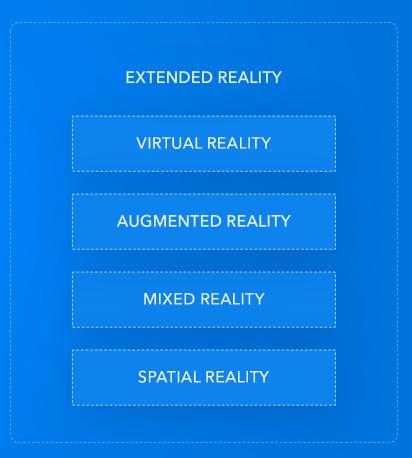


Extended Reality for Work

What is Extended Reality?

XR is a collective term for immersive technologies:

- > Virtual Reality: VR immerses users in a fully digital environment using head-mounted displays or multisensory rooms.
- > Augmented Reality: AR enhances real-world perceptions by overlaying digital information through devices such as smartphones or AR glasses.
- > Mixed Reality: MR not only overlays but also anchors digital objects to the real world, enabling interaction with digital elements as physical objects.
- > Spatial Reality: SR creates a 3D immersive experience on a screen, blending digital content with the real world without specialized glasses.



Learning with XR is better

According to a PwC study*, XR not only accelerates the learning process but also significantly enhances learner engagement, confidence, and focus.

- > **Speed of Learning**: Learners complete VR training 4x faster than traditional classroom training.
- > **Confidence**: Participants are 275% more confident in applying what they learned after VR training.
- > Emotional Engagement: VR learners feel 3.75x more emotionally connected to the content compared to those in traditional classroom settings.
- > **Focus**: VR learners are 4x more focused than those engaging with e-learning platforms



Leopoly is XR for Work

We are a leading company in the 3D and XR software development industry.

Our dynamic team of 30 professionals collectively possesses over 200 years of expertise in 3D, AR, VR, and MR, with specializations in design, UI/UX, and product planning.

- > Over ten years of industry experience
- > Solutions serving millions of users worldwide
- > Strong portfolio with Fortune 100 clients
- > Offices located in both the US and Europe

leopoly xR

Extended Reality for Work

leoshape

3D Product Customizer for O&P

shapelab

3D Model Creator in VR

Trusted Partner for DefTech Projects

Leopoly is a proud supplier to the Hungarian Defence Forces and VEX, supervised by the Ministry of Defence.

- > Cross-platform compatibility with our proprietary frameworks
- > Seamless integration with all Learning Management Systems (LMS)
- > Dedicated developer resources tailored for each project
- > SAAB-approved, **military-grade secure** development offices

