

## The Role of Gamification in Maximizing Sales Team Performance\*

Meriç Esat BEBİTOĞLU<sup>1</sup> Furkan Alp SARIÇAM<sup>2</sup>

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### Abstract

Games are enjoyable systems and processes that aim to win, are based on strategy, require communication, and provide pleasant times for participants. Business life strives to have these characteristics as well. This may be a key reason for the emergence of gamification as a prominent topic in the field of management science over recent decades. The literature contains numerous studies on gamification, which have been conducted on several different topics. These include employee engagement and performance, job satisfaction, training, human resources practices, and well-being. Nevertheless, there is a paucity of empirical research investigating the measurement of specific goals and outcomes, including remuneration. This study is based on an empirical investigation of the hypothesis that salespeople will be more successful in achieving goals over a period of time through the application of gamification strategies. The research, which is a case study, brings a different perspective to the employee's efforts to achieve the given goal and proposes a dynamic and contemporary approach to effective sales channel management. The case study was conducted with 104 sales representatives of a leading insurance company in Türkiye between January 2021-March 2022. The implementation of a gamified sales league, which entails the enhancement of product focus and the provision of immediate feedback, serves to create a competitive environment for sales representatives. As an important outcome; the sales league results in a significant increase in sales during a given period, with no additional benefit to the agents and sales representatives, while the company benefits from the enhanced performance of the sales team, which is driven by the competitive environment of the sales league.

**Keywords:** Gamification, remuneration, performance management, sales management, insurance.

**JEL Codes:** M1, M5, J3, O3

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1 İstanbul Nişantaşı Üniversitesi, İktisadi İdari Sosyal Bilimler Fakültesi, İşletme Bölümü, bebitoglu@nisantasi.edu.tr, ORCID: 0000-0001-5013-913X

2 HDI Sigorta Anonim Şirketi, furkanalpsaricam@gmail.com, ORCID: 0000-0001-7947-8303

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## Satış Ekibi Performansının En Üst Düzeye Çıkarılmasında Oyunlaştırmanın Rolü

### Öz

Oyunlar kazanmayı hedefleyen, stratejiye dayalı, iletişim gerektiren, katılımcılara keyifli zamanlar yaşatan eğlenceli sistem ve süreçlerdir. İş hayatı da bu özelliklere sahip olmak için çabalar. Oyunlaştırmanın son yıllarda yönetim biliminde en çok öne çıkan konulardan biri olmasının nedenlerinden biri de bu olabilir. Literatürde oyunlaştırma üzerine birçok farklı konuda yapılmış çok sayıda çalışma bulunmaktadır. Bunlar arasında çalışan bağlılığı ve performansı, iş tatmini, eğitim, insan kaynakları uygulamaları ve refah yer almaktadır. Literatürde, ücretlendirme de dahil olmak üzere, belirli hedef ve sonuçların ölçümünü inceleyen ampirik araştırma sayısı oldukça azdır. Bu çalışma, satış personelinin, belirli bir süre içinde, oyunlaştırma stratejilerinin uygulanmasıyla hedeflere ulaşma konusunda daha fazla başarı elde edeceği hipotezine yönelik ampirik bir araştırmaya dayanmaktadır. Örnek olay analizi niteliğindeki araştırma verilen hedefin çalışan tarafından gerçekleştirilmesi çabalarına farklı bir bakış açısı getirerek etkin satış kanalı yönetimine de dinamik ve çağdaş bir yaklaşım önermektedir. Örnek olay analizi çalışması, Türkiye'nin önde gelen bir sigorta şirketinin 104 kişilik satış temsilcisi grubu ile Ocak 2021-Mart 2022 tarihleri arasında gerçekleştirilmiştir. Ürün odağının geliştirilmesini ve anında geri bildirim sağlanmasını içeren oyunlaştırılmış bir satış liginin uygulanması, satış temsilcileri için rekabetçi bir ortam yaratmaya hizmet etmektedir. Önemli bir çıktı olarak satış ligi, acentelere ve satış temsilcilerine ek bir fayda sağlamadan belirli bir dönemde satışlarda önemli bir artışla sonuçlanırken, şirket, satış liginin rekabetçi ortamı tarafından yönlendirilen satış ekibinin artan performansından yararlanmaktadır.

**Anahtar Kelimeler:** Oyunlaştırma, Ücretlendirme, Performans yönetimi, Satış yönetimi, Sigortacılık

**JEL Kodları:** M1, M5, J3, O3

## Introduction

The digital gaming industry is currently experiencing a period of substantial growth. Projections indicate that by 2027, the industry's value will reach \$521 billion, with user numbers anticipated to reach 3.1 billion (Statista, 2022). According to a report by Reuters (2024), which drew on data from Newzoo, a prominent data platform specializing in market research and analysis within the gaming industry, by the conclusion of 2024, the projected number of users for 2027 had already been surpassed, reaching a total of 3.42 billion players. This substantial increase in user base has resulted in generated revenues amounting to \$187.7 billion. Consequently, businesses and brands in various sectors are recognizing the potential of incorporating gaming elements to enhance customer interaction, boost engagement, and cultivate loyalty (Deterding et al., 2011). Gamification has been demonstrated to provide businesses with a significant competitive advantage, which is the primary factor contributing to its proliferation across various industries such as banking, retail, and music streaming (Jacobides et.al, 2024). Gamification is poised to confer significant advantages in the development of digital and B2B businesses. One notable example is the insurance sector, which is undergoing a transformation through the integration of gamification principles into its digital framework. This integration not only enhances the user experience but also enables the adaptation to B2B models, facilitated by the emergence of agency-based structures. Gamification as a concept refers to the utilisation of game architecture principles and dynamics in non-game settings, including commercial realms, academic institutions, and medicinal practices. It encompasses the incorporation of game components, such as rewards, status symbols, competitive rankings, and challenges, with the objective of stimulating and engaging individuals in tasks that are typically perceived as uninteresting or uninspiring (Bawa 2023; Kapp, 2012).

Using gamification in the contemporary business ecosystem has garnered substantial interest in recent years, with proponents suggesting it may serve as an effective strategy to enhance employee engagement and performance (Aziz et al., 2017). Marache-Francisco and Brangier (2015), Du Vernet et al. (2016), and Swacha (2016) have noted that there are a variety of contexts in which gamification is currently being used, such as the work environment, the educational field, social settings, human-computer interaction, and corporate information systems. A comprehensive list of gamification studies on organizational behaviour and human resources practices is provided in Table 1, compiled by Kalafatoğlu (2020). As illustrated in Table 1, the majority of studies examined concentrate on the concepts of work engagement and motivation. It is believed that both concepts can contribute to the enhancement of sales performance. Gamification is effective in managing human capital in training, encouraging healthy choices, or recruitment and selection processes as given in literature review section. For example according to Cugelman (2013) gamification in health contexts aims to promote healthier behaviors and adherence to treatment regimens through motivational incentives and progress tracking. Rather than education and health practices Pečiūra and Žukauskaitė (2024) conducted a rigorous evaluation of the relationship between gamification and organizational socialization outcomes, as well as the impact of competition on organizational commitment. Even the usage of gamification in journalism has been highlighted by JA et.al. (2024) and usage of gamification for the sake of the society like being a good citizen is designed by governments and municipalities under the thema of 'gamification of citizenship' (Mills, 2025). However, it is rare for gamification to be adopted in remuneration systems that are understood in a strict sense. The issue identified in our study is that, despite a substantial body of research examining the use of gamification in business contexts, there is a paucity of rigorous studies that employ quantitative data, including employee performance metrics and remuneration. Our study is assumed to have these properties. On the other hand, Wozniak (2015) posits that certain solutions that are characteristic of gamification have simply become management practices, additionally emphasised that management boards are uncertain as to whether the introduction of this measure would be accepted by the employees. In addition to concepts such as healthcare, education, and language (vocabulary) development, distance learning, management is also one of the areas where gamification is used. Sales team management is considered to be within this scope. The present study examines the impact of gamification on sales performance, with a focus on the introduction of a gamified sales league to the sales representatives of a leading

company in Türkiye. The study encompasses not only the field of organizational behaviour and human resources practices, but also the remuneration of employees in numerical figures.

The limitations of gamification in organizations can be broadly categorised into two primary concerns: the potential for employee conflict and the possibility of long-term loss of motivation. Dale (2014) identifies the former as a significant challenge, noting that the intrinsic motivational pull of the game itself may foster internal tensions in gamified work environments. Furthermore, prolonged engagement with gamified tasks may result in a decline in intrinsic motivation, particularly if the tasks become less engaging over time. The utilisation of this methodology (Cardador et al., 2016; Seaborn and Fels, 2015) and a specific psychological profile that characterizes a player (Hamari et al., 2014) are also pertinent considerations. Given the prevalence of gamification as a consumer engagement tool among institutions and companies, this study was conducted with empirical research on the non-life agency channel of an insurance company in Türkiye. The subsequent sections will expound on the contributions of the study to the existing literature, the gaps it will fill, and the distinctions and commonalities between them. The analysis section will then proceed to discuss the application of the study in a real-world working environment and the results obtained. The conclusion and discussion section will address the limitations and future implications of the study and will explore the potential of gamification to enhance the performance of sales teams.

