Gamification as an innovative HR management tool for a modern company

Tretyakov Oleg Vladimirovich Candidate of Economic Sciences, Head of Department Perm National Research Polytechnic University

Abstract. In modern conditions, gamification has become one of the discussed management technologies. The attention of the academic community and business practitioners is focused on the study of a new phenomenon - gamification (the use of game elements in various non-game contexts). Despite the growth of research interest and the expansion of application practice, the concept of gamification is not sufficiently developed theoretically, there are no standardized rules and procedures for its implementation in the activities of companies. The article examines the theoretical and applied issues of gamification, identifies the problems and prospects of its development in the personnel management of a modern company.

Keywords: gamification, personnel management, gamification project; internal and external gamification.

The personnel of the company is one of the leading assets allowing to ensure high economic results and its competitiveness in the conditions of a dynamically changing external environment. To ensure the effective use of this asset, companies must: find effective ways to recruit the "best" employees; reduce the monotony and routine of labor operations, ensuring the involvement of employees in the company's activities; develop motivation programs that allow employees of organizations not only to demonstrate high productivity, but to find a balance between personal life and work. Due to the growing competition for "quality" human resources in the labor market, companies are forced to perform a number of non-specific social functions. For example, to provide employees not only with comfortable working conditions and decent wages, but also to organize leisure in the workplace, to promote the development of skills and competencies of employees that are not directly related to work functions and tasks, and to help solve personal affairs. Increasingly, HR managers are using concepts such as pleasure in doing work, fun in the work process, fun in completing tasks, and companies are looking for new management tools and technologies that can turn even the most monotonous work into fun. One such technology in recent years has been gamification.

Modern companies are looking for new approaches and tools to create an effective HR management system. One of these tools is gamification [1].

The first attempts at introducing gamification were unknowingly undertaken by the American fast food company "Kellogg Company" in 1910. The company announced a promotion that included a reward (decal book) for every two boxes of cereal purchased.

After two years, the snack firm Cracker Jack has implemented a similar game-based customer reward system. So, in every product released by the company, a prize was added (from stickers to baseball cards). Over the next 100 years, the company released about 23 billion products with gifts inside, and the inscription "Prize in every box" became a hit [2].

Despite the fact that by 1950 the understanding of gamification had not yet been formulated, its main element - positive emotions - already allowed to rapidly increase the level of consumer motivation and thereby led to increased sales [3].

It is difficult to unequivocally answer the question about the first researcher in the field of introducing game elements into the personnel management system. Several sources point to Canadian consultant Gabe Zichermann as a pioneer. He subsequently co-authored Game-Driven Marketing (2010) and Gamification by Design (2011), as well as Chairman of the Gamification Summit.

However, it is worth noting that the work of the American Charles Kunradt, the founder of The Game Of Work, was previously published. In his work, he proposed the idea of using games in the workflow to motivate employees. His proposals were not implemented at the time of their appearance, but were a source of analysis for the advancement of a modern approach to the study of this problem.

The term gamification in the modern sense has appeared relatively recently in the international business environment. It was proposed by N. Pelling in 2002. The widespread use of the term in the United States occurred only in 2010, this became possible due to the processed results of the use by companies of various business sectors of a new marketing move that successfully combines gaming and social media technologies [4].

In Russia, the process of gamification was made public in August 2012 thanks to the training course "Gamification" led by Professor of the University of Pennsylvania K. Werbach [5].

At the moment, gamification does not have a lot of practical experience in its application in Russia, therefore this tool is often confused with other concepts and is often given an incorrect, distorted meaning.

The authors who study the processes of game thinking are unanimous in the opinion that gamification does not have to be presented in the form of a game, but it implies the

application of psychological aspects inherent in the game process. At the same time, the most important element of this method is to provide instant and measurable feedback to the user. In this vein, feedback serves as a motivational stimulus and helps the user to track progress and, if necessary, make adjustments to their behavior.

Broadly understood, gamification is the process of applying the elements and properties of a game in a non-gaming context. It is important to note that the opinions of researchers on the issue of the identified categories of elements differ [6].

