A QUALITATIVE STUDY ON THE DEFINITION AND CONCEPT OF GAMIFICATION[1]

Bahman Huseynli[1,2], Aypar Uslu[3]

[1] PhD candidate, Department of Marketing, Institute of Social Science, Marmara University, Istanbul, Türkiye;
[2] Lecturer, Department of Business Administration, Azerbaijan State University of Economics (UNEC), Baku, Azerbaijan. E-mail: bahmanhuseynli@gmail.com, ORCID No: https://orcid.org/0000-0001-8139-3712
[3] Prof. Dr., Faculty of Business Administration, Marmara University, Istanbul, Türkiye. E-mail: auslu@marmara.edu.tr, ORCID No: https://orcid.org/0000-0002-6994-9367

https://doi.org/10.61640/jestp.2024.81.01.03

Received: January 08; accepted May 16, 2024; published online July 26, 2024

ABSTRACT

The main purpose of this study is to systematically compile theoretical information about the definition and concept of gamification. In this context, the study is a qualitative research and literature review, and systematic approach methods were used. As a result of the study, it was determined that the term and concept of gamification are new approaches and are an increasing field both in practice and in academic literature. Gamification, which is spreading more rapidly, especially in business and marketing applications, is expanding its use as one of the innovative strategies in the field of marketing, including customer relationship management. The main focus during the analysis and evaluation process was to produce a comprehensive study on the definition and concept of gamification.

Keywords: gamification, definitions of gamification, gamification concept

Jel Classification: M31, O30

[1]This study was derived from the doctoral thesis titled “Developing a Scale for Gamification in Marketing”, done by Bahman Huseynli under Prof. Dr. Aypar Uslu`s supervision, at Department of Marketing, Social Sciences Institute, Marmara University.

INTRODUCTION

In recent years, gamification, which has emerged as a trend in the business and marketing sectors, has attracted the attention of academics, educators, and practitioners from various fields. When the literature is examined, it is evident that there are many definitions related to gamification. Gamification, as a research discipline, is growing rapidly.
Gamification is maturing from basic questions like "what" and "why is it gamified" to more mature questions like "how" and "when to gamify". However, proving gamification effects still faces empirical and theoretical challenges. In this context, it is important to define gamification, generalize the concept of gamification, and reveal the benefits of gamification.

Gamification stands out from educational learning games and online games today because such activities are not related to commercial organizations and businesses that serve stakeholders. The gamification process is different from sales retention programs in marketing, which are designed to create brand loyalty in customers. These types of frequency or continuity programs focus on customer behavior. Instead, gamification encompasses the total customer experience, including internal experiences and motivations, integrated throughout the service marketing process (Conaway and Garay, 2014).

The main goals of using gamification applications in marketing are to increase participation, loyalty, brand awareness, motivation, and ownership (Pavlus, 2010; Witt, Scheiner and Robra-Bissantz, 2011). For this reason, businesses are now using gamification elements on both web-based and mobile-based platforms. The impact of the technological capacity of gamification environments should be designed with a large amount of information in accordance with consumer needs to make easy and quick decisions and should be connected to simple interfaces (Hofacker et al., 2016).

According to Landers (2014), in gamification studies, it should be the goal of researchers to adopt and test these qualities individually and in meaningful combinations, paying clear attention to the selected qualities.

METHODOLOGY

The main purpose of this study is to systematically compile theoretical information about the definition and concept of gamification. In this context, qualitative research, a literature review, and systematic approach methods were used. Within the scope of the study, two basic questions were investigated:

- *RQ 1: What are the definitions of gamification?*
- *RQ 2: What does the concept of gamification cover?*

For each of the research questions, a separate literature review was conducted and systematically examined. In this direction, scans were made in accordance with historical developments. In the process of analysis and evaluation, the main goal was to present a comprehensive study on the definition and concept of gamification. For this reason, the study is exploratory research and will make important contributions to the creation of the theoretical foundations of subsequent studies.

LITERATURE REVIEW AND ANALYSIS

Definitions of Gamification

Practitioners of the concept of gamification and authors of academic literature (Herbig, 1991; McAfee and McMillan, 1996; Vargo and Lusch, 2008; Lusch et al., 2007; Terlutter and Capella, 2013) have provided various definitions of gamification.

