer satisfaction.

Moreover, the use of various metrics and indicators allows organizations to measure the success of their gamification strategies and continuously optimize their approach. Moving forward, further exploration and implementation of gamification techniques will be crucial for brands seeking to enhance their customer engagement efforts and stay competitive in today's dynamic market landscape.



#### **3.2.4. Motivation**

In this axis, the interviewee's insights into the impact of gamification on consumer motivation will be analyzed:

The first respondent examined whether gamification affects consumer motivation to engage with brands or products. They considered factors such as brand awareness, fan interaction, reward types, mechanics simplicity, and product accessibility. According to them, reward type and participation simplicity are key to motivating consumers. They noted an uptick in customer loyalty post-gamification initiatives, supported by social media metrics and qualitative feedback.

The second respondent highlighted gamification's role in motivating consumer interaction by providing enticing incentives and challenges. They identified attractive rewards, interactive challenges, and social interactions as effective motivators. Notably, active participants showed increased loyalty.

The third respondent stressed gamification's ability to entertain consumers, offer appealing rewards, and foster long-term loyalty. They pointed to progression, social interactions, and personalization as key motivational factors. Similar to others, they observed heightened loyalty post-gamification efforts.

Lastly, the fourth respondent underscored the importance of emotional connections with clients and high-quality rewards in driving consumer engagement and loyalty. Their emphasis on building rapport and offering valuable rewards aligns with others' views on motivating consumer behavior through gamification.

In conclusion, the exploration of the role of gamification in consumer motivation has yielded valuable insights from the respondents. Across the board, a consensus on the effectiveness of gamification in stimulating consumer engagement and fostering long-term loyalty is observed. Respondents highlighted various elements such as attractive rewards, interactive challenges, and social interactions as key drivers of motivation.

Additionally, they emphasized the importance of simplicity in mechanics, brand consideration, and emotional connections with clients in influencing consumer behavior. The observed increase in customer loyalty post-gamification initiatives further reinforces the positive impact of gamification strategies. Overall, these findings underscore the significant potential of gamification as a powerful tool for brands to enhance consumer motivation, drive engagement, and build lasting relationships with their audience.

### **3.2.5. Recommendations of Interviewees**

In the recommendation phase, they proposed integrating personalized elements to better cater to individual consumer needs and enhance their engagement with the brand. This approach involves tailoring experiences and offerings to match the preferences and behaviors of each consumer segment, thereby creating more meaningful and impactful interactions. By adopting personalized strategies, brands can build stronger connections with their audience, foster greater loyalty, and ultimately drive business growth.

## **CONCLUSION**

To conclude, the empirical research has effectively addressed the research questions by rigorously testing the hypotheses. Utilizing one-sample t-tests along with simple and multiple linear regression analyses, the study provided significant insights into consumer motivation and involvement through gamified activities. The results unequivocally demonstrated that gamification positively impacts motivation and involvement, elucidating why brands increasingly adopt these strategies to foster customer loyalty.

Furthermore, the interviews conducted offered invaluable insights into the practical applications of gamification by brands. These qualitative findings revealed how brands strategically leverage gamification to achieve their marketing objectives, attract and satisfy customers, and cultivate robust brand-client relationships. The interviews highlighted specific gamification elements and tactics employed by brands to enhance customer experience and engagement.

These comprehensive findings underscore the pivotal role of gamification in modern marketing strategies. By enhancing consumer engagement and fostering brand loyalty, gamification proves to be a powerful tool for brands aiming to build lasting and meaningful connections with their customers. The study's conclusions affirm the growing significance of incorporating gamified elements in marketing efforts to drive consumer involvement.

## GENERAL CONCLUSION

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This dissertation investigates the role of gamification in enhancing consumer involvement and motivation. By integrating game-design elements into non-game contexts, gamification aims to boost engagement and drive consumer behavior. The study draws on key theoretical frameworks, to understand the dynamics between gamification, consumer involvement, and motivation.

Empirical research was conducted to test three hypotheses: increased familiarity with gamification positively affects consumer involvement; higher levels of consumer involvement enhance consumer motivation; and consumers need both familiarity with gamification and active involvement to become motivated. Data collected from online questionnaires and interviews confirmed these hypotheses, underscoring the importance of gamification in fostering consumer engagement and motivation. These findings contribute valuable insights for leveraging gamification in marketing strategies.

The central problem addressed in this dissertation is the extent to which gamification contributes to consumer involvement and motivation. In an increasingly digital and competitive marketplace, businesses are continually seeking innovative strategies to engage consumers and drive their behavior. Gamification, which incorporates game-design elements into non-game contexts, has emerged as a promising approach to achieve these goals. However, the specific impact of gamification on consumer involvement and motivation required further investigation to provide actionable insights for marketers and business strategists.

