

MR. ACE

MIXED
REALITY &

AUGMENTED REALITY FOR
CORPORATIONS AND
ENTERPRISE



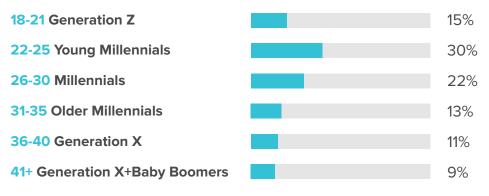
FOR NEW RECRUITS

The effectiveness of trainings are threatened and might be significantly decreased when the ranks of recruits will be filled with Generation Z. Digital native Millennials have already brought difficulties to the military sector; what can we expect from those who grew up holding a smart device?

With the introduction of new technologies and drastic changes to existing ones, military facilities have to think of the flexibility and efficiency of their training programs. For years, virtual practicing appeared to be much more persuasive and memorable than its traditional alternative. However, problems persist. These solutions have been operating below peak efficiency. Armed forces constantly enlist new recruits that have to gain necessary skills in lifelike conditions or as close to reality as possible in a short period of time.

TRAININGS AND DIGITAL NATIVES

According to Nation Master, the average age to join the army across the world is 18-28 years old. However, training officers are almost always older and have an average age of 35-40 years old. The gap between generations feels particularly acute when members of Generation X (Baby Busters) start to train Millennials and some of Generation Z.



Military demographics by age and generation

Technologically proficient youth just fail to master the maximum amount of skills due to outdated training methods, unrealistic situations, and lack of essential armament. Moreover, some trainings are extremely costly due to the complexity of their simulation or additional risks to the life and health of recruits.



WHY TO IMPROVE THE QUALITY OF TRAININGS

To get ahead, the military sector is adopting trainings and simulations based on virtual and augmented reality technologies. And every year the share of augmented reality trainings gets more significant. Unlike VR, augmented reality simply makes use of the existing environment by overlaying new information on top of it. For example, pilots' helmets can now display information about the control panel, weather data, messages from the mission control center, etc. And with the introduction of Microsoft HoloLens, mixed reality trainings based on holographic technology have started to supplant VR ones. According to Statista, the worldwide shipment of smart augmented reality glasses is forecasted to reach 5.4 million units by 2020, while Microsoft claims that around 80 million AR and MR devices will be sold by 2020.

WHAT IS MR.ACE?

To help military facilities increase the efficiency of their training programs and save money on the development of complex practicing algorithms and mechanics, Program-Ace introduces MR. ACE, a unique SaaS platform based on mixed and augmented reality technologies. Forego the need to hire developers who will craft your AR and/or MR training app, and instead use our service where no additional coding is required. Just import 3D objects, 2D information, video, holograms or any other content necessary for the training, choose a trigger image, marker or location for AR apps, and watch your digital content flawlessly overlay or embed into the real world



MR. ACE's key components include:

- cloud-based SaaS platform that requires no additional coding
- user-friendly drag and drop editor
- 3D object recognition
- most popular objects and actions used for military simulations and trainings
- ability to import any existing 3D training software
- unlimited customization possibilities

Using the most prominent technologies such as Unity, OpenCV, C#, C++, and OpenGL, MR. ACE helps not only cover the lack of a skilled workforce, but increases command response efficiency, and almost completely reduces the time needed to adapt to real equipment.

THE ROAD TO A BETTER MILITARY EDUCATION

Focused on innovations, Program-Ace is willing to help the military sector modernize their training environment, making it more effective for young people and less costly for the educational centers to arrange. A holographic and AR future is closer than you might think and the military share in augmented and mixed reality market will be no less than 4% by 2022 and will continue to grow.

For facilities ready to take the lead, Program-Ace rapidly develops and deploys MR. ACE, forming the foundation of a broadly applicable and versatile industrial platform. Innovate your training culture and increase revenue - be one step ahead with Program-Ace. Take your chance to shape the training according to your needs and demands, share your thoughts, ideas, and experience, so we can make MR.ACE better, while it is still under development.