The term gamification has been around in the academic literature since at least van Benthem's (2002) discussion of logic games. van Benthem (2002: 2) says: *"In principle, any logical task can be 'gamified'"*. Van Benthem used this term to mean the presentation or transformation of a non-game task into a game, and this term is still a definition that the common man can understand today (Landers, 2014).

Bunchball (2010) defined gamification as *"the process of integrating game features into business websites to engage and bond with customers".*

Deterding et al. (2011a, 2011b) made a definition of voting based on the studies of practitioners, academics, and others to date. Deterding et al (2011a) defined gamification as *"the use of game features in non-game contexts".* Gamification, which has rapidly emerged as one of the most popular persuasive technologies widely used to promote positive change since Deterding et al.'s (2011) definition, affects user behavior by incorporating game-like elements into non-game contexts. The most frequently achieved effect with gamification is an improvement in the user's engagement and intrinsic motivation towards the development of certain actions that are often considered boring or uninteresting (Trinidad, Ruiz, and Calderon, 2021).

According to Zichermann and Cunningham (2011), gamification is *"the application of game principles and game design elements (i.e., game mechanics and dynamics) in non-game contexts to encourage problem solving and encourage desired behaviors".* Werbach, Hunter, and Dixon (2012) defined gamification as *"the use of game elements and game design techniques in non-game contexts".*

Huotari and Hamari (2012) and Deterding et al. (2011a), in contrast, did not think of gamification as a full-fledged game, but instead suggested that the focus should be on the user experience, regardless of the final product. Therefore, Huotari and Hamari (2012) defined gamification as *"the process of developing a service for gamified experiences to support the total value creation of users".*

Domínguez et al. (2013) defined gamification as *"incorporating game elements into a non-game software application to enhance user experience and engagement".* Burke (2014) defines gamification as *"the use of game mechanics and experience design to digitally engage and motivate people to achieve their goals".*

JD Supra Buzz's business consultant has developed a glossary where he defines the term gamification as *"a business strategy that applies game design techniques to non-game experiences to drive user behavior"* (Pierce, 2014). The Wall Street Journal identified the most important disruptive technology trends in 2014 (Burris, 2014) and defined gamification as *"a challenging, fast-moving trend of using advanced simulations and skill-based learning systems to provide a self-identifying, interactive, game-like, and competitive, immersive user experience".* Werbach (2014) defined gamification as *"the process of integrating game features into business websites and making business activities more gamified to engage and bond with customers".*

Gamification has tried to be defined both theoretically and practically. Gamification refers to service design that aims to provide users with game-like experiences, usually with the ultimate goal of influencing user behavior (Huotari and Hamari, 2012). In another approach, gamification can also be defined as a tool used to solve problems or achieve organizational goals (Buckley and Doyle, 2017).

Definitions of Gamification

Five years after the definition of gamification research by Deterding et al. (2011), Vermeulen et al. (2015) began to discuss the maturation of gamification as an academic research object.

According to Seaborn and Fels (2015), gamification is used to define two concepts:

1) Creation or use of a game in any non-entertainment contexts and/or purposes;
2) Turning an existing system into a game.
3)

Current research considers gamification as a service or process that can take place in three or more consecutive stages (Hamari, Koivisto, and Sarsa, 2014; Helmefalk, 2019):

- The first stage is mechanical: decisions, rules, and aesthetics to change non-game contexts (Robson et al., 2015).
- The second stage is the psychological processes that mediate various relationships (Hamari, Koivisto, and Sarsa, 2014; Dichev and Dicheva, 2017).
- The third stage is a domain-specific outcome or other context-specific outcome, such as triggering a specific behavior (Cochoy and Hagberg, 2016).

Putting these three stages into context (Landers et al., 2018), although the ultimate goal of a marketer is to increase sales, gamified marketing (mechanics) must evoke positive emotions in consumers (means) and repeatedly motivate purchases (outcomes) (Helmefalk and Marcusson, 2019).

Gamification differs from other parallel developments in several key ways:

1) Gamification, instead of providing direct hedonic experiences through audio-visual content or economic incentives, as seen in loyalty marketing, generally tries to provide experiences reminiscent of games (Huotari and Hamari, 2011; 2012).

2) Gamification tries to influence motivations rather than direct attitudes and/or behavior as in persuasive technologies (Fogg, 2003; Oinas-Kukkonen and Harjumaa, 2009).

