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REVIEW

Gamification and motivation: an analysis of its impact on corporate learning

Gamificación y motivación: un análisis de su impacto en el aprendizaje corporativo

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ABSTRACT

Introduction: gamification, through its game mechanics, allows you to stimulate and motivate both competition and cooperation between people, increasing motivation for learning.
Objective: characterize the impact of gamification on corporate learning.
Method: a review of the bibliography was carried out using articles rescued from databases such as SciELO, Dialnet, Scopus, Researchgate, recovering a total of 16 reference articles from available literature related to the topic in question, included in the time frame. between 2019 and 2024.
Results: the business sector is no stranger to this boom in gamification. Companies have incorporated it in two main areas, marketing, to improve customer acquisition and loyalty, and human resources, using games in the recruitment and training processes of personnel, also incorporated into the selection processes, applied in the way that best suits your needs whether in terms of marketing or aimed at better performance of your employees.
Conclusions: Gamification in the corporate learning process has a significant impact by increasing participation, fostering knowledge and collaboration, stimulating creativity and combining learning with business objectives. Furthermore, in relation to marketing it can enhance consumer loyalty participation.

Keywords: Gamification; Corporate Learning; Creativity; Business Knowledge.

RESUMEN

Introducción: la gamificación, a través de sus mecánicas de juego, permite estimular y motivar tanto la competencia como la cooperación entre las personas, el incremento de la motivación por el aprendizaje.
Objetivo: caracterizar el impacto de la gamificación en el aprendizaje corporativo.
Método: se realizó una revisión de la bibliografía mediante los artículos rescatados desde las bases de datos como SciELO, Dialnet, Scopus, Researchgate, recuperándose un total de 16 artículos referenciales de literatura disponible relacionados con el tema en cuestión, comprendidos en el marco de tiempo entre el 2019 y 2024.
Resultados: el sector empresarial no es ajeno a este auge de la gamificación. Las empresas la han incorporado en dos áreas principales, marketing, para mejorar la captación y fidelización de clientes y, recursos humanos, empleando juegos en los procesos de reclutamiento y formación de personal, incorporado además a los procesos de selección, aplicándose de la forma que mejor se adapte a sus necesidades ya sea en términos de marketing o dirigidos a un mejor rendimiento de sus empleados.
Conclusiones: la gamificación en el proceso de aprendizaje corporativo tiene un impacto significativo al aumentar la participación, fomentar el conocimiento y la colaboración, estimula la creatividad y compagina el aprendizaje con los objetivos comerciales. Además, en relación con el marketing puede potenciar la participación y fidelidad del consumidor.

Palabras clave: Gamificación; Aprendizaje Corporativo; Creatividad; Conocimientos Empresariales.

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INTRODUCTION

Gamification (G) refers to techniques employed in game design but used in other non-game domains to promote the motivations of individuals. Gamification was coined by the British computer game programmer Nick Pelling as early as 2002. Although it was not until 2008 that the term gamification appeared in the English-speaking world, it became popular in the second half of 2010.[1]

It is important to consider that gamification should not only be conceived as a means of influencing people's behaviour but as a tool to enrich the experience of individuals; in this sense, we must understand their internal and external motivations and adjust the gamification according to such findings.[2]

Gamification, through its game mechanics, allows to stimulate and motivate both competition and cooperation between people, increased motivation for learning, constant feedback, more meaningful learning, more measurable results, development of appropriate skills, digital literacy and learner autonomy, and in turn, all this leads to the establishment of better interpersonal relationships and more stable emotional health.[3]

The objective of gamification is not simply to use the intrinsic instinct of the human being for the pleasure of playing to motivate him to play for the sake of playing, but on the contrary, through an innovative and attractive design for the subject, it seeks to engage him with the activity and motivate him to improve his abilities, skills and knowledge.[4]

It shows the need to implement new strategies in teaching-learning models that are more active and motivating, as is the case of educational gamification, since when learning is perceived dynamically and wrapped in an attractive narrative, motivation becomes the engine of the educational process, achieving potential results in the development of their knowledge, skills and abilities both academically and professionally.[5]