K. Kanningen and G. Zikkerman in their research expressed an opinion on the relationship between the selected game elements and the final effectiveness of gamification programs. So, the effectiveness of the application directly depends on the goals and expected results, the methods used to adapt personnel to the innovation system, as well as on the degree of organization of feedback to the users of the program [7].

Broadly understood, gamification is the process of applying the elements and properties of a game in a non-gaming context. It is important to note that the opinions of researchers on the issue of the identified categories of elements differ [6].

K. Kanningen and G. Zikkerman in their research expressed an opinion on the relationship between the selected game elements and the final effectiveness of gamification programs. So, the effectiveness of the application directly depends on the goals and expected results, the methods used to adapt personnel to the innovation system, as well as on the degree of organization of feedback to the users of the program [7].

K. Werbach and D. Hunter continued to study the approach of gami ed systems from the point of view of considering them as a business tool. The authors suggest that the modern internal processes of the company are rapidly passing through the stages of merging with the world of game design, in which gamification acts as an intermediary between the game and practical tasks.

According to K. Hiotari and J. Hamari, gamification should not be equated with an inferior game. They view it from the angle of the formation of a new experience, which tends to grow rapidly. From the point of view of this theory, it is necessary to focus on the process of user interaction with the gamification system, without taking into account the type of the final product. Thus, attention is shifting from the highlighted elements of the game to the experience that can be acquired in the process of using gamification systems [9].

Summarizing the currently existing approaches, we can say with confidence that gamification is an innovative tool for solving various kinds of business problems, which involves the use of game elements and contributes to the formation of new experience in the non-game process.

In this context, the main aspects of gamification are:

- interaction processes (ensuring user interaction with each other);
- game aesthetics (creating conditions conducive to a positive emotional outburst, which in turn serves as a tool for user engagement and motivation);
- feedback from the system (use of points, rewards and statuses to confirm the user level increase) [10].

Together, these elements contribute to the formation of new experiences and serve as a guarantor of the effective use of gamification systems.

In the modern world, all areas of human life are undergoing rapid changes. Given this problem, companies have to react quickly to external conditions and adapt to market demands. The ability to analyze the available tools for managing business processes, as well as to develop to create innovative methods becomes a prerequisite for the existence of a company.

Approaching the process of creating new methods, many factors are taken into account, of which the most significant is the compliance of the technology with modern standards and market requirements [11].

For about 10 years, there has been an active absorption of various types of leisure activities into games. The idea of people's need for play was first expressed by Henry Murray in his motivational concept. In addition, the author identified this need among the main ones and described it as a means of self-realization and adaptation [1].

A generational shift in the labor market can also be noted. For example, generation Y (born after the 1980s) has a strong interest in information technology and, thus, sets the direction for the work of HR services, which are looking for innovative tools to engage this generation in the workforce. Thus, taking into account these trends, companies began to use gamified systems to solve various kinds of problems, including to attract employees and improve their work efficiency [2].

Based on the research data, it can be concluded that the potential of gamification as a personnel technology is underestimated by the world community. However, despite this, the forecast of the company Gartner, which specializes in the analysis of modern consulting technologies, speaks of a further increase in demand for the use of gamification by companies around the world [12].

Despite the positive forecasts, there are also critics of gamification, who highlight a number of negative factors. Among them, the most significant is the risk of changing a person's internal motivation to external rewards. Feeling of control and manipulation is another of the problems inherent in all types of play activities.

Some researchers argue that gamification is not capable of achieving the goals identified before the implementation phase. Others consider the use of this tool in work activities unacceptable and point to the consequence of the use of gaming technologies, which is expressed in a decrease in labor productivity.

The described negative phenomena, of course, take place, however, they arise in most cases when the technology for creating a project is not followed, the goal and objectives are incorrectly formulated, as well as when mistakes are made in the process of introducing the project into the organizational system. Another significant mistake that can reduce the effectiveness of gamification to a minimum is the poor design of the project [13].

Skeptical specialists tend to think that gamification is a kind of PR stunt created by marketers with the aim of making easy money. This can be refuted by the positive results from the application of gamification in practice, as well as the fact that this tool has been used by many well-known firms that have proven themselves in the market [14].

Gamification technologies are used as tools for the implementation of the following areas in the field of personnel management: staff recruitment; adaptation of personnel; staff motivation; training; team building.