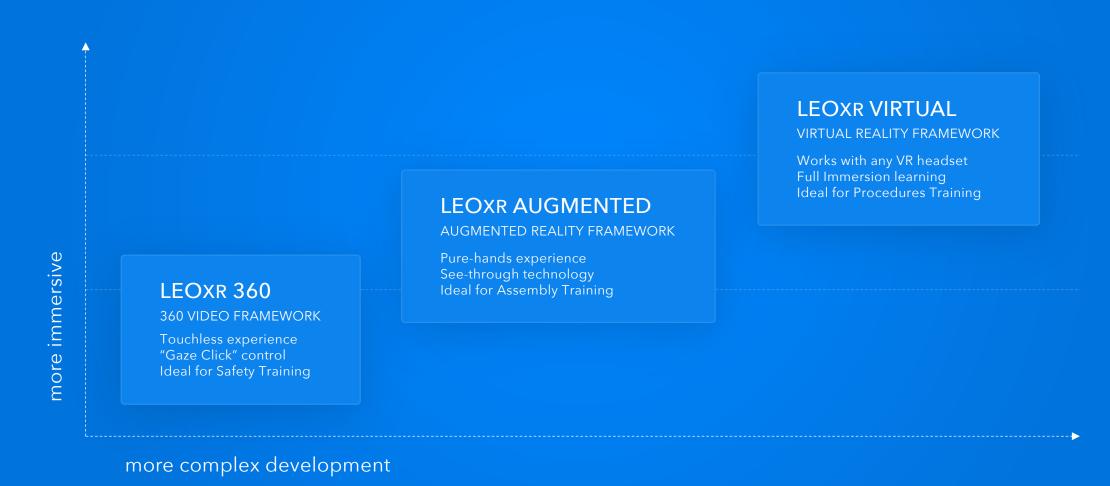








Our Proprietary Cross-Platform DefTech XR Frameworks

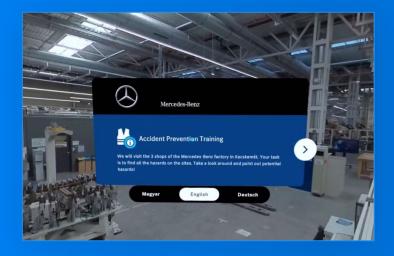


Touchless VR Safety training for Mercedes-Benz

LEOXR 360 FRAMEWORK

Mercedes-Benz wanted to enhance their safety training, so we undertook a task to use VR to teach the recognition of dangerous situations across three plant units. This was achieved through 360-degree videos recorded at each location.

- > Hazard warnings in videos with detailed explanations.
- > Gaze-click interaction for user simplicity, no controllers needed.
- > VR software allows hazard recognition training in cranes, robot cells, and traffic.
- > Supports multilingual interfaces in Hungarian, English, and German; easily expandable to include more languages and scenarios.







Virtual Prototyping for Medtronic

LEOXR AUGMENTED FRAMEWORK

Developed for Hololens 2 in collaboration with medical engineers and doctors, this AR application showcases and demonstrates surgical instruments and medical equipment.

- > Simulation and Testing: Simulate surgical robots, x-ray navigation systems, and physics; measure dimensions and reveal inner structures.
- > Virtual Inventory: Spawn and import interactive holograms of real-life objects.
- > Collaboration: Real-time online and LAN-based interaction; add virtual annotations and notes.
- > Session Management: Save and organize environments as sessions for later use.



AR HOLOLENS INTERACTIVE

SAAB SARTS Augmented Reality Training

LEOXR AUGMENTED FRAMEWORK

Saab requested an augmented weapon system guide, so we provided the solution by offering users of various weapon systems comprehensive product information, maintenance guides, and support tools, enabling realistic usage and maintenance training.

Within the SARTS PC editor, training materials can be created, allowing trainees to practice procedures on a hologram of the product using Hololens 2 XR glasses.

These holograms integrate with the physical environment, displaying procedural steps on the hologram or the actual device, enhanced with virtual annotations.

This innovative approach ensures immersive and effective training, preparing users for real-world scenarios.











SAAB 340 VR Training Public Demo

LEOXR VIRTUAL FRAMEWORK

Saab needed to provide better training for their maintenance team, so we developed a demo application of an XR-based maintenance training approach for civil airliners.

This enhanced ground handling, specific maintenance procedures, and knowledge verification. The project features a pre-take-off check and component replacement within a dynamic, gamified training system, setting the stage for future all-encompassing maintenance training on the same platform.

The pre-take-off inspection utilized video game elements, where students inspected nearly 100 parts, with some randomly shown as defective. Another module enabled practicing the removal and installation of a main component directly from the classroom.







STANDALONE

CROSS-PLATFROM



SAAB GRIPEN VR Maintenance Training

LEOXR VIRTUAL FRAMEWORK

Saab wanted to make Gripen maintenance remote and scalable, so we developed the Gripen Virtual Reality Training Program. This program aims to provide cost-effective training for technicians maintaining fighter aircraft by allowing users to follow manuals and procedural steps in an environment that doesn't rely on expensive and hard-to-access technology.

As the first step in a long-term cooperation, we will implement five basic maintenance procedures (e.g., refueling, rearmament) on the VR platform for the Gripen C/D.

This realistic, interactive simulation will be used to practice the procedures, study the aircraft's main systems, and assess trainees' knowledge.



VR DEFTECH FRAMEWORK INTERACTIVE

FULL-IMMERSIVE





leopoly.com