By exploring how familiarity with gamification affects consumer involvement and how this involvement subsequently influences motivation, this research aims to clarify the mechanisms through which gamification can enhance consumer engagement. The findings offer a nuanced understanding of the conditions under which gamification is most effective, thereby addressing the critical question of its contribution to consumer involvement and motivation.

To evaluate the hypotheses, a combination of statistical methods was employed. For the first two hypotheses, a one-sample t-test and simple linear regression analysis were used. The one-sample t-test assessed whether the mean level of familiarity with gamification was significantly higher than the test value. Simple linear regression examined the direct relationship between consumer involvement and consumer motivation.

The second hypothesis, suggesting that increased involvement positively impacts consumer motivation, was validated. This was evidenced by a One sample t-test, indicating that respondents

## GENERAL CONCLUSION

perceive the mentioned attributes as engaging. Additionally, through simple linear regression, the analysis established a positive correlation between motivation and involvement.

For the third hypothesis, which proposed that consumers need both familiarity with gamification and active involvement to become motivated, multiple regression analysis was conducted. This method assessed the combined effect of both independent variables (familiarity with gamification and consumer involvement) on the dependent variable (consumer motivation). The results of these analyses confirmed all three hypotheses, demonstrating the positive impact of gamification on consumer involvement and motivation.

The research successfully met its objectives by investigating the contribution of gamification to consumer involvement and motivation. Through a comprehensive review of theoretical frameworks and empirical research, the study aimed to clarify the relationship between familiarity with gamification, consumer involvement, and motivation.

The findings of the study confirmed the hypotheses, indicating that increased familiarity with gamification positively influences consumer involvement, which, in turn, enhances consumer motivation. Furthermore, the research provided insights into the conditions necessary for consumers to be motivated, emphasizing the importance of both familiarity with gamification and active involvement in activities.

By fulfilling these objectives, the research contributes to a deeper understanding of how gamification can be effectively utilized in marketing strategies to engage consumers and drive their behavior. These insights have practical implications for businesses seeking innovative approaches to enhance consumer involvement and motivation in today's competitive marketplace.

### 1. Recommendations

In considering the implementation of gamification strategies to enhance consumer involvement and motivation, several key recommendations emerge. Developing engaging gamified experiences is essential, resonating with the target audience's interests and preferences. Incorporating meaningful elements enhances engagement and motivation. Educating consumers about gamification is crucial, increasing familiarity through interactive tutorials, informational campaigns, or demonstrations of gamified features. Encouraging active consumer involvement is key, providing opportunities for participation in challenges, competitions, or collaborative tasks fosters a sense of ownership and investment, heightening motivation.

## GENERAL CONCLUSION

Personalizing gamification strategies to individual consumer preferences and behavior patterns is recommended. Utilizing data analytics to customize experiences and rewards maximizes relevance and effectiveness. Continuously monitoring and adapting gamification efforts is vital, ensuring sustained engagement and motivation over time. Flexibility and adaptability based on feedback and results drive brand loyalty and satisfaction. Extending gamification beyond traditional marketing channels creates a seamless brand experience, expanding consumer engagement. Investing in ongoing consumer research and feedback is essential, enabling the refinement of strategies to align with evolving preferences and expectations. These actions effectively harness gamification's power, enhancing consumer involvement and motivation, and driving brand loyalty, satisfaction, and profitability.

### 2. Future Research Objectives

Looking ahead, several avenues for future research emerge, aiming to deepen the understanding of gamification's impact on consumer behavior and motivation. Longitudinal studies could provide insights into how engagement levels evolve over time and the factors influencing long-term behavioral changes. Additionally, comparative studies across diverse cultural contexts can reveal insights into the universality of gamification principles and the need for culturally sensitive approaches.

Utilizing advanced data analytics techniques, such as machine learning and predictive modeling, can enhance the personalization and effectiveness of gamification strategies. Analyzing large datasets can uncover nuanced relationships between consumer behavior, gamified experiences, and motivational factors. Furthermore, applying neuroscientific methods, such as neuroimaging and physiological measurements, can investigate the underlying cognitive and emotional processes involved in consumer responses to gamification. Understanding the neural mechanisms behind gamification can inform the design of more compelling and impactful experiences.

As technology continues to evolve, exploring the integration of gamification with emerging technologies such as virtual reality (VR), augmented reality (AR), and artificial intelligence (AI) presents exciting opportunities. Investigating how these technologies enhance or transform gamified experiences can open new possibilities for consumer engagement and motivation. Lastly, ethical considerations surrounding gamification, particularly concerning privacy, data security, and psychological well-being, warrant further exploration. Future research should address concerns

## GENERAL CONCLUSION

related to potential manipulation, addiction, and unintended consequences of gamified interventions. Pursuing these future research objectives can advance the understanding of gamification's role in shaping consumer behavior and motivation, ultimately informing the development of more effective and ethical marketing practices.