## Literature Review

Gamification can be defined as the utilisation of game design elements in contexts that are not inherently game-like (Deterding et al., 2011). De-Marcos et al. (2014) emphasised the importance of engaging people and solving problems. Gamification can be defined as the process of enhancing services with motivational affordances in order to elicit gameful experiences and, subsequently, behavioural outcomes. (Hamari et al., 2014). Seaborn and Fels (2015), Woźniak (2015), Werbach and Hunter (2012) and Zichermann and Cunningham (2011) identified the structural elements that elicit interest in playing a game and render it appealing to individuals through the influence of familiar psychological mechanisms, such as:

- Points (feedback provided to players regarding their performance, expressed in numerical values)
- Badges (status symbols or achievements in the game, representing wins or losses. General performance feedback for users)
- Leaderboards (the basic comparison tools for the position of the player or user)
- Challenges (the tasks that a player should complete in the gamified experience)
- Rewards (extrinsic or intrinsic, according to the value)

In the literature, there are various studies on the application area of gamification in education, distance learning, word development and other education-based subjects. For example, gamification has proven to be particularly effective in English language teaching, helping to motivate learners, engage the in-classroom activities and improve language retention (Pădurean, 2024). Gamification offers a simple yet powerful approach to motivate students (Islam et al., 2025). Also, Amirbayeva (2024) investigates the application of gamification as a supplementary tool in education, paying particular attention to how it can enhance reading, vocabulary, and writing skills in a course in Advanced English whereas Sun and Li (2025) expressed the idea of game-based learning and the bonding between psychology and academic performance. According to the findings of Sánchez (2025) study; gamification is a motivating approach in higher education. About training of employees Bitrián et al. (2024) identified gamification strategies to increase success of e-training systems. Yıldız et al. (2023) investigated the effect of gamification on pre-service social studies teachers' technology acceptance. According to the findings, gamification had significant effects on pre-service teachers' perceived usefulness, perceived ease of use, attitude toward use, facilitating conditions, technological complexity, perceived enjoyment, and behavioral intentions.

Apart from the educational and behavioral point of view a distinct approach is held by Konzack (2024) as Gamification and Industry 4.0. Gamified smart manufacturing investigates how the transformative shift of production and manufacturing opens up for gamified experiences in the work place. There are studies observed about finance and banking; Lai and Langley (2023) examine how digital gamification techniques, which incorporate video gaming elements into apps, are reshaping the logics and practices of intermediation that are core to FinTech economies and Viet Tam et. al. (2024) explores the influence of gamification on level of acceptance of digital banking by users.

In the literature of human-computer interaction (HCI), gamified business projects are typically analysed in the context of motivational theories of self-determination and goal-setting. HumanComputer Interaction (HCI) is a multidisciplinary field exhibiting increasing significance in the modern world, shaping our interactions with technology and transforming our daily lives. HCI plays a critical role in bridging the gap between human capabilities and technological break throughs (Stephanidis & Salvendy 2024). In contrast to other mammals, human beings are capable of self-improvement and self-control in their environment. These abilities are essential for human well-being and development.

Moreover, the application of gamification may be particularly beneficial for the Millennial generation who are supposed to be the current sales employees of the companies today. Although gamification has the potential to capture the attention of individuals across all demographic groups, when integrated with technology, Millennials may derive greater benefit, given their familiarity with video games. A recent study indicates that the mean age of the video gaming population is 34 years, with 39% of game purchasers being women and 61% being men (Kalafatoglu, 2020). The empirical and conceptual studies on gamification were reviewed by Kalafatoğlu (2020) and are summarised by the authors according to topics in Table 1.

Table 1

## Conceptual and Empirical Studies that Examined Gamification

Conceptual Studies	Motivation	Perf. Man	Training	Work Engagement	Well-being	Innovation	Commun	Hr Man.
Armstrong and Landers (2018)			✓					
Bhattacharyya et al. (2018)				✓				
Cardador et al. (2017)		✓						
ChamorroPremuzic et al. (2017)								✓
Ergle D. (2015)				✓				
Johnson et al. (2016)					✓			
Kumar and Raghavendran (2015)				✓				
Marlow et al. (2016)			✓					
Oravec (2015)					✓			
Robson et al. (2016)				✓				
Saranghi and Shah (2015)				✓				
Trees (2015)				✓				✓
Woźniak (2015)								✓

Empirical studies	Motivation	Perf. Man	Training	Work Engagement	Well-being	Innovation	Commun	Hr Man.
Mekler et al. (2017)	✓	✓						
Liu et al. (2018)	✓	✓		✓				
Scheiner (2015)	✓							
Katzlinger (2017)								✓
Garcia et al. (2017)			✓					
Baxter et al. (2017)			✓					
Ergle D. (2016)				✓				
Cheng (2017)					✓			
Araujo and Pestana (2017)					✓			
Patricio, R. (2017)						✓		
Dulskaia et al. (2017)							✓	
Piras et al. (2017)							✓	
Vinichenko et al. (2016)								✓

**Source:** Kalafatoğlu (2020), compiled by the authors.

According to Kalafatoğlu's (2020) compilation the majority of these studies represent examples of organizational behaviour and human resources practices, especially clustered on work engagement and motivation. The part of the study that gives a clue for our study is the existence of studies on performance management. At this juncture, the performance of the sales team is a subject of interest. According to Izmir (2025), contemporary purchasing decisions are evaluated with a broad strategic perspective, and these decisions are made with the help of expert teams or networks. In this context, sales centers are defined as dynamic and flexible structures where employees from different fields of expertise come together in line with a common goal. It can be said that there is an interdisciplinary approach in the functioning principle of sales centers. A critical aspect of sales center effectiveness involves striking a delicate balance between behavioral and result-oriented control systems. This balance enables sales center members to achieve short-term results while cultivating long-term relationships, a fundamental tenet of the relational marketing paradigm. The result-oriented nature of sales center employees, who often receive incentives such as commissions and bonuses, subjects them to more objective evaluation criteria (Izmir, 2025). The advent of gamification is predicted to emerge as a pivotal instrument in the management of sales and, naturally, the purchasing function within the sales center paradigm.

Similarly, Sharma et al. (2024) also examined the 20 most cited articles on the principles of gamification and their applicability in the business world. Rocha et. al. (2019) executed an empirical study to adopt the gamification to train sellers and professionals through a sales simulator game, as a strategy to minimize sales problems in organizations. Results indicated that the use of predictive gamification allowed mitigating future problems, in average, four months in advance of the arrival of the new products at the points of sale. Vardarlier and İnan (2017) put forth a proposal to enhance the performance of sales personnel through the implementation of gamification strategies. The integration of game dynamics with an analysis of player profiles and the identification of motivational sources was recommended as a potential approach. For example, Mueller (2024) investigates the potential of integrating gamification into development and operations (DevOps) practices to overcome common challenges such as lack of motivation, engagement,

and collaboration within software development and operations teams. Also, Elsalmy et. al. (2025) focused on identifying, assessing, and mitigating gamification risks in agile software enterprises.

A study that bears some resemblance to our study is Woźniak's (2020) Gamification for Sales Incentives. In this study, Woźniak examined the gamification setup that would be optimal for sales personnel, the type of reward that would satisfy them, and the potential outcomes of such rewards. However, the study did not involve the implementation or evaluation of an application. In contrast, our study involves the implementation of both a survey administered to sales personnel and an application that was executed within a specified timeframe.

While numerous applications that incorporate a gamified environment (Jacobides et.al., 2024) have been demonstrated to be beneficial (Kalafatoğlu, 2020), the specific advantages of game elements remain under investigation. Unfortunately, most gamification research studies cannot provide a complete study that will satisfy the academic and business community (Bizzi, 2023). Similarly, the impact of gamification initiatives within sales organizations on the performance of numerically supported roles has not been extensively researched (Sharma, 2024). A review of the literature reveals the existence of studies utilising gamification in the fields of education and health, but not in the management of sales channels and sales targets, which consist of business and real-life problems. The present study therefore aims to analyse the phenomenon of gamification as an alternative to the more traditional approach of setting sales targets and striving to meet them. In addition, the study presents a case study created in collaboration with a company to demonstrate how the implementation of a gamified sales league can improve sales performance. Our study offers an empirical basis for the improvement of sales performance. The distinction between our study and previous research is the utilisation of concrete data and observations to quantify and compare the bonuses and scoring systems that lead to increased employee income, particularly in terms of rewards. It is anticipated that the findings will make a valuable contribution to the extant literature in this field.

## The Relationship Between Gamification Categories

Human-Computer Interaction (HCI) proficiently combines multiple disciplines to study how users interact with computers (Timbadiya, 2025). The field of gamification as an HCI (human-computer interaction) study is a relatively new area of research, particularly within the business sector. As is the case with many improvements in the business sector, the application of gamification varies according to its usage in the workplace. While consumer-company-related activities can be gamified in order to increase engagement, this kind of gamification is referred to as external gamification. Hence there are many studies about gamification concerning work engagement given in Table 1. Conversely, gamification can also be employed to facilitate habitual changes in users, as evidenced by the deployment of gamified apps by NGOs engaged in the fight against diabetes, which incorporate running apps. This form of gamification is what is known as behavioural change gamification. In their study Putranti et. al. (2024) tried to evaluate the impact of gamification on the performance of online transportation drivers via social values, motivation and participatory engagement. However, in this study, gamification is employed with the objective of enhancing the work performance of employees within companies. The concept of internal gamification is illustrated in Figure 1, which is drawn from the work of Werbach and Hunter (2012).