3) Gamification means adding *"gamefulness"* to existing systems instead of creating a completely new game, as is done in *"serious games"* (Deterding et al., 2011c; Huotari and Hamari, 2012).

However, persuasive technologies also refer to interactive computer systems designed to change user attitudes and/or behaviors (Fogg, 2003; Oinas-Kukkonen and Harjumaa, 2009). Clearly, there is some overlap between gamification and persuasive technology (Hamari and Koivisto, 2013). For example, some persuasion mechanisms, such as feedback and rewards, can be considered similar to those used in gamification (see Oinas-Kukkonen and Harjumaa, 2008).

Depending on how we conceptualize the different approaches in persuasive design, gamification can be seen as an overarching concept in the sense that it can be used in various fields, or as a specific type of persuasive design within other approaches (Hamari and Koivisto, 2013).

CONCLUSION

From the perspective of information interfaces, Deterding et al. (2011a) believe that the term "gamification" appeared in the digital media industry in 2008 and became widespread in 2010. They define gamification as *"the use of game design elements in non-game contexts"* and separate the concept from playfulness. Thus, instead of design for fun interaction or play, the authors refer to complex terms such as game, game interaction, and game design. Therefore, business practices may prefer to frame gamification in terms of playful interaction rather than playful interaction (Conaway and Garay, 2014).

Goehle (2013) distinguishes gamification from video games in an educational context, and Cohen (2011) argues that online social games may soon replace textbooks in schools. These educational trends can prepare employers to incorporate gamification into their business processes.

Gamification is responsible for developing and applying new features to traditional business applications. These new features can include ease of use, attractive design, points, leader boards, and rewards (Wang, 2011). Games play an important role in reducing perceived barriers such as the difficulty of human relationships with computers, the lack of usability and security, and the ease of use of computer applications (Yoon, 2009).

The term gamification and the concept of gamification as a new approach are increasing both in practice and in academic literature. Although the definition proposed by Deterding et al. (2011a, b) is the most accepted definition of gamification, the continued development of the field of gamification causes new definitions to emerge. Gamification, which is spreading more rapidly, especially in business and marketing applications, is expanding its use as one of the innovative strategies in the field of marketing, including customer relationship management.

REFERENCES

Buckley, P., & Doyle, E. (2017). Individualising gamification. An investigation of the impact of learning styles and personality traits on the efficacy of gamification using a prediction market. *Computers & Education*, *106*, 43–55. https://doi.org/10.1016/j.compedu.2016.11.009

Bunchball, I. (2010). Gamification 101: An introduction to the use of game dynamics to influence behavior. *White paper*, 9, 1-18. Available at http://jndglobal.com/wp-content/uploads/2011/05/gamification1011.pdf Received on 15.09.2023.

Burke, B. (2014). *Gamify: How Gamification Motivates People to Do Extraordinary Things.* Bibliomotion.

Burris, D. (2014). The tech trends that will disrupt, create opportunities in 2014. CIO Wall St J:, http://blogs.wsj.com/cio/2014/01/16/the-tech-trends-thatwill-disrupt-create-opportunities-in-2014/ Received on 13.02.2023.

Cochoy, F., & Hagberg, J. (2016). Win, Earn, Gain: Gamification in the History of Retailing. Dymek, M., & Zackariasson, P. (Eds.). *The Business of Gamification: A Critical Analysis* (1st ed.). Routledge. https://doi.org/10.4324/9781315740867

Cohen, A. M. (2011). The gamification of education. *The Futurist, 45*(5), 16-17.

Conaway, R., & Garay, M. C. (2014). Gamification and service marketing. *SpringerPlus, 3*(1), 1-11. https://doi.org/10.1186/2193-1801-3-653

Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011a, September). From game design elements to gamefulness: defining "gamification". In Proceedings of the 15th international academic MindTrek conference: Envisioning future media environments (pp. 9-15). https://doi.org/10.1145/2181037.2181040

Deterding, S., Khaled, R., Nacke, L. E., & Dixon, D. (2011, May). Gamification: Toward a definition. In *CHI 2011 Gamification Workshop Proceedings* (Vol. 12, pp. 1-79).

