student of 419 group of the Department of of Management of Foreign Economic

Activity of Enterprises, National Aviation University, Kyiv.

Scientific advisor: Ovsak O.P.

Ph.D. in Economics, associate professor of the Department of Management of Foreign Economic Activity of Enterprises of the National Aviation University, Kyiv.

## VIRTUAL AND AUGMENTED REALITY TECHNOLOGIES IN HUMAN RESOURCES MANAGEMENT

Technology and IT are the most rapidly developing industries in the modern world. Whether we like it or not, whether we are afraid of it or looking forward to it, if technology is neglected, the business can fall far behind its competitors. Nowadays, virtual (VR) and augmented (AR) technologies are widely used in marketing, advertisement, and PR (VR/AR represents a new technology that provokes new emotions from clients and makes them interested in the company or/and product, make them more engaged), retail (for example, virtual fitting rooms that help customers to decide on the size and the color of the good they want to purchase - it increases sales and attract new clients), production and engineering (for example, a 3D model of the projected construction/item in VR, the designer can see the project at a 1: 1 scale and better assess the design quality, as well as the ergonomic characteristics of the object, which cannot be done by looking at the 3D model on the monitor screen) and any other sphere of human life. But, the biggest impact VR and AR have on a company's human resources management, and firstly in corporate training of both newcomers and experienced employees.

VR and AR technologies provide companies with the ability to lead training and briefings of working in dangerous places, hazardous materials, or expensive equipment without risk neither for employee's health nor for the company's budget; it saves time for corporate training and thus significantly saves company's expenditures for it; corporate training using VR/AR technologies turned to be more effective than traditional education system as it not only totally engage employees in the learning process, but also allows to practice - there are a few different scenarios, so they can learn what they must do and what they mustn't do through trial and error and observing the consequences of their decisions and actions.

Let's find out the main benefits the company can get after VR/AR technology was implemented in the corporate training and the main points the manager must consider while choosing a VR/AR contractor.

Virtual Reality and Augmented Reality are two sides of the same coin. Augmented Reality simulates artificial objects in the real environment; Virtual Reality creates an artificial environment to inhabit.

Virtual and augmented reality technologies are practice-oriented tools that will not work without a specific need, set tasks and understanding of the issues that the business needs to close. Thus, to make a decision about purchasing VR / AR tools, a manager needs to determine goals the company wants to achieve through the implementation of VR / AR. For that the following questions could be considered:

- How exactly does technology help to achieve business goals?
- When closing what tasks of the company will virtual and augmented reality be most effective?

- How, where and on what VR equipment will employees learn and work?
- Who will oversee the VR / AR learning or work process?
- How will the piloting process be carried out, what indicators will be taken into account?
  - What research should be done before purchasing solutions and after launching a pilot?
  - How long will the costs of the technology pay off in the future? [2]

The advantages of using VR and AR technologies in corporate training are the following:

- increased employees engagement and increased emotionality that facilitates the process of memorizing and learning;
- in VR simulations it is possible for employees to observe the consequences of their decisions and actions, which has a strong influence on the motivation of employees to comply with regulations and instructions, and reduces the number of errors;
- more understandable explanation of difficult and abstract processes by their visualization:
- due to the effect of complete immersion and the inability to be distracted by extraneous stimuli, the learner assimilates information much faster;
- ability to get real practical skills. Virtual simulators train new employees of the company to work with expensive or dangerous equipment without risks to life, the likelihood of breakdown or harm to the environment;
- training apparatus with VR/AR technology reduce time and money spent for education of new employees;
- for managers VR and AR allow to see the infrastructure of an enterprise under construction, walk around an object modeled in 3d format;
- ability to use VR/AR for soft skills development. For the development of soft skills, first of all, a high coefficient of emotional intelligence is important, that is, a person's ability to show feelings, control their emotions and correctly recognize them. At the same time, feedback allows you to consolidate the acquired skills: for example, when the correct behavior is rewarded with a smile of the interlocutor, and the wrong one is rewarded with discontent:
- learning to work with clients in virtual reality allows you to better understand the motives of their behavior, the reasons for choosing certain products, and increases the stress resistance of company employees.

From all the above listed, the following conclusion can be done. VR/AR is no longer technology of the future, it's a technology of today. Its necessity in the company's corporate training is conditioned by more effective and fast education of the employees, reduction of time, expenditures, and other resources spent for the education of employees, the safety of both employees' health and company's assets, accessibility, and versatility. The improvements provoked by implementing AR/VR into corporate training strengthens the company's position on the market and increase brand awareness which leads to sales and profit growth.

## References

- 1. Augmented Reality in Business: Benefits and Applications Available at: https://perfectial.com/blog/augmented-reality-in-business/
- 2. Digitalization of production: why does the industry need VR/AR technologies? (2021) Available at: https://www.velillum.com/technology/digitalization-of-production-why-does-the-industry-need-vr-ar-technologies/

- 3. The Amazing Ways Companies Use Virtual Reality For Business Success. Available at: https://bernardmarr.com/the-amazing-ways-companies-use-virtual-reality-for-business-success/
- 4. Top 10 AR/VR Applications in Mobile Apps. Available at: https://onix-systems.com/blog/top-10-applications-of-ar-and-vr-in-business
- 5. Virtual Reality Technology. Available at: https://www.sciencedirect.com/topics/computer-science/virtual-reality-technology