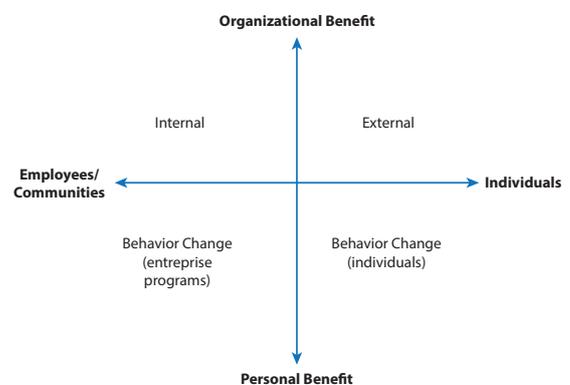


Figure 1. Relationship between different gamification categories, (Werbach and Hunter, 2012)

Three principal advantages of gamification can be identified as the incorporation of game properties like progress bars, badges, and leaderboards facilitates the engagement of employees in the gamified activity. Secondly, the introduction of a challenging environment in the game design can facilitate the generation of novel solutions to business problems. Thirdly, while the increased engagement of users and the introduction of a challenging environment provide motivation for the activity, this motivation can result in enhanced performance (Werbach and Hunter, 2012). Gamification has business to business (B2B) and business to consumer (B2C) practices. For example, Proulx et. al. (2025) questioned how can a B2B platform be used to foster collaboration and open innovation between multiple companies that are part of a manufacturing cluster using gamification. Our focus in this study is also related with business to business (B2B) gamification in insurance sector, but business to consumer (B2C) gamification tools are also available. In his study Patel (2025) discussed the impact of gamification on customer loyalty, specifically focusing on the neurobiological mechanisms, particularly the role of dopamine, within the brains reward system. For example, Starbucks, Duolingo and Nike Run Club offers badges and scoreboard ranks that gain social value over time, showcasing users' commitment and dedication (Lu and Ho, 2020; Jakobides et.al. 2024).

Gamification is defined as the package of a service that consists of providing feedback and interaction with a service system based on a set of rules (Huotari and Hamari, 2011). While defining gamification as the utilisation of game design elements in non-game contexts Deterding et.al. (2011) found this argument to be insufficient for the full range of gamification. A touchpad that can order a product in a place cannot be considered a gamified system, but it also provides feedback and interacts with the user. Furthermore, it undermines the gamification of service marketing and discards its use in social and experiential dimensions. Gamification techniques can be applied to a variety of marketing activities to help marketers create a more immersive and interactive experience for their customers, by leveraging elements such as points, badges, leaderboards, challenges, quizzes, sweepstakes, and rewards to encourage desired behaviors, foster engagement, and build a sense of community around a brand or product (Gupta et. al. 2024). In the field of gamification studies, the motivation to complete tasks assigned through the use of gamified exercises is a key area of analysis. Leaderboards, points, badges, and challenges are generally associated with a psychological need for satisfaction and intrinsic motivation factors (Mitchell et. al., 2020; Sailer et.al.,2017; Blohm and Leimeister, 2013; Mekler et.al., 2013; Peng et.al., 2012; Ryan et.al., 2006). For example, while accolades such as badges (e.g., golden medals or "10k runner") enhance performance by providing feedback on performance, they also enhance self-efficacy and encourage the desired behaviour associated with the task (Hamari, 2017).

The concept of immersion is defined by narrative stories, avatars, profiles, customization, and virtual identity. Since its start, HCI has moved from basic command-line interaction to modern platforms that use touch screens and voice command along with virtual reality (Tambidya, 2025). It has been demonstrated that immersion-related features are related to the psychological need for autonomy. The game's achievement-related features include the ability to earn badges, medals, trophies, virtual currency/coins, points, scores, experience points, status bars, progress, levels, leaderboards, rankings, high score lists, and increasingly difficult tasks. These features are typically associated with the psychological need for competence. Social-related features encompass team/cooperation, social competition, and social network features. However, while immersion-related features are only related to autonomy, other features have multiple relationships with self-determination (Xi and Hamari, 2020, 2019; Wee and Choong, 2019; Sailer et al., 2013; Aparicio et al., 2012).

## The Creation of Gamification Programs Aligned with the Specific Requirements of an Enterprise.

According to Bawa (2023), the following considerations are essential for the design of gamification programs that align with the specific enterprise needs:

- It is of the utmost importance to gain an understanding of the target audience. This entails an analysis of their preferences, motivations, and needs. This information is vital for the development of a bespoke programme, which should consider factors including age, seniority, occupational role and work environment. The term “game mechanics” refers to the fundamental elements that contribute to the allure and appeal of gamification. Tondello et al. (2018) also underlines that these include the conferral of points, the bestowal of badges, and the establishment of leaderboards
- The creation of a transparent and structured progression path, delineating the necessary steps to attain the desired outcomes, is a crucial element in maintaining motivation and engagement. This entails the formulation of well-defined objectives and milestones, accompanied by regular feedback and acknowledgment of progress. It is recommended that appropriate incentives be provided to sustain favourable actions and encourage persistence in the desired direction. It is crucial to ensure that the rewards offered are aligned with the preferences and motivations of the target audience, and that they are tailored to the specific goals and objectives of the programme in question.

The evaluation of a gamification programme in terms of its efficacy allows for the identification of areas in need of enhancements and ensures that the programme is aligned with the organisational goals. This process entails the monitoring of key performance indicators, including engagement, efficiency, and return on investment (ROI), and the implementation of modifications to the programme as necessary.

Bawa (2023) and Aziz et al. (2017) have elucidated a multitude of advantages that can be realised through the implementation of gamification in an organisational context. These include:

- Increased employee engagement
- Improved supplier performance
- Improved customer engagement
- Increased collaboration

As the gamification effect on work performance is explained, gamification needs to affect the work performance and need to be tested with quantitative evaluation. The best way to analyze the quantitative evaluation, number of sales as a work performance metric is considered to be used in the article. Hypothesis 1 is formulated as follows.

*H1: Gamified sales performance has a significant difference from non-gamified sales performance.*

Hypothesis 2 is formulated as follows.

*H2: Post-gamified sales performance has a significant difference from pre-gamified sales performance.*

## Method

The participants and the sample of the research were determined by the case study analysis method, in this context it was important to select a dynamic and agile company that has a significant share in the Turkish insurance market and is increasing its market share. In terms of insurance products, standard insurance products such as earthquake and disaster insurance, standard insurance products such as life insurance and home package were preferred, rather than insurance products that may vary according to the demographic characteristics, desires or special conditions of the customer.

It is considered that the use of the same incentives in the measurements taken before, during and after gamification is an important assumption to ensure the consistency of the numerical comparison. In other words, an attempt was made to show the significant difference that could be achieved with gamification under the same conditions. The reliability and validity of the data obtained were investigated by applying relevant tests.

## Case Description and Specifics

Türkiye Sigorta, a prominent enterprise, has consented to participate in the research project, which entails the establishment of a league for its sales agency channel. In the 2020 agency channel sector ranking, the company was positioned seventh with a 5.45% market share<sup>4</sup>. Following the establishment of the company in 2020, the agency network underwent a strategic expansion, with the number of agencies increasing by up to 90%. As anticipated, the newly contracted agencies were initially reluctant to utilise the company's product for their customers. However, during this period, the channel was able to increase its market share to 7.03% and its position to 6th in the sector by the end of 2021. Furthermore, the portfolio of the agency channel of the company was predominantly motor third-party liability (MTPL). The figure above is provided because it is imperative to comprehend the agency channel size and dispersancy. Consequently, sales employees collaborate with them within a business-to-business model.

## Participants and Sampling

In order to comprehend the alterations in the sales performance with a high degree of precision, insurance companies in Türkiye furnish real-time production, sales, and data for analysis purposes. Despite the presence of over 60 insurance companies in the Turkish market, the top five firms – with the capacity to employ over 100 sales personnel each – collectively account for a significant proportion of the market. The research was conducted with a sample of 104 sales agents between January 2021 and March 2022.

While the sample of the research is the consumers who want to buy insurance policies in Türkiye, the agents who try to reach them and the gamification method that will help the sales representatives consisting of 104 people connected to these agents to achieve their goals have been analysed. Considering the demographic characteristics of the sales representatives, it can be said that almost all of them are young people and we believe that they are familiar to the technology and gaming sector in their daily lives.

## Measures and Instruments

The gamified sales league components modelling enables sales representatives to be challenged on a weekly basis to improve their agency selling penetration for a specific profitable product of the company. The league leaderboard provided a competitive environment, while the regional leaderboard table facilitated intergroup competition. The experience points, which were reset to zero at the conclusion of each weekly league, served as a feedback mechanism, in conjunction with the coloured background and ranking. The settings provided an activity cycle for the sales representatives. Initially, they requested a policy for the company from their agencies, with the understanding that each sale would improve their position in the league. In return, they observed their current position and were motivated to request additional policies from their agencies. Consequently, milestones (badges) reinforced the continuation of the activity cycle, as illustrated in Figure 2.