Translated into Spanish as ludificación, it is based on the use of techniques, elements and dynamics of games and leisure in non-recreational activities in order to enhance motivation from gamified learning situations that allow reinforcing behaviour during problem-solving, improving performance both at a motor level and in cognitive, affective or social aspects, as well as achieving personal and collective goals and evaluating learning by the participant himself.[6]

The consolidation of the use of simulation or games as teaching tools results from a long trajectory. This evolution has gone from an initial purely playful character, passing through a more functional approach, to become a consolidated teaching strategy, allowing more meaningful learning.[7]

The idea of introducing game structures to most anodyne activities is familiar but has practically always been used in contexts such as education or business to make these activities more attractive.[6]

Therefore, the objective of this review article is to characterize the impact of gamification on corporate learning.

METHOD

A review of the available literature was carried out using the synthetic and historical-logical analytical methods using articles rescued from databases such as SciELO, Dialnet, Scopus, and Researchgate, recovering a total of 16 referential articles of available literature related to the topic in question, comprised in the time frame between 2019 and 2024. Filters were used to select articles in English and Spanish. The terms "Gamification", "Corporate Learning", "Creativity", and "Entrepreneurial Knowledge" were used as keywords in the article.

RESULTS

In today's dynamic world, the acquisition of knowledge and its management are increasingly relevant for organizations and individuals. Accordingly, educational innovation is present in technological processes and development. Teaching and research are the basic forms through which knowledge is created and transferred. The environments where this teaching-learning takes place may be face-to-face or virtual, and each modality will have its complexity of interaction.[8]

The presence of the game or some of its elements in learning environments is increasingly frequent. The conception that the game is only an entertainment activity for leisure time is changing as it has been proven that its use in teaching activities favours the acquisition of certain skills, competencies, and content.[9]

It is important to generate a methodology for developing and implementing a strategy through gamification as a valid method for teaching and research, in addition to generating knowledge for the entire educational community.[10]

After an exhaustive analysis of the literature related to gamification, the attention given to its ability to be an effective strategy to achieve objectives in various situations stands out, although gamification is revealed as a tool with great potential to stimulate motivation and enhance participation. To achieve optimal performance, the game elements must be thoroughly adapted to the purposes and requirements of those involved.[2]

Based on the results obtained in this project, gamification in Higher Education is an effective tool to improve the degree of perception of various competencies in Project Engineering. Besides being an innovative teaching activity, virtualizing multimedia content through social networks ensures a formative improvement.[4]

The application of these resources through the introduction of the dynamics and components of the games, together with teamwork, has been especially useful in correcting the traditional lack of motivation of some of the students in the classroom, their lack of class attendance, or the lack of real involvement of university students in a learning process in which not only the leading role should be shared between the teacher and the students, but in which it is also mandatory to face their training both in content and in professional skills and competences.[11]

Manzano León A et al.[5] demonstrate in their study that gamification enhances the commitment to learning, thanks to the fact that it favours an active and creative teaching style if used properly in Vocational Training. Active teaching methodologies and

strategies such as cooperative learning and project-based learning allow students to experience a significant increase in curricular competencies and socioemotional skills when they can work in teams and work on activities that allow them to explore and make decisions for different real scenarios.

Aroca Serrano R[12] comments that for gamification to be successful, the games must offer rewards that involve people in learning and that are adaptable to be carried out individually and in groups. The authors believe that gamification in the corporate learning process, and even business management, has a significant impact by increasing participation, improving knowledge retention, fostering collaboration, facilitating performance monitoring, stimulating creativity and aligning learning activities with business objectives.

The business sector is no stranger to this gamification boom. Companies have incorporated it in two main areas: marketing to improve customer acquisition and loyalty and human resources, using games in the recruitment and training processes. The objective is to identify and attract the best talent and increase employee commitment and participation.[7]

De Los Ríos Berjillos A et al.[7] state that the cultural traits of millennials, the development of technology and the change in the conception of the training process of students, driven by the European Higher Education Area, have been determinants in the development and evolution of games in university teaching. Gamification is related to the development of skills, motivation and commitment. In addition, companies are incorporating it in their selection and training processes. Organizations in the global index must have at least one gamified application. With this, we can see that gamification is booming in the field of large companies, such as BBVA, Nike, McDonald's, and Coca-Cola.[13]

García Martínez A. et al.[14] address in their study one of the techniques that have acquired greater importance among companies in recent years: gamification. He states that this technique has different types of application, differentiating between internal, external, and behavioural change gamification, so each company should apply the one that best suits its needs, whether in terms of marketing or aimed at improving the performance of its employees.