### 3. Research limitations

Research limitations should be acknowledged to provide context for the findings and suggest areas for future research improvement. Firstly, the generalizability of the findings may be limited due to the specific sample characteristics or the context in which the research was conducted. Additionally, the reliance on self-reported data from surveys and interviews may introduce response bias or social desirability effects, impacting the accuracy of the results.

Furthermore, the complexity of gamification as a multidimensional concept may not have been fully captured in the research design or measurement instruments used. This could potentially overlook certain aspects of gamification that could influence consumer involvement and motivation.

Moreover, the cross-sectional nature of the study design limits the ability to establish causality between variables. Longitudinal studies would provide more robust evidence of the relationships investigated.

Finally, resource constraints may have limited the scope of the research, preventing the exploration of additional variables or the inclusion of more diverse samples.

Despite these limitations, the findings contribute valuable insights into the relationship between gamification, consumer involvement, and motivation. Future research endeavors should aim to address these limitations to build upon and refine the understanding of this dynamic phenomenon.

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**Appendix 01:** The Host Company's Logo**Appendix 02:** The Questionnaire**The contribution of gamification to consumer's motivation and involvement**

- Welcome to our survey on the impact of gamification elements on motivation levels and involvement. We have few questions that will require your assistance to understand how gamification elements contribute to user motivation and involvement in such activities.
- Bienvenue à notre enquête sur l'impact des éléments de gamification sur les niveaux de motivation et l'engagement . Nous avons quelques questions qui nécessiteront vos retours afin de comprendre comment les éléments de gamification contribuent à la motivation et à l'engagement des utilisateurs dans de telles activités.

Before we begin, please select the language you are comfortable with.

Avant de commencer, veuillez choisir la langue avec laquelle vous êtes à l'aise.

- English
- Français



## APPENDIXES

### Appendix 02.1: The Questionnaire – English Version

Esteemed respondents,

With the aim of finalizing my Master's Dissertation at the Higher School of Commerce, I am extending an invitation to you to take part in this study by filling out the following survey. Please provide candid responses to the questions.

Kindly be informed that the survey guarantees complete anonymity, and no personal information will be gathered or disclosed.

1- Have you ever participated in activities or used products/services that offer rewards or incentives

Yes

No

2- Are you familiar with the concept of gamification (the integration of game elements into non-game contexts)?

Yes

No

1- I'm familiar with the points system (Receiving points for a specified action)

1      2      3      4      5      6      7

Not Familiar                      Familiar

2- I'm familiar with badges (visual symbols or representations awarded to users for accomplishing specific tasks, e.g: Superfan badge)

1      2      3      4      5      6      7

Not Familiar                      Familiar

3- I'm familiar with challenges on digital platforms



## APPENDIXES

On a scale of 1 to 7, rate the level of importance of the following statements

1- It is important for me to receive rewards

1      2      3      4      5      6      7  
 Not important at all                        Very important

2- It is important for me to earn points

1      2      3      4      5      6      7  
 Not important at all                        Very important

3- It is important for me to earn badges

1      2      3      4      5      6      7  
 Not important at all                        Very important

4- It is important for me to participate in challenges on digital platforms

1      2      3      4      5      6      7  
 Not important at all                        Very important

5- It is important for me to be ranked to track my achievements

1      2      3      4      5      6      7  
 Not important at all                        Very important

### Demographic Information

1- Please indicate your gender

Male

Female

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2- Please indicate your age group

- <18
- 18 – 25
- 26 – 50
- 51 – 60
- >60

3- Please indicate your employment status

- A student
- Unemployed
- Employed
- Retired

**Appendix 02.2: The Questionnaire – French Version**

Chers répondants,

Dans le but de finaliser mon mémoire de master à l'École Supérieure de Commerce, je vous adresse une invitation à participer à cette étude en remplissant le sondage ci-dessous. Veuillez fournir des réponses franches aux questions.

Veuillez noter que le sondage garantit une anonymat complet, et aucune information personnelle ne sera collectée ni divulguée.

1-Avez-vous déjà participé à des activités ou utilisé des produits/services qui offrent des récompenses ou des incitations ?

- Oui
- Non

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2- Êtes-vous familier avec le concept de gamification (l'intégration d'éléments de jeu dans des contextes hors-jeu) ?