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<sup>4</sup> According to Türkiye Sigorta, Reasürans ve Emeklilik Şirketleri Birliği statistics at: <https://www.tsb.org.tr/istatistikler> direct indirect premium 2020-12

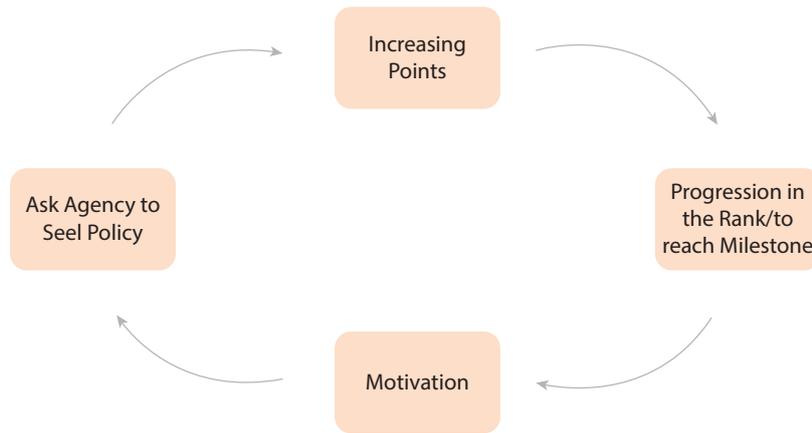


Figure 2. Star products sales league activity cycle

Consequently, in order to enhance the engagement of the products, a task-oriented and commitment-increasing solution was devised, comprising a design of PBL (Point, Badges, Leaderboard) based campaign for sales representatives, as detailed in Table 2. The game-designed campaign model is based on the premise that a specific level of policy should be instilled at a designated point in time for each agency within the company. The management team sought to implement a strategy that would enable all sales representatives to promote the company’s non-motor products. The study used the company’s primary business intelligence system, OBIEE as an evaluation instrument.

Table 2  
Gamified Sales League Content Summary

Characteristics	Product	Calculation	Time (Day)	Elements	#of ISR	Prize
<b>Gamified Sales League Dates</b>						
Jun’21	BP	(+1 BP*0,7) + (1 BP*0,3) per Agency	30	L,P,B,PB,R	69	300 YTL
Jul’21	HP-PA	(+2 HP+1 PA)*0,7+(1 HP+1 PA)*0,3 per agency	31	L,P,B,PB,R	67	300 YTL
Aug’21	CH	(+2CHperAgency)*0,5+(+2 CH per New Agency)*0,5	31	L,P,B,PB,R	70	300 YTL
Sep’21	PA	(+3 PA within Campaign)*1 per Agency	30	L,P,B,PB,R	72	300 YTL
17th-21st Jan’22	PA	(5 PA)*1 per Agency	5	L,P,B,PB,R,BF	81	-
1st-7th Feb’22	HP	New Sales 2 HP per Agency	7	L,P,B,PB,R,BF	87	-
14th-25th Feb’22	DASK	New Sales 8 DASK per Agency	12	L,P,B,PB,R,BF	104	-
7th-19th Mar’22	DASK	New Sales 8 DASK per Agency	13	L,P,B,PB,R,BF	104	-

BP=Business Package	B=Badges
CH=Complementary Health	L=Leaderboard
HP=Home Package	P=Points
PA=Personal Accident	PB=Progress Bar
DASK=Turkish Catastrophe Insurance Pool	R=Rankings

### Gamification Design

Gamification can be a valuable tool for enhancing enterprise performance. However, it is crucial to design gamification programs that are tailored to the specific needs and objectives of the organization. The researched company, a market leader in the insurance sector, sought to enhance the engagement of its sales representatives in the agency channel through the implementation of basic game elements, without the introduction of additional incentives for agencies. The incorporation of competition between individuals and collaboration for regional rankings, basic points, badges and leaderboards with challenges serves to enhance the gaming experience.

In this context, the gamified sales leagues align with the components of the game elements hierarchy proposed by Werbach and Hunter (2012), as illustrated in Figure 3.

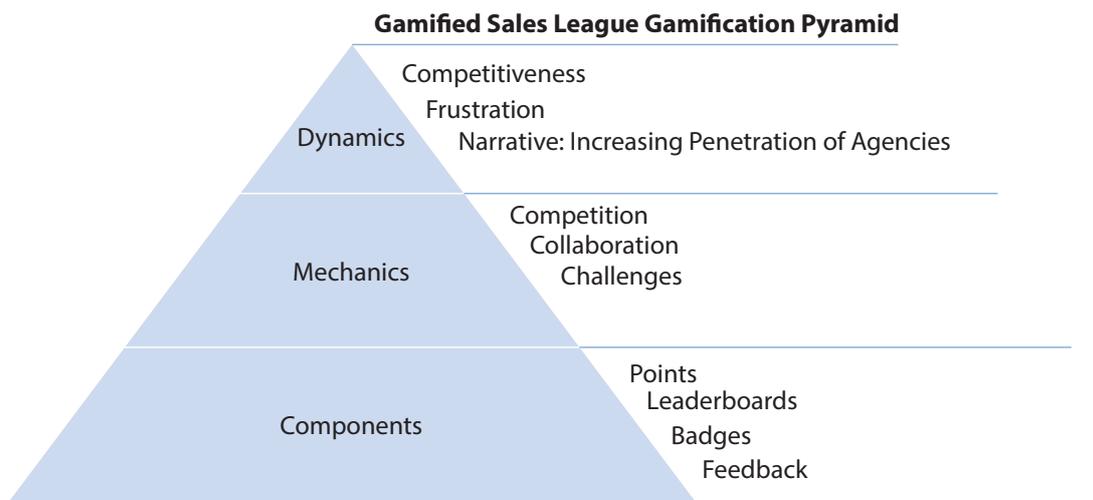


Figure 3. Gamified sales league in-game elements hierarchy

Upon the initial success of the sales league initiative, the channel management proceeded to plan and refine the 2022 iteration of the sales league. The introduction of milestones for each sales league represented a significant improvement in the sales league, as illustrated in Figure 4.



Figure 4. Star products sales league’s milestone announcement

### Procedures for data collection

Milestones serve as a badge mechanism for sales representatives, while simultaneously presenting additional challenges for the top-ranked attendees. The first attendee of the milestone was announced among sales representatives. The name of the attendee was subsequently written on the online sales league milestone table, which was accessible to all users. This enabled users to view the name of the first sales representative to reach the milestone at any time, as well as the leaderboard's updated situation. The introduction of the new sales leagues also had an impact on the performance of sales representatives. In the previous league, the top performers exhibited a tendency to slow down their pace of sales after reaching a certain threshold. This presented a significant challenge to those teams that were not at the pinnacle of the league standings, who were also motivated to improve their performance.

In the previous attempts of the management in 2021, the channel management declared a product and established regulations governing the accumulation of sales points for representatives within the sales league as seen at Figure 5. The sales leagues incorporate some basic gamified elements. The sales league system is based on a rule-based point system, a feedback mechanism, points, rankings, a leaderboard, and badges.

REGIONAL MANAGEMENT	SALES REPRESENTATIVE	TOTAL PREMIUM	RANK	IP	COMMISSION PERCENTAGE	PREMIUM AMOUNT	STAR PRODUCTS SALES	SINGLE POLICIES SOLD	SALES (FY2024)
ALPHA REGIONAL MANAGEMENT	21st Sales Representative	24	1	100	% 100	26	305	0	30.834
BETA REGIONAL MANAGEMENT	2nd Sales Representative	27	1	100	% 100	27	313	0	30.998
GAMMA REGIONAL MANAGEMENT	3rd Sales Representative	35	1	100	% 100	30	317	0	30.391
DELTA REGIONAL MANAGEMENT	4th Sales Representative	48	1	87	% 87	42	497	0	185.879
ETA REGIONAL MANAGEMENT	5th Sales Representative	30	5	86	% 86	35	272	0	60.538
THETA REGIONAL MANAGEMENT	6th Sales Representative	40	6	85	% 85	34	428	0	115.343
ZETA REGIONAL MANAGEMENT	7th Sales Representative	24	7	83	% 83	30	227	0	44.235
ETA REGIONAL MANAGEMENT	8th Sales Representative	47	8	82	% 82	39	461	0	67.075
THETA REGIONAL MANAGEMENT	9th Sales Representative	35	9	82	% 82	29	409	0	66.124
ALPHA REGIONAL MANAGEMENT	10th Sales Representative	28	10	82	% 82	23	240	0	27.694
BETA REGIONAL MANAGEMENT	11th Sales Representative	50	11	82	% 82	41	579	0	107.898
OMEGA REGIONAL MANAGEMENT	12th Sales Representative	38	12	76	% 76	30	391	0	67.053
13th to 47th									
THETA REGIONAL MANAGEMENT	48th Sales Representative	34	48	70	% 70	34	262	0	61.674
THETA REGIONAL MANAGEMENT	49th Sales Representative	37	49	70	% 70	34	325	0	57.669
ALPHA REGIONAL MANAGEMENT	50th Sales Representative	58	50	60	% 60	35	432	0	82.813
BETA REGIONAL MANAGEMENT	51st Sales Representative	30	51	60	% 60	18	260	0	56.534
THETA REGIONAL MANAGEMENT	52nd Sales Representative	42	52	59	% 59	35	315	0	34.769
THETA REGIONAL MANAGEMENT	53rd Sales Representative	32	53	59	% 59	19	236	0	24.120
54th to 64th									
ALPHA REGIONAL MANAGEMENT	65th Sales Representative	43	65	53	% 53	23	303	0	67.288
BETA REGIONAL MANAGEMENT	66th Sales Representative	49	66	53	% 53	26	361	0	78.570
THETA REGIONAL MANAGEMENT	67th Sales Representative	34	67	52	% 52	30	226	0	27.272
THETA REGIONAL MANAGEMENT	68th Sales Representative	25	68	52	% 52	13	184	0	40.439

Figure 5. Star products sales league's sales representatives' leaderboard

The leaderboard of the sales league is designed to provide an overview of the relative position of attendees in relation to their colleagues. The use of a coloured background for sales representatives according to their position provides a means of providing positional feedback to the sales representatives, which in turn allows them to identify areas for improvement in their performance. The implementation of a system of hourly data renewal has been shown to have an effect on the level of usage and acceptance of the leaderboard among sales representatives. Consequently, on a daily basis, sales representatives received an electronic communication regarding the semi-successful agencies that were on the verge of attaining success, with 1 or a few policies. The objective of this gamified campaign design was to enhance the focus of sales representatives on a specific product while simultaneously facilitating the formation of a portfolio and network between representatives and their agencies. It was anticipated that this approach would result in increased channel gross written premium and the number of policies, furthermore, it will enhance the agencies' utilisation of the screening tools within the company's system.