The introduction of gamified projects in the recruiting process can help reduce the costs of recruiting, as well as improve the quality of the hired staff. In addition, gamification can also act as a talent pooling tool.

When carrying out adaptation measures, gamification allows you to reduce psychological tension and thereby significantly speed up the process of involving an employee in work.

Game-based motivational programs are highly sought after for their ability to bring entertainment into routine routines. Most often, this process is accompanied by the introduction of points, awards and statuses into the motivational program, which subsequently serve as the basis for the provision of any type of material or non-material incentives (bonuses, benefits, gifts, rolling awards, title assignment). Thus, using gamification as a motivation tool, the company develops competition between employees, and this, in turn, leads to increased efficiency and employee engagement [15].

In terms of staff training, gamification helps solve several significant problems. Of these, the most significant is the simplification of the perception by employees of a large flow of information. As another indisputable advantage of using gami ed systems in teaching, one can single out the ability to simulate non-standard situations that are rarely encountered in everyday work. This method can significantly reduce the risks associated with safety at industrial enterprises, which is especially important for industries where the safety of not only

the organization, but also the whole country can depend on the behavior of people in emergency situations [16].

In team building, gamification is a kind of tool for creating a favorable psychological climate that promotes liberation, relieves stress, and also increases the level of creative activity.

Summarizing the directions of using gamification in personnel management, we can say that with the correct implementation of systems in a particular area, it is possible to achieve improved business results by increasing productivity, engagement and retention of employees.

When using the elements of the game in the personnel management system, it is also important to take into account the possible forms of their manifestation.

In practice, the following forms of gamification systems are distinguished: competitive; victorious; aesthetic.

The competitive form implies the creation of certain conditions for a healthy competitive struggle between employees. Thanks to this process, a significant increase in staff motivation can be observed, but this directly depends on the organization of the event and the quality level of the preparatory measures. For example, one of the most important stages in the implementation of a competitive project in the personnel management system is its worthy coverage in the corporate environment. Thus, with the right preparatory measures, a competitive form of gamification can bring a company results in practical activities and, thereby, affect its financial performance.

The victorious form acts as a kind of tool for social recognition. A characteristic feature of this form is the recognition of all participants as winners, in the West this phenomenon is usually called the term "Win-win". In this regard, social encouragement and approval becomes a motivational stimulus. As an example, we can single out a project in which company employees received bonuses for voluntary assistance to colleagues. The accumulated bonuses could later be used by users to purchase real gifts. This method of using the victorious form of gamification helps to improve the psychological climate in the team, to form a sense of mutual assistance among the staff, and also to strengthen the team spirit as a whole.

The next form is aesthetic gamification. This form pursues the solution of a number of tasks, one of which is the formation of a clear idea of the goal and mission of the company in the team, as well as the subsequent correlation of these ideas with their own desires. A successful example of the application of the aesthetic form of gamification can be the creation of a corporate achievement system. An important condition for the effectiveness of such a

system is the attainability of goals and the construction of a visual way of their implementation. As a rule, when using this approach, company personnel are interested in achieving more and more new results, thereby developing in their professional field [17].

Undoubtedly, in order to achieve the greatest efficiency from the introduction of gamification systems into the practice of personnel management, it is necessary to use all possible forms of gamification. However, often, for some reason (for example, financial) it is not possible to do this, so the optimal solution may be to use two forms at once.

Considering the above, it is important to highlight the aspects that influence the implementation of gamified systems.

A particular difficulty for HR managers in the process of introducing gamification is the fact that there are limited specialists with the necessary competencies and are able to create a high-quality product that would correspond to the tasks set by the organization. The fact is that the development and implementation of game methods require diverse skills and abilities: knowledge in the field of programming and game design, ability in the development of training courses, as well as other narrowly focused and specific knowledge [18].

Authors studying the practical importance of gamification provide a number of tips for its implementation.

Firstly, one should not turn the innovative method into a tool for identifying negligent employees and give it a negative color, since in the presence of these conditions, the motivation of employees to the process completely disappears.

Secondly, it is necessary to conduct an analysis of possible risks, this requires the active work of HR managers, specialists of the legal department, as well as the participation of IT-technologies and corporate communications departments.

