

## 16. AUGMENTED REALITY IMPLEMENTING IN DIFFERENT SPHERES OF LIFE

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The implementation of augmented reality in different areas is described in this paper. Its impact on medicine, education, commerce and entertainment is highlighted. Through a combination of real-world examples and expert insights, the paper delves into the idea how AR is reshaping these sectors and unlocking new possibilities for innovation and advancement.

Augmented reality (AR) technology has revolutionised the way people perceive and interact with the environment by merging the real and virtual worlds. This technology superimposes computer-generated objects on the world around us, changing the experience of interacting with it. AR applications have found their use in various areas of life, including gaming, education, healthcare or commerce. AR technology gives users many new possibilities such as exploring virtual landscapes, interacting with virtual objects or getting real-time information about the world around us. AR has truly changed human interaction with the environment.

The impact of AR on medicine has been a revolution as this technology improves diagnosis, treatment and education in the field [1]. With AR technology, medical professionals can gain a comprehensive view of complex medical cases by visualising patient data and medical images in 3D, allowing for more accurate assessments and better-informed decisions. When it comes to treatment, AR can help surgeons during procedures by overlaying important information directly onto the patient's body, helping to make as few mistakes as possible. Along with this, AR is improving medical education by creating new learning opportunities for students. For example, using simulated surgeries, medical students can practice complex and dangerous procedures without live patients. AR can change the medical industry for the better through relative accuracy, efficiency, and safety in healthcare.

It should be mentioned that in the field of education, AR technology has also made a major contribution by offering new and exciting learning experiences [2]. By combining virtual objects and the real world, AR allows learners to interact with content in new ways [2]. This technology allows complex concepts to be explored visually, developing spatial thinking as well as making abstract ideas more visual and understandable. For example, in biology classes, using AR, students can observe virtual organisms or the inner workings of a cell, while in history classes they can witness historical events of the past unfolding right before their eyes. With its ability to create dynamic and interactive learning environments, AR can transform standard classrooms into spaces for new discovery and exploration.

In commerce AR has become a powerful tool to improve it. With this technology, customers can interact with the products they want to buy, such as trying on virtual clothes, visualising furniture in their homes, or even trying different types of make-up from the comfort of their own homes [3]. Such shopping experiences not only grab customers' attention, but also help them make more informed purchasing decisions, minimising the likelihood of returns. By implementing AR into commerce, businesses can effectively engage customers, increase sales and stay ahead in an increasingly competitive market.

The entertainment industry has undergone the biggest changes after the introduction of AR technology. With AR, users are able to transform their environment into virtual playgrounds, merging the real and virtual worlds. Using mobile apps or specialised AR devices such as headsets or glasses, users can explore and interact with new dimensions in real time. AR has opened up a whole world of entertainment possibilities, from gaming to live performances. Gamers can battle virtual creatures in their own living rooms, while concertgoers can enjoy performances by their favourite artists from the comfort of their own homes. It is worth noting that AR has also made its way into parks and museums, enhancing the visitor experience by overlaying additional information or visual effects on exhibits. As technology continues to advance, the potential of AR in entertainment is only limited by people's imagination.

In conclusion it is necessary to say that AR technology has the potential to revolutionise various industries and improve everyday experience. AR is breaking down barriers and merging the real and virtual worlds in ways people have never thought possible.

### **References:**

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