- Oui
- Non

Sur une échelle de 1 à 7, évaluez votre niveau de familiarité avec les énoncés suivants

1- Je suis familier avec le système de points (attribution de points à une action spécifique que vous avez réalisé )

	1	2	3	4	5	6	7	
Non Familier	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Familier

2- Je suis familier avec les badges (symboles visuels ou représentations attribués aux utilisateurs pour avoir accompli des tâches spécifiques . Ex: Super Fan sur Facebook )

	1	2	3	4	5	6	7	
Non Familier	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Familier

3- Je suis familier avec les défis sur les plateformes digitales

	1	2	3	4	5	6	7	
Non Familier	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Familier

	1	2	3	4	5	6	7	
Non Familier	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Familier

5- Je suis familier avec les classements (affichages qui classent les utilisateurs en fonction de leurs performances ou réalisations)

	1	2	3	4	5	6	7	
Non Familier	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Familier

Sur une échelle de 1 à 7, évaluez votre niveau d'accord avec les énoncés suivants

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1- Je participe à des activités gamifiées car elles offrent des objectifs et des règles clairs

	1	2	3	4	5	6	7	
Désaccord	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Accord

2- Je participe à des activités gamifiées car elles offrent un retour immédiat

	1	2	3	4	5	6	7	
Désaccord	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Accord

3- Je participe à des activités gamifiées car elles offrent un sentiment de progression et accomplissement

	1	2	3	4	5	6	7	
Désaccord	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Accord

4- Je participe à des activités gamifiées car elles offrent une interaction sociale

	1	2	3	4	5	6	7	
Désaccord	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Accord

5- Je participe à des activités gamifiées car elles offrent une personnalisation ( adaptées selon la cible )

	1	2	3	4	5	6	7	
Désaccord	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Accord

Sur une échelle de 1 à 7, évaluez le niveau d'importance des énoncés suivants

1-Il est important pour moi de recevoir des récompenses

	1	2	3	4	5	6	7	
Non Important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Important

2-Il est important pour moi de gagner des points

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	1	2	3	4	5	6	7	
Non Important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Important

3-Il est important pour moi de gagner des badges

	1	2	3	4	5	6	7	
Non Important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Important

4-Il est important pour moi de participer à des défis sur les plateformes digitales

	1	2	3	4	5	6	7	
Non Important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Important

5-Il est important pour moi d'être classé pour suivre mes réalisations

	1	2	3	4	5	6	7	
Non Important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Important

### Informations démographiques

1-Veuillez indiquer votre sexe

- Homme
- Femme

2-Veuillez indiquer votre tranche d'âge

- <18
- 18 – 25
- 26 – 50
- 51 – 60
- >60

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3- Veuillez indiquer votre situation sociale

- Étudiant
- Sans emploi
- Employé
- Retraité

### **Appendix 03: The interview guide**

Dans le cadre de notre recherche sur la contribution de la gamification dans la motivation et l'engagement des consommateurs , nous vous présentons ce guide d'entretien afin d'étudier l'impact des actions gamifiées . Nous espérons que vous pourrez répondre aux questions ci-dessous.

Veuillez noter que nous nous engageons à préserver l'anonymat de nos participants. Nous vous prions donc de rédiger vos réponses sous chaque question. Nous vous remercions chaleureusement pour votre contribution à cette étude, qui est importante pour faire avancer nos recherches

#### **1-Identification du profil de l'interviewée :**

- Quelle est votre profession actuelle ?
  
- Depuis combien de temps exercez-vous cette fonction ?
- Quelles sont vos principales missions ?

#### **2-Compréhension de la gamification :**

- Pouvez-vous définir ce que vous entendez par "gamification" ?
  
  
  
  
  
  
  
  
  
- Comment votre entreprise utilise-t-elle la gamification dans les stratégies de communication de ses clients ?



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-Pouvez-vous donner des exemples concrets de campagnes ou d'initiatives de gamification que vous avez mises en place

### **3-Impact sur l'engagement des consommateurs :**

-Selon vous, en quoi la gamification peut-elle contribuer à l'engagement des consommateurs ?

-Avez-vous observé des changements dans le comportement des consommateurs suite à la mise en place de stratégies de gamification ?

-Comment mesurez-vous l'engagement des consommateurs dans les campagnes de gamification ?

### **4- Influence sur la motivation des consommateurs :**

-En quoi la gamification peut-elle influencer la motivation des consommateurs à interagir avec une marque ou un produit ?

-Quels éléments de la gamification sont les plus efficaces pour stimuler la motivation des consommateurs ?

-Avez-vous constaté une augmentation de la fidélité des clients suite à des initiatives de gamification ?

### **5- Défis et limites :**

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-Quels sont, selon vous, les principaux défis ou obstacles rencontrés lors de la mise en place de stratégies de gamification ?

### **Conclusion :**

-Avez-vous des remarques finales ou des suggestions à ajouter sur le sujet

**Appendix 04:** Organizational organigramme