## Data Analysis

In order to mitigate the impact of competitive pricing fluctuations and seasonal trends, weekly applied sales leagues were subjected to analysis using IBM SPSS 25. The data was gathered from the company and classified into three categories: pre-league, league, and post-league. Each category represents the same number of days. Furthermore, in January, management initiated the introduction of a conventional league, devoid of any gamification, for the sales representatives, preceding the implementation of the gamified sales league. Consequently, this period was also labeled as West-directorate campaign. In order to analyse the performance of sales representatives and to reduce the impact of the varying number of agencies on their activities, the gross written premium (GWP) and several variables related to the sale of policies were adopted as performance indicators. These indicators were calculated for each sales representative and for each agency, with the number of policies sold per agency and the number of GWP per agency being used as the basis for analysis.

The preliminary examination of the data retrieved from the company suggests that four terms demonstrate notable disparities as shown at Table 3.

Table 3

West-directorate sales channel figures before and after gamification

West-Directorate Region	Before Gamification	Campaign w/o Gamification	Gamification	After Gamification
Gross Written Premium (GWP) YTL	2.339	16.692	96.907	7.355
Policies sold/day	26	270	3.927	148

The average gross written premium (GWP) of the total channel for the pre-sales league term was 2,339 Turkish Lira (YTL), with an average of 26 policies sold per day. In the west-directorate campaign, the average gross written premium (GWP) of the channel was 16,692 Turkish Lira (YTL), with an average of 270 policies sold per day. In the sales league period, the average GWP of the channel was 96,907 YTL, with an average of 3,927 policies sold per day. In the period subsequent to the conclusion of the league, the mean gross written premium (GWP) of the channel was 7.355 Turkish Lira (YTL), with an average of 148 policies sold per day. Table 3 demonstrates that the traditional sales campaign was effective to some extent, but that gamification later increased sales figures even more. This point may indicate that sales is a motivational issue that needs to be managed.

The impact of the gamified sales league on sales performance can be evaluated in comparison with the company's own sales league, given the west-directorate campaign. The average GWP of the directorate per day was 12.936 YTL, with an average of 215 policies sold per day across the eight regions. The sales league, which was introduced by the company after the previous week's league, yielded an average gross written premium (GWP) of 56.593 Turkish Lira (YTL) and an average number of policies sold per day in the same eight regions, as illustrated in Figure 6.

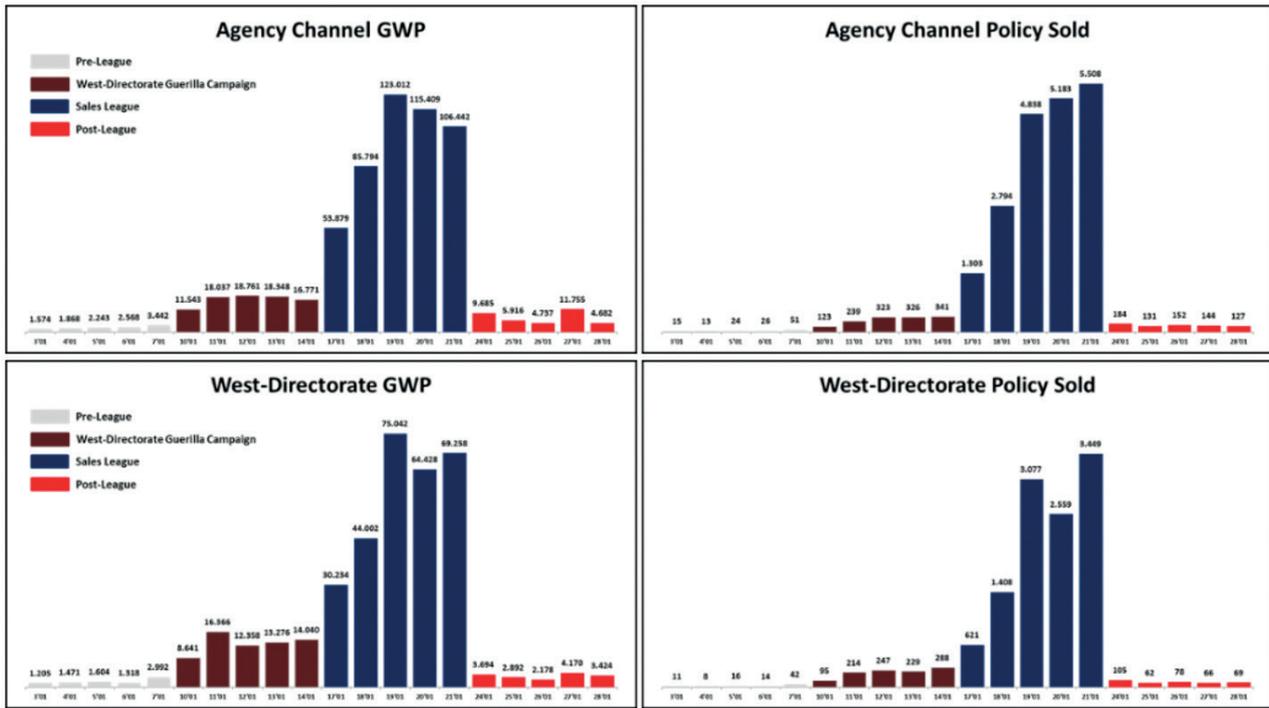


Figure 6. January 2022 sales league: personal accident policy sales trend

The application of the ANOVA test demonstrated a statistically significant discrepancy in the mean number of policies sold per agency and the mean GWP per agency of sales representatives across the specified time periods. The post-hoc analysis indicates that the sales league performance is significantly higher than that of other periods of the product performance. Following the conclusion of the sales league, the subsequent post-league period exhibits a markedly elevated mean value in comparison to the pre-league period with respect to both GWP and the number of policies sold per agency. In contrast, the mean value of the west directorate campaign period is found to be significantly higher than that of the post-league period with regard to GWP per agency, whereas the mean value of the policy sold per agency is not found to be statistically significant, as indicated in Table 4.

Table 4

Post-Hoc with Games-Howell for Jan. 2022 Sales League: Personal Accident

Multiple Comparisons (Games-Howell)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
<b>GWP per Agency</b>					
<b>Pre-League</b>					
Sales League	-129,03	7,1	0	-147,65	-110,41
Post-League	-6,52	2	0,01	-11,75	-1,29
West-Directorate Campaign	-20,6	4,12	0	-31,41	-9,79
<b>Sales League</b>					
Pre-League	129,03	7,1	0	110,41	147,65
Post-League	122,51	7,32	0	103,36	141,66
West-Directorate Campaign	108,43	8,16	0	87,19	129,67

Post-League					
Pre-League	6,52	2	0,01	1,29	11,75
Sales League	-122,51	7,32	0	-141,66	-103,36
West-Directorate Campaign	-14,08	4,49	0,01	-25,79	-2,37
West-Directorate Campaign					
Pre-League	20,6	4,12	0	9,79	31,41
Sales League	-108,43	8,16	0	-129,67	-87,19
Post-League	14,08	4,49	0,01	2,37	25,79
Number of Policies Sold per Agency					
Pre-League					
Sales League	-5,25	0,14	0	-5,6	-4,89
Post-League	-0,17	0,04	0	-0,28	-0,06
West-Directorate Campaign	-0,34	0,06	0	-0,5	-0,19
Sales League					
Pre-League	5,25	0,14	0	4,89	5,6
Post-League	5,08	0,14	0	4,71	5,45
West-Directorate Campaign	4,9	0,15	0	4,52	5,29
Post-League					
Pre-League	0,17	0,04	0	0,06	0,28
Sales League	-5,08	0,14	0	-5,45	-4,71
West-Directorate Campaign	-0,17	0,07	0,08	-0,36	0,01
West-Directorate Campaign					
Pre-League	0,34	0,06	0	0,19	0,5
Sales League	-4,9	0,15	0	-5,29	-4,52
Post-League	0,17	0,07	0,08	-0,01	0,36

\*The mean difference is significant at the 0.05 level.

In February 2022, the initial results of the sales league demonstrated a distinction between the three periods, as evidenced by the data as given in Table 5.