Deterding, S., Khaled, R., Nacke, L.E. and Dixon, D. (2011b). Gamification: Toward a definition. In *Proc. ACM CHI Conf. Hum. Factors Comput. Syst.* (pp. 1-4). Available at http://gamification-research.org/wp-content/uploads/2011/04/02-Deterding-Khaled-Nacke-Dixon.pdf Accessed 11.07.2022

Deterding, S., Sicart, M., Nacke, L., O'Hara, K., & Dixon, D. (2011). Gamification: Using Game Design Elements in Non-Gaming Contexts. In *Proceedings of the 2011 Annual Conference Extended Abstracts on Human Factors in Computing Systems, CHI EA`11* (pp. 2425–2428). New York: ACM. https://doi.org/10.1145/1979742.1979575

Deterding, S., Sicart, M., Nacke, L., O'Hara, K., & Dixon, D. (2011c). Gamification: Using Game Design Elements in Non-Gaming Contexts. In *Proceedings of the 2011 Annual Conference Extended Abstracts on Human Factors in Computing Systems, CHI EA`11* (pp. 2425–2428). New York: ACM. https://doi.org/10.1145/1979742.1979575

Dichev, C., & Dicheva, D. (2017). Gamifying education: what is known, what is believed and what remains uncertain: a critical review. *International Journal of Educational Technology in Higher Education, 14*(1), 1-36. https://doi.org/10.1186/s41239-017-0042-5

Domínguez, A., Saenz-de-Navarrete, J., De-Marcos, L., Fernández-Sanz, L., Pagés, C., & Martínez-Herráiz, J. J. (2013). Gamifying learning experiences: Practical implications and outcomes. *Computers & Education*, *63*, 380-392. https://doi.org/10.1016/j.compedu.2012.12.020

Fogg, B.J. (2003). *Persuasive Technology: Using Computers to Change What We Think and Do.* Boston: Morgan Kaufmann Publishers.

Goehle, G. (2013). Gamification and web-based homework. *Primus, 23*(3), 234-246. https://doi.org/10.1080/10511970.2012.736451

Hamari, J., & Koivisto, J. (2013, June). Social Motivations to Use Gamification: An Empirical Study of Gamifying Exercise. In *Proceedings of the 21st European Conference on Information Systems (Vol. 105, No. 5,* pp. 18-19).

Hamari, J., Koivisto, J., & Sarsa, H. (2014) Does gamification work? A literature review of empirical studies on gamification. *Hawaii International Conference on System Science (HICSS)*, 3025–3034. Hawaii, USA.

Helmefalk, M. (2019). An interdisciplinary perspective on gamification: Mechanics, psychological mediators and outcomes: Mechanics, mental mediators and outcomes. *International Journal of Serious Games, 6*(1), 3-26. https://doi.org/10.17083/ijsg.v6i1.262

Helmefalk, M., & Marcusson, L. (2019). Gamification in a servicescape context: a conceptual framework. *International Journal of Internet Marketing and Advertising, 13*(1), 22-46. https://doi.org/10.1504/IJIMA.2019.097894

Herbig, P. A. (1991). Game theory in marketing: Applications, uses and limits. *Journal of Marketing Management, 7*(3), 285-298. https://doi.org /10.1080/0267257X.1991.9964157

Hofacker, C. F., De Ruyter, K., Lurie, N. H., Manchanda, P., & Donaldson, J. (2016). Gamification and mobile marketing effectiveness. *Journal of Interactive Marketing*, *34*(1), 25-36. https://doi.org/10.1016/j.intmar.2016.03.001

Huotari, K., & Hamari, J. (2011, May). Gamification" from the perspective of service marketing. In *Proceedings of CHI: Workshop Gamification: Using Game Design Elements in Non-Game Contexts*. Vancouver, BC, Canada, 2011, May 7–12.

