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**RETAIL SERVICE TECHNOLOGIES:  
AUGMENTED REALITY  
AND DEEP LEARNING OPPORTUNITIES**

**ТЕХНОЛОГИИ НА СЛУЖБЕ У РИТЕЙЛА:  
ВОЗМОЖНОСТИ ДОПОЛНЕННОЙ  
РЕАЛЬНОСТИ И ГЛУБОКОГО ОБУЧЕНИЯ\***

This work is aimed at studying the ways of applying augmented reality (AR) and artificial intelligence (AI) in the field of Economics.

AR is the projection of any digital information over a screen of any devices. It appears in the line of sight of the existing environment and supplements it with sounds, video, and graphics. The usage area comprises social media (Snapchat, Instagram), special apps (3DBrush, LeoAPP AR), home improvement (IKEA), as well as appearance improvement (L`Oreal, Sephora) in order to supplement information about the environment and improve the perception of information [1].

The global AR market is still unstable. According to forecasts, within 2017 to 2022 the global market for AR and VR technologies will be growing by 71.6 % per year on average. The total growth rate will amount to 106 billion dollars in 2022.

The Republic of Belarus is beginning to dive deeper into AR in order to reach a higher level of technologies. For example, the Belarusian company WANNABY is building a mass market of mobile AR platform and technologies.

Deep learning is the next generation of artificial intelligence that allows computers to learn independently. Its purpose is to imitate and ultimately surpass the human mind. The application field involves virtual assistants, unmanned vehicles, customer service, facial recognition, personalization, etc. Personalization plays a special role in retail. Large retail chains have learned to extract information about customers from different sources: social networks, IOT sensors developed on the basis of both A. I. and Deep Learning, chatbots, messengers, and data from call centers. Equipped with this information, the machines interpret the user's behavior in a store and try to predict their actual intention to buy [2].

Fast development of these technologies causes a problem of their illegal use. Such phenomenon as deep fake, i.e. fake image and voice based on AI, has become popular with scammers.

The global AI and DL market grows by 31 % annually, which will have led to a fourfold increase of the total market volume of these technologies by 2022 as compared to the level of 2017.

Over the past few years the Belarusian AI market has grown several times. Belarusian service companies proved to be in a greater demand in foreign markets than in domestic ones [3].

As a conclusion, we tend to assume that the development of augmented reality technology and artificial intelligence has immense prospects for application in various fields. In the economy they have already begun a new Chapter and have found their application primarily in the field of retail.

### References

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