Third, it is important to take into account the characteristics of the personnel: its gender and age structure, the predominance of a certain type of generation, the level of resistance to change [19].

Thus, writing a project strategy comes down to the following points:

- analysis of business processes, as well as possible risks associated with the implementation of game elements;
 - revealing the correlation of existing processes and game elements;
 - definition of the goal and objectives of the project;
 - creating a game strategy;
 - -selection of scenario elements typical for gameplay (awards, statuses, points);
- formulation of a list of measurable parameters by which information on user behavior will be collected [20].

Thus, the analysis of the theoretical foundations of gamification management as a personnel-technology allows us to conclude that gamification is an innovative tool for solving various kinds of business problems, which implies the use of game elements and contributes to the formation of new experience in the non-game process. Gamification technologies are used to improve the efficiency of personnel management in such areas as recruitment and selection of personnel, adaptation of personnel, as well as its training and motivation.

References:

- 1. Dobychina N.V. Computer games a theater of active actions // Philosophical problems of information technologies and cyberspace. 2013. № 1. P. 149-158.
- 2. Zemskova M.S. The introduction of gamification in the process of motivating personnel of generation Y / M.S. Zemskova, M.V. Krasnova // International research journal. 2016. № 10 (52). P. 29-33.
- 3. Markeeva A.V. Gamification as a tool for managing personnel in a modern organization // Russian Journal of Entrepreneurship. 2015. № 12. P. 1923-1936.
- 4. Dyatko K.D. Gamification and the possibility of its application in personnel management // Blog about personnel management. 2015. № 6. Access: http://dyatko.info.
- 5. Werbach K. Engage and Conquer. Game thinking in the service of business / Kevin Werbach, Dan Hunter. M.: "Mann, Ivanov, Ferber". 2015. 543 P.
- 6. Lyubko E.O. Hemification step by step: instructions for use // Human potential management. 2015. № 1 (41). P. 2-8.
- 7. Shatilova E.O. Gemification as a tool of corporate culture // Management of corporate culture. 2014. № 4. P. 246-251.
- 8. Mcgonigal J. Reality Is Broken: Why Games Make Us Better and How They Can Change the World: Blackwell Publishing, 2011. 121 P.
- 9. Vinichenko M.V. Monitoring of working conditions and the nature of their influence on health of students and academic staff. / A.V. Kirillov, E.V. Frolova, O.V. Kaurova, S.A. Makushkin. International Journal of Environmental and Science Education, 2016. 4564-4577 P.
- 10. Radoff J. Game On: Energize Your Business with Social Media Games: College Publishing, 2011. 35 P.
- 11. Schlender P.E. Personnel management / P.E. Schlender, V.V. Lukashevich, V.D. Mostova, A.N. Artemiev, Y. G. Soskin. M.: Unity-Dana. 2012. 367 P.
- 12. Konanchuk D.A. The era of "greenfield" in education // Blog about education. 2013. № 2. Access: https://goo.gl/JpCwPJ.

- 13. Kirillov A.V. Improvement in the learning environment through gamification of the educational process. IEJME mathematics education, 2016. 2071-2085 P.
- 14. Deterding S. From Game Design Elements to Gamefulness: Defining Gamification: International Academic MindTrek Conference, 2011. 357 P.
 - 15. Koster R. A Theory of Fun for Game Design: Paraglyph Press, 2005. 256 P.
- 16. Edery D. Changing the Game: How Video Games Are Transforming the Future of Business: FT Press, 2009. 71 P.
- 17. Brown T. A New Culture of Learning: Cultivating the Imagination for a World of Constant Change: The University of Michigan Press, 2011. 271 P.
- 18. Esaulova I.A. Personnel development: strategies, organization, practical solutions: monograph. Perm: Publishing house of Perm. state tech. un-ty. 2017. 178 P.
- 19. Fedorova N.V. Personnel management / N.V. Fedorov. O.Yu. Minchenkov. M.: KnoRus. 2016. 224 P.
- 20. Squire K. Video Games and Learning: Teaching and Participatory Culture in the Digital Age: Teachers College Publishing, 2011. 12 P.