Table 5  
Home package policy sales figures before and after gamification

Home package policy sales	Before Gamification	Gamification	After Gamification
Gross Written Premium (GWP) YTL	141.716	393.781	173.114
Policies sold/day	248	930	281

In the three periods of home package sales, the pre-league sales average gross written premium was 141.716 (YTL), with an average of 248 policies sold per day. In the sales league period, the average gross written premium (GWP) was 393.781 YTL, while the average number of policies sold was 930 per day. In contrast, the post-league period exhibited a notable decline in performance, with an average GWP of 173.114 YTL and an average number of policies sold of 281 per day, as illustrated in Figure 7.

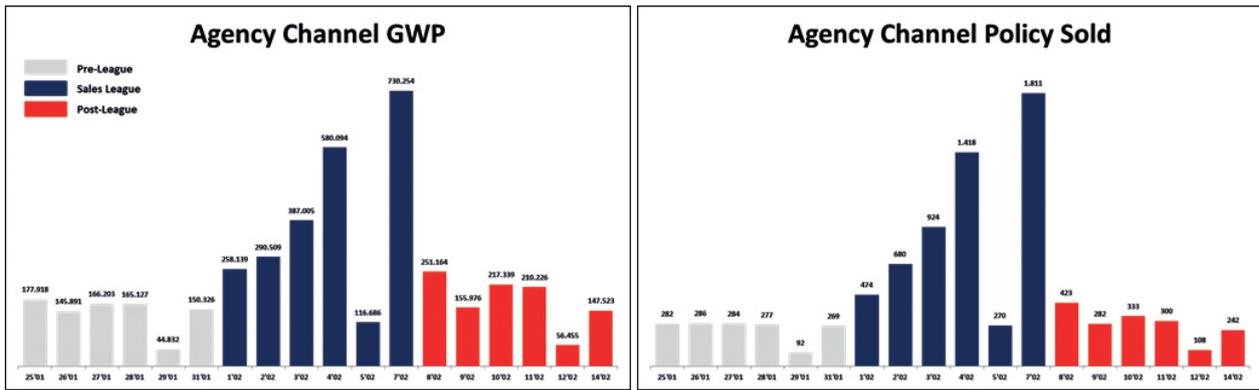


Figure 7. February 2022 sales league: home package sales trend

The results of the analysis of variance (ANOVA) indicate a statistically significant difference ( $p < 0.01$ ) between the means of the three periods of the product in relation to both the variables of GWP and policy sold. The Post-Hoc analysis revealed that the sales league is significantly higher for the other periods of the product in the GWP per agency variable ( $p < 0.01$ ). With regard to the number of policies sold per agency, the Sales league also exhibits a higher mean than the other means, and the mean difference is also statistically significant ( $p < 0.01$ ) as shown in Table 6.

Table 6

Post-Hoc with Games-Howell for February 2022 Sales League: Home Package

Multiple Comparisons (Games-Howell)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
<b>GWP per Agency</b>					
Pre-League					
Sales League	-382,47	27,66	0	-448,14	-316,79
Post-League	-53,46	19,78	0,02	-100,27	-6,65
Sales League					
Pre-League	382,47	27,66	0	316,79	448,14
Post-League	329,01	29,29	0	259,59	398,43
Post-League					
Pre-League	53,46	19,78	0,02	6,65	100,27
Sales League	-329,01	29,29	0	-398,43	-259,59
<b>Number of Policies Sold per Agency</b>					
Pre-League					
Sales League	-1,12	0,06	0	-1,27	-0,97
Post-League	-0,05	0,03	0,34	-0,12	0,03
Sales League					
Pre-League	1,12	0,06	0	0,97	1,27
Post-League	1,07	0,06	0	0,92	1,22
Post-League					
Pre-League	0,05	0,03	0,34	-0,03	0,12
Sales League	-1,07	0,06	0	-1,22	-0,92

\*The mean difference is significant at the 0.05 level.

In February 2022, the second sales league was classified into two dimensions: the pre-league and sales league periods. Due to the limited time available for the study, there was insufficient data to assess the effectiveness of the gamified sales league in the post-league sales period. The sales trend graphs of the channel for DASK at Table 7 illustrate the distinction between the league and other periods of sales for the products.

Table 7

Catastrophe (DASK) policy sales figures before and after gamification

DASK sales	Before Gamification	Gamification	After Gamification (5 days)
Gross Written Premium (GWP) YTL	308.963	615.535	378.131
Policies sold/day	1.616	3.311	2.017

In the pre-league period, the total channel average gross written premium (GWP) was 308.963 Turkish Lira (YTL), with an average of 1.616 policies sold per day. In the league period, the average GWP was 615.535 YTL, with an average of 3.311 policies sold per day. Although the data for the post-league period is incomplete, the five-day trend following the implementation of the sales league can be observed to be 378.131 YTL in average GWP and 2.017 policies per day, as illustrated in Figure 8.

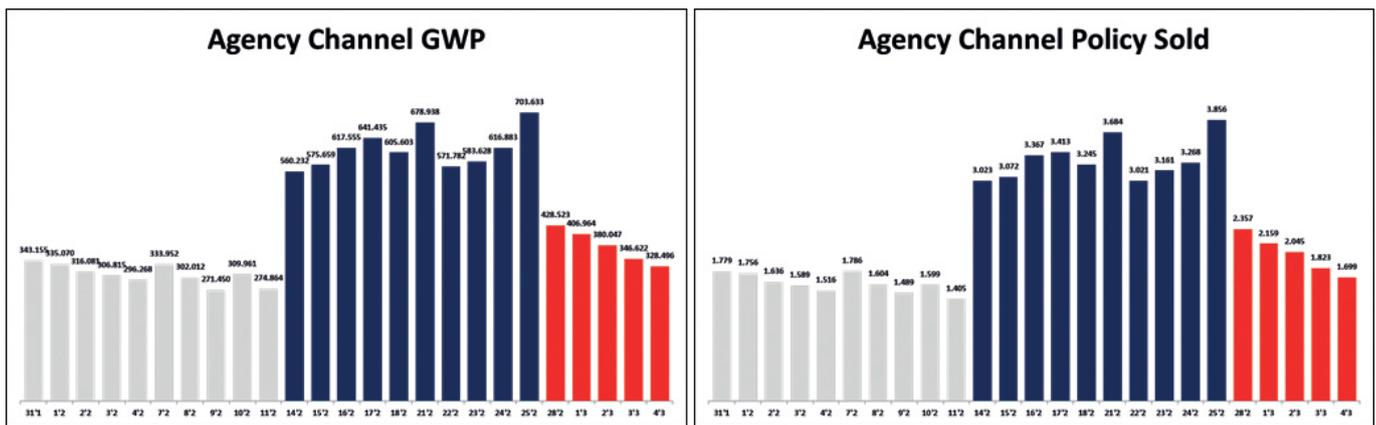


Figure 8. February 2022 sales league: DASK sales trend

The results of the Independent Sample T-test at Table 8 examine the GWP per agency and the number of policies sold per agency variables in two dimensions, namely the pre-league and league periods.

Table 8

Independent Sample T-test for Sales League: TCIP

	Levene's Test for Equality of Variances		t-test for Equality of Means			t-test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Interval of the Diff. (95% Confidence) Lower Upper		
GWP per Agency										
Equal variances assumed	42,32	0,00	-9,62	200	0,00	-969,89	100,79	-1.168,63	-771,15	
Equal variances not assumed			-9,8	150,76	0,00	-969,89	98,94	-1.165,37	-774,41	
Policy Sold Per Agency										
Equal variances assumed	5,87	0,02	-18,26	194	0,00	-5,07	0,28	-5,62	-4,52	
Equal var. not assumed			-18,26	180,02	0,00	-5,07	0,28	-5,62	-4,52	

The pre-league period has a mean of 823 YTL for the GWP per agency variable, while the league period has a mean of 1.792,90 YTL. The results demonstrate a significant difference in the means of the two periods ( $p \leq .01$ ). With regard to the number of policies sold per agency, the pre-league period yielded a mean of 4.45, while the league period yielded a mean of 9.51. The results indicate that there is a significant difference between the means of the two periods in the policy sold per agency variable ( $p < 0.01$ ) at Table 8.

**Discussion:** Upon examination of the sales channel in methodology part, it was determined that the ratio of employee or agency engagement was insufficient for the channel management, given the implementation of a commissioned-based campaign for the agencies and quarterly paid bonus systems. In a competitive environment, sales representatives compete within their own organization, which has been shown to decrease the total group performance in previous studies (Aakvid et. al., 2017; Jung et.al., 2010). Therefore, the traditional top-down approach from management to execution levels to setting goals may not be enough to motivate salespeople to achieve those goals in today's contemporary business life. On the other hand, given goals which is set by the management may sometimes be regarded as implausible, abstract and unattainable.

Gamification may be more suitable for today's employees, especially young people, by setting goals in terms of sales channel management due to its game-based nature. At this point, it is debatable whether salesperson who are not so familiar with the philosophy of the game mindset would be subject to a similar effect. The question of how to sustain the motivation of agents who accrue higher sales figures and, as a result, receive greater bonuses through gamification with equivalent incentives remains an area for further research. Another pertinent question is how to ensure the continued relevance and engagement of agents in the gamification process, thereby averting the risk of it becoming an entrenched, routine activity. We believe that games have attracted the interest of almost everyone at a certain period of time in their lives, regardless of generations, so gamification is considered to have a potential of success in real life business practices. The question arises as to whether the gamification practices employed in such contexts are indeed complex, and whether they might even be considered boring by those who do not possess a strong interest in games.