In addition, gamification in marketing can enhance consumer participation, foster loyalty, stimulate diffusion and create unforgettable brand experiences. The combination of gamification with marketing can be a way to build solid relationships with the consumer.

Sánchez Verdú C[15] states that by realizing the practice, two new methodologies were applied, gamification and cooperative learning, through which it was possible to bring the student closer to the consumer.

This brought the student closer to an experience in the business world, both with the joint work of the cooperative method and the gamification competition through a business simulation method, which allowed the promotion of competitiveness, improvement, and teamwork to obtain the highest rating from customers.

Through the development of a gamification project, Lahuerta Otero E[16] has achieved a greater connection between teaching and business reality and greater involvement, dynamism and student satisfaction in the classroom. Thus, the survey of 39 international marketing students showed an average of 7.4 overall satisfaction with the proposal. In short, improvements are expected when the proposed project has been achieved.

Terán Bustamante A et al.[8] show in their results a higher percentage of student retention through the introduction of an educational scenario design based on games through highly visual content and intellectual challenges. Gamification provides experiences that activate motivation for learning and have constant feedback that allows for more meaningful learning and retention in memory as they are more attractive and generate competitiveness and collaboration.

CONCLUSIONS

Gamification in the corporate learning process has a significant impact by increasing participation, fostering knowledge and collaboration, stimulating creativity and aligning learning with business objectives. In addition, marketing can enhance consumer loyalty and engagement.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

AUTHORSHIP CONTRIBUTION

Conceptualization: Verenice Sánchez Castillo, Carlos Alberto Gómez Cano.
Curation of data: Verenice Sánchez Castillo, Carlos Alberto Gómez Cano.
Formal analysis: Verenice Sánchez Castillo, Carlos Alberto Gómez Cano.
Acquisition of funds: Verenice Sánchez Castillo, Carlos Alberto Gómez Cano.
Research: Verenice Sánchez Castillo, Carlos Alberto Gómez Cano.
Methodology: Verenice Sánchez Castillo, Carlos Alberto Gómez Cano.
Project Administration: Verenice Sánchez Castillo, Carlos Alberto Gómez Cano.
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Writing - proofreading and editing: Verenice Sánchez Castillo, Carlos Alberto Gómez Cano.

REFERENCES

1. Antón Lumbier I. El impacto de la influencia social y la gamificación en la actividad física mediante el uso de aplicaciones móviles de salud (mHealth). UPNA [Internet]. 2023 [citado 3 de febrero de 2024]; Disponible en: https://academica-e.unavarra.es/xmlui/handle/2454/45700

2. Calderón Jaramillo JS, Loaiza Dávila LE. Los juegos de acción gamificados en las capacidades físicas condicionales de estudiantes de bachillerato. Polo de Conoc [Internet]. 2023 [citado 3 de febrero de 2024];8(11). Disponible en: https://mail.polodelconocimiento.com/ojs/index.php/es/article/view/6226

3. Blanco Llorente M. La cooperación y la gamificación como instrumentos válidos para mejorar las relaciones interpersonales. UVA [Internet]. 2020 [citado 3 de febrero de 2024]; Disponible en: https://uvadoc.uva.es/handle/10324/41188

4. Estévez Gualda, J, García-Marín, AP, Gómez Madueño, J, Agrela Sáinz, F. Gamificación y aprendizaje cooperativo para la mejora de competencias en Ingeniería de Proyectos. UCO [Internet]. 2019 [citado 3 de febrero de 2024]; Disponible en: https://helvia.uco.es/handle/10396/19677