Huotari, K., & Hamari, J. (2012, October). Defining gamification: a service marketing perspective. In *Proceeding of the 16th International Academic MindTrek Conference* (pp. 17-22). https://doi.org/10.1145/2393132.2393137

Landers, R. N. (2014). Developing a theory of gamified learning: Linking serious games and gamification of learning. *Simulation & gaming*, *45*(6), 752-768. https://doi.org/10.1177/1046878114563660

Landers, R. N., Auer, E. M., Collmus, A. B., & Armstrong, M. B. (2018). Gamification science, its history and future: Definitions and a research agenda. *Simulation & Gaming, 49*(3), 315-337. https://doi.org/10.1177/1046878118774385

Lusch, R. F., Vargo, S. L., & O'brien, M. (2007). Competing through service: Insights from service-dominant logic. Journal of Retailing, 83(1), 5-18. https://doi.org/10.1016/j.jretai.2006.10.002

McAfee, R. P., & McMillan, J. (1996). Competition and game theory. *Journal of Marketing Research, 33*(3), 263-267. https://doi.org/10.1177/002224379603300301

Oinas-Kukkonen, H., & Harjumaa, M. (2009). Persuasive systems design: Key issues, process model, and system features. *Communications of the Association for Information Systems, 24*(2009), 485-500. https://doi.org/10.17705/1cais. 02428

Pavlus, J. (2010). The game of life.(Cover story). *Scientific American*, *303*(6), 43-44.

Pierce, A. (2014). Virtual Currency & Beyond – Acronyms, Abbreviations, and Key Definitions, Pillsbury Social Media, Entertainment & Technology Team document. Available at https://www.jdsupra.com/legalnews/virtual-currency-acronyms-abbreviation-25571/ Received on 13.02.2023.

Robson, K., Plangger, K., Kietzmann, J. H., McCarthy, I., & Pitt, L. (2015). Is it all a game? Understanding the principles of gamification. *Business Horizons, 58*(4), 411-420. https://doi.org/10.1016/j.bushor.2015.03.006

Seaborn, K., & Fels, D. I. (2015). Gamification in theory and action: A survey. *International Journal of Human-Computer Studies, 74*, 14-31. https://doi.org/10.1016/j.ijhcs.2014.09.006

Terlutter, R., & Capella, M. L. (2013). The gamification of advertising: analysis and research directions of in-game advertising, advergames, and advertising in social network games. *Journal of Advertising, 42*(2-3), 95-112. https://doi.org/10.1080/00913367.2013.774610

Trinidad, M., Ruiz, M., & Calderon, A. (2021). A bibliometric analysis of gamification research. *IEEE Access,* 9, 46505-46544. https://doi.org/10.1109/ACCESS.2021.3063986

Van Benthem, J. F. A. K. (2002). *What Logic Games are Trying to Tell Us*. Amsterdam, The Netherlands: ILLC Publications. Available at https:// eprints.illc.uva.nl/id/eprint/89/1/PP-2003-05.text.pdf Received on 24.05. 2023.

Vargo, S. L., & Lusch, R. F. (2008). Service-dominant logic: continuing the evolution. *Journal of the Academy of marketing Science*, 36, 1-10. https://doi.org/10.1007/s11747-007-0069-6

Vermeulen, H., Gain, J., Marais, P., & ODonovan, S. (2016, January). Reimagining gamification through the lens of Activity Theory. In *2016 49th Hawaii International Conference on System Sciences (HICSS)* (pp. 1328-1337). IEEE. https://doi.org/10.1109/HICSS.2016.168

Wang, R. (2011). Demystifying enterprise gamification for business. Available on https://www.constellationr.com/research/demystifying-enterprise-gamification-business Received 11.01.2024.

Werbach, K. (2014). (Re) defining gamification: A process approach. In *Persuasive Technology: 9th International Conference, PERSUASIVE 2014, Padua, Italy, May 21-23, 2014. Proceedings 9* (pp. 266-272). Springer International Publishing. https://doi.org/10.1007/978-3-319-07127-5_23

Werbach, K., Hunter, D., & Dixon, W. (2012). *For the Win: How Game Thinking Can Revolutionize Your Business*. Philadelphia: Wharton digital press.

Witt, M., Scheiner, C. W., & Robra-Bissantz, S. (2011). Gamification of online idea competitions: insights from an explorative case. In *INFORMATIK 2011 – Informatik Schafft Communities*, *Lecture Notes in Informatics*, (pp. 192-207). 4.-7 October 2011, Berlin, Germany.

Yoon, C. (2009). The effects of national culture values on consumer acceptance of e-commerce: Online shoppers in China. *Information & management*, *46*(5), 294-301. https://doi.org/10.1016/j.im.2009.06.001

Zichermann, G., & Cunningham, C. (2011). *Gamification by design: implementing game mechanics in web and mobile apps*. O'Reilly Media, Incorporation.