However, the main importance of the gamified sales leagues is to focus the sales representatives on certain products in their portfolio. Furthermore, the goal orientation of sales representatives to master tasks and improve their agencies' portfolios, as well as to demonstrate their visibility in the league, could also promote higher results. From an organizational perspective, the benefits of gamification, resulting from task specificity, feedback, and goal commitment, may foster sales performance (Latham and Locke, 1991). Therefore, the sales league period may be explained by the significant difference in goal orientation. However, further studies are needed to clarify this effect.

**Conclusion:** The analysis indicates that post-league sales performance is higher than pre-league periods. The reason for the post-performance being higher than the previous period can be attributed to the adaptation of the attitude. Adopting a behaviour, such as increasing focus on a specific product, may be considered as the internalisation of an extrinsic motivation as intrinsic motivation (Deci and Vansteenkiste, 2004). Nevertheless, the impact of internalisation requires further research. It can thus be concluded that the introduction of gamified sales performance has led to a considerable improvement in performance levels, as demonstrated by the findings of the present study. The Goal Focus effect may be a contributing factor. Furthermore, the post-league period demonstrated superior performance compared to the pre-league period, which could be attributed to behavioural adaptation.

A statistical analysis of the company's sales trends for specific products reveals that Gamified Sales League consistently outperforms previous campaigns or production periods in terms of sales performance. This is evidenced by the fact that, despite changes in product content across all leagues, the number of units produced and sold has consistently increased during the league period. It is important to note that conditions of the incentive earnings were remained the same and major peripheral environment was routine whereas it is possible to say that the comparison between the terms are consistent. Upon completion of the DASK Sales leagues in February and March 2022, the result of the March year-to-date agency channel sector rankings demonstrated the impact of this significant improvement in the DASK product. In 2021, the company was positioned in the 6th ranking in both the March 2021 year-to-date and at the end of the year. Following the introduction of the gamified sales league to the channel in 2022, the company's position in the non-life agency channel sector was elevated to fourth place. To assess the impact of the sales league, it is notable that the company's growth rate quadrupled the sector's total growth. Consequently, its market share increased to 9,6% with a 3,2% increase<sup>5</sup>. Meanwhile, it is not possible to say that gamification is the solely reason for this improvement, but can be considered as a significant effect.

Upon analysis of the results, it was found that campaigns which exhibited a statistically significant increase in performance were those which achieved a higher sales number per agency for three different non-motor products in the sector. It can be argued that there were significant differences between the sales league period and the sales league period for the personal accident, DASK and Home Package products. The same comparisons were also found to be significant for the post-league period and the pre-league period. Consequently, the two hypotheses (H1 and H2) are accepted.

In the literature, there are studies using gamification in many fields such as education and health, but there is no study on the management of sales channel and sales targets consisting of business world and real-life problems. For this reason, research on sales targets (goals) management with gamification was conducted in a company where sales channel management is actively carried out. It is thought that presenting the tangible results of the research with a case analysis based on real life will contribute to the literature and business sector. Yet, there are no studies about evaluating the performance outputs of the sales employees with numbers and remunerations it was not possible to compare the results with other studies.

<sup>5</sup> Retrieved from Türkiye Sigorta, Reasürans ve Emeklilik Şirketleri Birliği statistics at: [https://www.tsb.org.tr/tr/istatistikler/Sales\\_Channel\\_Based\\_Premium\\_2022-03](https://www.tsb.org.tr/tr/istatistikler/Sales_Channel_Based_Premium_2022-03) (last reached at 05.07.2024)

A further aspect of the findings is that channel management needs to be managed in a sustainable way, particularly in terms of motivation and the policies that are followed. The tables and figures demonstrate a clear correlation between the implementation of gamification strategies and the evolution of management techniques within sales channels. It is evident that these channels undergo a transformation in their management approach in response to the introduction of campaigns and gamification elements. The success of this evolution is contingent upon the implementation of appropriate policies, which are designed to provide achievable targets, advantages, and additional benefits. On the other hand, instead of setting targets at the beginning of the period and expecting them to be met at the end of the period in the classical way, by gamification working with targets becomes dynamic, exciting and easily internalised and accepted by sales representatives. Through this aspect, the study can provide contribution to literature and business life.

**Limitations and Further Recommendations:** It is important to note that our study is not without its own limitations and concerns. Although the company that the research was conducted is one of the leading insurance companies in Türkiye, it was not possible to conduct the research in other competitor companies. Currently, not all companies view gamification theory positively. In contrast, as the application was a novel phenomenon, all factors other than gamification were disabled in the evaluation process. It is postulated that the process of habituation to gamification will enhance the efficacy of this study if it is replicated in the future. The study did not include an analysis of a pre-existing case study. Instead, a new case study was developed in collaboration with the company. The fact that the DASK (Turkish Catastrophe Insurance Pool, DASK) insurance product is a standard product confers advantages such as certainty, simplicity and easy comparability in terms of the study. The rapid adoption of market changes, the price elasticity of products, and the bundling of products with other products may render the Personal Accident and Home contents sectors less homogeneous in terms of competition. DASK is a government-mandated product, and the government regulates the premium and coverage. Therefore, the substantial change in sales performance places the third campaign, the DASK campaign, at the core of the study. Therefore, one of the limitations of the study is that gamification has not been established in insurance products other than Personal Accident (PA) and Home Package products other than DASK

In conducting the study on the effectiveness of the channel campaign, it was assumed that the routine sales process flow of the channel would remain constant, given the absence of any evidence to suggest otherwise. This included the absence of additional commission for agencies, bonus payments for sales representatives, and pricing strategies that differed from those observed in other channels. To enhance the reliability and generalizability of the findings, it is essential to identify and address potential limitations of the study. This includes the need to consider the impact of additional variables, such as the aforementioned factors, on the observed outcomes. Additionally, recommendations for future studies can be formulated based on the insights gained from this study.

While cultural differences can influence the sales approach of salespersons (Moberg and Leasher, 2011), the motivational perspective of the cultures can also vary (Deci, et al., 2001). To ascertain the impact of game design elements on insurance sales performance, it is necessary to examine life insurance and other branches of the non-life insurance sales channels, such as bancassurance. While the effect of the sales league on sales representatives is considered in this study, further analysis is required to determine the long-term impact of the sales league on intermediaries.

As in the previous studies, gamification triggers motivation to perform an activity, while task-challenge based activities increase product focus on sales. Further studies need to analyse the effect of game design elements and the effect of motivational factors (intrinsic/extrinsic or psychological need for satisfaction) as a trigger for sales improvements. However, motivation has been the dominant factor analysed in previous studies. There could be a relationship between the sales performance of the gamified sales league and self-efficacy (Elliot, 1999). Self-determination theory, goal-setting theory and self-efficacy theory are the main theories related to gamification used in the previous studies. Therefore, these theories should be considered

in further studies as the mediating or moderating factors of the theories for sales performance. While the results of the three sales leagues show the performance improvement in DASK, Home Package and Personal Accident insurance products such as MOD, MTPL, Health Products and Business Packages need to be analysed to test the incremental effect of the sales league would also continue in the different products.

This study, which was conducted to show how the implementation of a gamified sales league can improve sales performance, can be addressed in different sectors other than insurance companies.

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## Genişletilmiş Özet

**Amaç:** Oyunlar, yapıları gereği, kazanmanın ve rekabetin ön planda tutulduğu, stratejiye dayalı, iletişim yeteneklerinin gelişmiş olmasını gerektiren, katılımcı ve sonuç odaklı olmanın yanı sıra eğlenceli olmayı da hedefleyen sistem ve süreçlerdir. Geniş açıdan bakıldığında, oyunlarla bir çok benzer özelliği bulunan iş yaşamı ve onun alt kümesi olan işletmeler arasında bu özelliklere sahip olmak için çabalar dururlar . Oyunlaştırmanın son yıllarda yönetim biliminde en çok öne çıkan konulardan biri olmasının olası nedenlerinden biri de bu yapısal ve niteliksel benzerliklerdir. Oyunlaştırma ve oyun unsurlarının oyun dışı alanlarda kullanımı, 2010'lu yıllardan itibaren özel sektörde önemli bir uygulama ve araştırma konusu haline gelmiştir. İçsel ve dışsal motivasyon kaynaklarını kullanarak kullanıcıları daha hedef odaklı hale getirmeyi ve bu şekilde performans değişimini ve göreve adanmışlığı artırmayı öngören oyunlaştırma teorileri, özellikle zorunlu

olan ve tüm pazar tarafından ortak olarak fiyatlandırılan sigorta ürünlerine uygulandığında performans değişiminin metrik olarak ölçülmesi ve bu değişimin istatistiksel olarak anlamlı olup olmadığının değerlendirilmesi amaçlanmıştır.