5. Manzano León A, Sánchez Sánchez M, Trigueros Ramos R, Álvarez Hernández J, Aguilar Parra JM. Gamificación y Breakout Edu en Formación Profesional. El programa «Grey Place» en Integración Social. UCO [Internet]. 2020 [citado 3 de febrero de 2024]; Disponible en: http://helvia.uco.es/xmlui/handle/10396/19280

6. Sánchez Silva Á, Lamoneda Prieto J. Hibridación de la gamificación, la educación física relacionada con la salud y el modelo integral de transición activa hacia la autonomía en la iniciación al crossfit en estudiantes de secundaria. Dialnet [Internet]. 2021 [citado 4 de febrero de 2024];(42). Disponible en: https://dialnet.unirioja.es/servlet/articulo?codigo=7986349

7. De Los Ríos Berjillos A, Muñoz Ocaña Y, Castro González P, Arroyo Barrigüete J. Gamificación: estrategia compartida entre universidad, empresa y millennials. REDU [Internet]. 2019 [citado 3 de febrero de 2024];17(2). Disponible en: https://riunet.upv.es/handle/10251/137380

8. Terán Bustamante A, Mendieta Jiménez B, Terán Bustamante A, Mendieta Jiménez B. Modelo de transferencia de conocimiento a través de la gamificación: un gcMooc. Actualidades Investigativas en Educación [Internet]. agosto de 2019 [citado 4 de febrero de 2024];19(2). Disponible en: http://www.scielo.sa.cr/scielo.php?script=sci_abstract&pid=S1409-47032019000200105&lng=en&nrm=iso&tlng=es

9. Cornellà P, Estebanell M, Brusi D. Gamificación y aprendizaje basado en juegos. RACO [Internet]. 3 de agosto de 2020 [citado 4 de febrero de 2024];28(1). Disponible en: https://raco.cat/index.php/ECT/article/view/372920

10. Beltrán Beltrán M. Estrategia didáctica de gamificación para fomentar la actividad física y los hábitos saludables en estudiantes de grado noveno. UNDES [Internet]. 2022 [citado 3 de febrero de 2024]; Disponible en: https://repositorio.udes.edu.co/server/api/core/bitstreams/163f3e4b-87ef-4ea6-834b-a9452ca4a624/content

11. Jiménez Cardona N. Reflexiones acerca de una experiencia de gamificación en Derecho Mercantil dentro del grado de ADE de la Univeristat de Barcelona. Univ de Barse [Internet]. 3 de marzo de 2020 [citado 4 de febrero de 2024]; Disponible en: https://diposit.ub.edu/dspace/handle/2445/196224

12. Aroca Serrano R. Proyecto de innovación educativa a través de la gamificación: La aventura pirata. UCAM [Internet]. 2022 [citado 4 de febrero de 2024]; Disponible en: https://repositorio.ucam.edu/bitstream/handle/10952/5426/Aroca%20Serrano_Rufino.pdf?sequence=1

13. Lopez Navarro C. LA GAMIFICACIÓN EN EL ÁREA DE ECONOMÍA. UAL [Internet]. 2013 [citado 3 de febrero de 2024]; Disponible en: https://repositorio.ual.es/bitstream/handle/10835/2294/Trabajo.pdf?sequence=1

14. García Martínez A, Catalán Gil S. Gamificación empresarial: Aplicación Volveremos - Repositorio Institucional de Documentos. Unizar [Internet]. 2022 [citado 3 de febrero de 2024]; Disponible en: https://zaguan.unizar.es/record/111155

15. Sánchez Verdú C. Simulación empresarial en la asignatura de Iniciación a la Actividad Emprendedora y Empresarial

utilizando el trabajo cooperativo y la gamificación. RUA [Internet]. 27 de junio de 2020 [citado 4 de febrero de 2024]; Disponible en: http://rua.ua.es/dspace/handle/10045/107643

16. Lahuerta Otero E. Dinamización de asignaturas optativas de 4o curso de la Facultad de Economía y Empresa mediante procesos de gamificación. Gredos [Internet]. 2019 [citado 4 de febrero de 2024]; Disponible en: https://gredos.usal.es/bitstream/handle/10366/140264/MID_19_061.pdf?sequence=1