**Tasarım ve Yöntem:** Türkiye'nin elementer sigorta sektöründeki aktif büyüklüğü bakımından en büyük beş sigorta şirketinden birinin acente kanalı satışlarında, Şirket yönetiminin de desteğiyle, bir oyunlaştırma süreci tasarlanmıştır. Çalışma kapsamında gerek sayısal büyüklüklerin gelişimi gerekse çalışma verimliliği ve etkinliğinin artırılabilmesi için temel olarak satış ekibinin odaklanma süreçleri yeniden tasarlanmıştır. Tasarımda kullanılan oyun elemanları; liderlik tablosu, puanlama sistemleri, rozetleme (Efsane, Kahraman vb.) ve ek mücadeleler şeklinde kurgulanmıştır. Oyun elemanlarını oluşturan bu unsurlar sayesinde, şirketin iş zekâsı ekranlarında tüm satışçılar tarafından canlı olarak takip edilebilen bir oyun kurgusu oluşturulması olanaklı hale gelmiştir. Başarı unsurlarının daha da içselleştirilebilmesi amacıyla, her oyun turunda (haftalık satış sonuçlarında) kazanan satışçılara rozetler verilmiş ve bu durum şirket içinde resmi yollardan duyurularak manevi ödüllendirme olarak paylaşılmıştır. Başlangıçta, acenteler aracılığıyla sık üretim elde edilemeyen ürünler üzerinde denenen bu yaklaşım, olumlu sonuçlar elde edilmesinin ardından, sektörde fiyat rekabetinin olmadığı ve devlet tarafından zorunlu olarak sabit metrekare fiyatıyla belirlenen primle sunulan Zorunlu Deprem Sigortası ürününe uygulanmıştır. Zorunlu Deprem sigortası olarak bilinen Doğal Afet Sigortaları Kurumu (DASK) adıyla tanınan standart bir ürünün seçilmesindeki amaç, oyunlaştırma öncesi ve sonrasında ölçümlendirme yapılan performansın ürün özelliklerinden ve başarımı etkileyebilecek diğer etkenlerden mümkün olduğunca uzak tutulması çabasıdır. Bir başka deyişle daha kapsamlı ve cazip ürünlerin görece olarak daha az özellik ve avantajdaki ürünlerle karşılaştırılmasının ve elde edilen sonuçların olası tutarsızlığının önüne geçilmeye çalışılmıştır. SPSS yazılımı ile gerçekleştirilen istatistiksel analizde genel olarak uygulama sonuçları, şirketin oyun dönemi öncesi tespit edilen verileri, oyunlaştırma sürecinde elde edilen veriler ve oyunlaştırma süreci sonrası veriler ANOVA testi (varyans analizi) yöntemi ile analiz edilmiştir. Araştırmanın anlamlılık derecesinin belirlenmesi için Post-Hoc analizler gerçekleştirilmiştir.

**Bulgular:** Çalışma kapsamında öncelikle başarımlar (performans) ölçütleri belirlenmiştir. Somut, sayısal başarımlar ölçütleri kullanılmıştır. Bu nedenle satış ekiplerinin oyun dönemlerindeki başarımlar büyüklükleri; acente başına poliçe satışı ve prim üretimi açısından iki yönlü olarak değerlendirilmiştir. Yapılan analiz sonucunda ferdi kaza sigortaları, konut sigortaları ve zorunlu deprem sigortasından oluşan ürün grupları için, oyunlaştırma dönemlerinde elde edilen satış adetleri ile oyunlaştırma öncesi satış adetleri arasında anlamlı farklılıklar tespit edilmiştir. ANOVA testi sonuçları, hem prim hem de satılan poliçe değişkenleri için ürünün üç döneminin ortalamaları arasında istatistiksel olarak anlamlı bir fark olduğunu göstermektedir ( $p < 0.01$ ). Post-Hoc analizi, acente başına prim değişkeninde ürünün diğer dönemleri için satış liginin önemli ölçüde daha yüksek olduğunu ortaya koymuştur ( $p < 0.01$ ). Acente başına satılan poliçe sayısına ilişkin olarak da Satış ligi diğer ortalamalardan daha yüksek bir ortalama sergilemektedir ve ortalama farkı da istatistiksel olarak anlamlıdır ( $p < 0.01$ )Oyunlaştırma uygulaması sonrasında, söz konusu ürünlerin satış adetlerinde oyunlaştırma öncesi döneme göre anlamlı bir artış tespit edilmesinde değerlendirme ölçütünün objektif olması konusunda hassasiyet gözetilmiştir; Oyunlaştırma sürecinde değerlendirmeye alınan sigortacılık ürünlerinin 'terzi usulü' şekillendirilemeyen, sınırları ve kapsamı belli standartları tanımlayan, sabit ürünlerin ürünler kullanılmasıyla kişisel değerlendirmenin, zevk, beğeni, özel ihtiyaç, dönemsellik veya başka kampanyaların etkisinden arındırılmış olması hedeflenmiştir. Ayrıca, Ferdi Kaza sigortası ürününde, satış ekiplerine yönelik olarak daha önce uygulanan satış odak kampanyası ile oyunlaştırma dönemindeki satış performansı karşılaştırılmış ve oyunlaştırma uygulamasının, satış kampanyasına göre anlamlı derecede etkili olduğu belirlenmiştir. Tüm bu karşılaştırmaların sonucunda oyunlaştırma dönemi elde edilen satış adetleri ve prim üretimi, diğer dönemlere göre anlamlı derecede daha fazla satış adedi ve primi elde ederken, oyunlaştırma sonrası dönemler ise oyunlaştırma öncesi dönemlere göre anlamlı derecede yüksek satış adedine sahiptir. Oyunlaştırılmış satış liginin satış performansı üzerindeki etkisi, batı direktörlüğü kampanyası göz önüne alındığında şirketin kendi satış ligi ile karşılaştırılarak değerlendirilebilir. Batı bölge-

si satış müdürlüğü kampanya dönemin ortalama değeri, acente başına prim üretimi bakımından lig sonrası dönemden önemli ölçüde daha yüksek bulunurken, acente başına satılan poliçenin ortalama değeri istatistiksel olarak anlamlı bulunmamıştır.

**Sınırlılıklar:** Bu çalışmanın, kanal kampanyasının etkinliğini değerlendirirken belirli varsayımlar altında gerçekleştirildiği dikkate alınmalıdır. Özellikle, satış sürecinin rutin akışının sabit kalacağı varsayılmıştır. Bu varsayım, acentelere ek komisyon verilmemesi, satış temsilcilerine bonus ödemeleri yapılmaması ve diğer kanallarda gözlemlenen fiyatlandırma stratejilerinin uygulanmaması gibi unsurları kapsamaktadır. Ancak, bu unsurların çalışmanın bulgularına etkisi göz ardı edilmiştir ve dolayısıyla bu faktörlerin etkilerini dikkate almak, bulguların güvenilirliğini ve genellenebilirliğini artırmak açısından önemlidir. Ayrıca, çalışmanın bulgularından elde edilen iç görüler doğrultusunda gelecekteki çalışmalar için öneriler geliştirilebilir. Gamification'ın kültürel farklılıkların etkisi altında nasıl çalıştığı ve sigorta sektöründeki diğer ürünler ile hayat sigortası gibi branşlarda nasıl performans artırıcı bir etki yarattığı gibi konular da araştırılmalıdır.

**Teorik ve Pratik Katkılar:** Bu çalışma, oyunlaştırmanın sigorta satış performansı üzerindeki etkilerini inceleyerek önemli bir teorik ve pratik katkı sağlamaktadır. Teorik açıdan, çalışmanın sonuçları, oyunlaştırmanın motivasyon teorileri, hedef belirleme teorileri ve öz-yeterlik teorileri bağlamında nasıl işlediğine dair yeni bilgiler sunmaktadır. Özellikle, hedef odaklılık ve geri bildirim gibi unsurların satış performansını nasıl etkilediği üzerine yapılan analizler, bu teorilerin pratik uygulamalarını desteklemektedir. Ayrıca, oyunlaştırmanın, acente bazında satış performansını nasıl artırabileceği konusundaki anlayışa katkıda bulunur.

Pratik açıdan, çalışmanın bulguları, oyunlaştırma unsurlarının sigorta sektöründe nasıl etkili bir şekilde uygulanabileceğine dair somut örnekler sunmaktadır. Satış ekiplerinin motivasyonunu ve performansını artırma potansiyelini gösteren bu uygulamalar, sigorta şirketlerinin ve diğer sektörlerdeki satış organizasyonlarının performans çalışmalarında kullanılmak üzere dikkate değer sonuç göstermektedir. Oyunlaştırmanın yalnızca ek teşvikler olmadan bile satış performansını iyileştirme kapasitesini ortaya koyarak, sektördeki uygulayıcılara stratejik kararlar almada yardımcı olabilir. Ayrıca, çalışmanın sonuçları, sigorta sektöründeki diğer ürün gruplarında oyunlaştırmanın etkisinin test edilmesi gerektiğini vurgulamaktadır.

**Özgün Değer:** Literatürde oyunlaştırma üzerine çalışan bağlılığı ve performansı, iş tatmini, eğitim, insan kaynakları uygulamaları ve refah gibi farklı konularda yapılmış çok sayıda çalışma bulunmaktadır. Bununla birlikte, ücretlendirme de dahil olmak üzere belirli hedef ve sonuçların ölçümünü inceleyen ampirik araştırma sayısı oldukça azdır. Bu çalışma, oyunlaştırma olgusunu analiz etmekte ve oyunlaştırılmış bir satış liginin uygulanmasının satış performansını nasıl artırabileceğini göstermek için şirketle iş birliği içinde oluşturulmuş bir vaka çalışması sunmaktadır.