XR Solutions for Medical Devices

Abstract

Extended reality (XR) is among the emerging technologies and encompasses augmented reality, virtual reality, and mixed reality. In the healthcare industry, XR is widely viewed as a powerful tool for the treatment of a variety of conditions, primarily in mental health and wellness.
Tech Mahindra's XR solutions for medical devices focuses on enabling professionals to improve healthcare experiences ranging from product installation and training to surgeries, support, and patient's hospital stay.
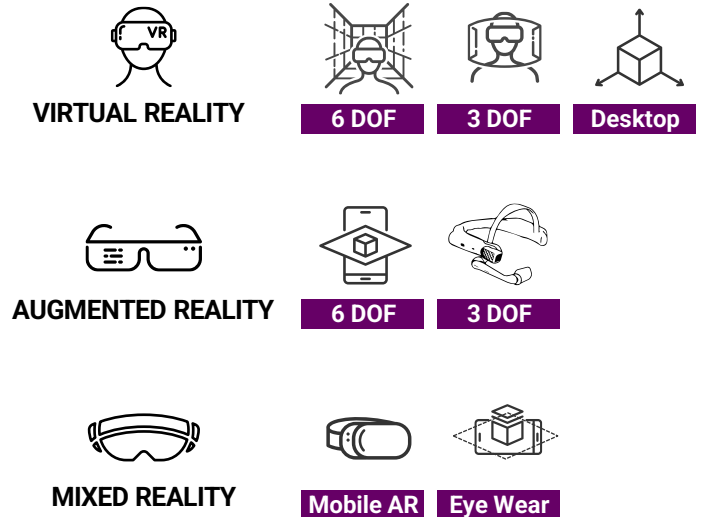
With the technology landscape evolving rapidly, new medical devices and procedures are getting complicated. This calls for life-long training and patient safety. Our XR solutions are immersive, interactive and enable unique ways of customer buying journey. The solutions enable our customers to use in controlled learning environment with individualized learning/mastery and team training, get repetitive practice, expect defined outcomes and benchmark, and get effective feedback.
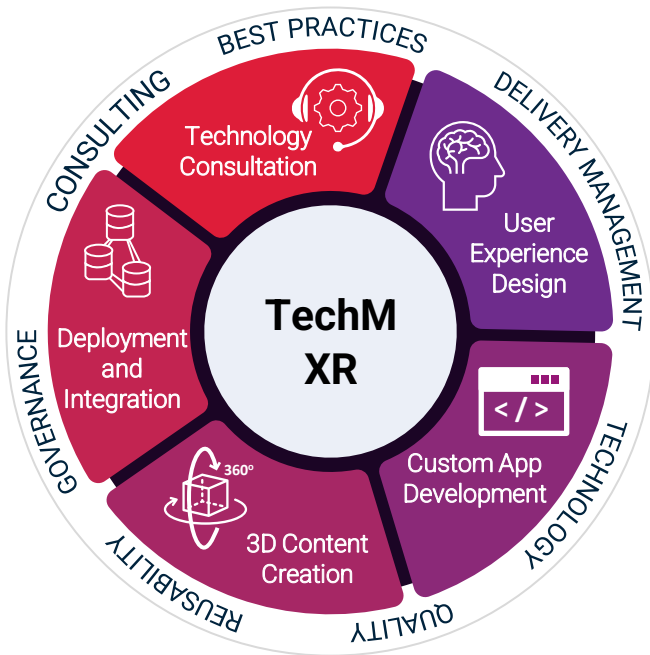
Our Solutions

- Physician/patient education
- Surgical procedure simulation
- Product configurator
- Product installation videos
- Immersive trainings
  - Installation, operations, maintenance, and safety trainings
- Digital work instructions
  - AR workflows, remote mentoring, and hands-free smart glass solutions
- Wearable computing
  - HoloLens, HMT-1, Google glass, and handheld devices
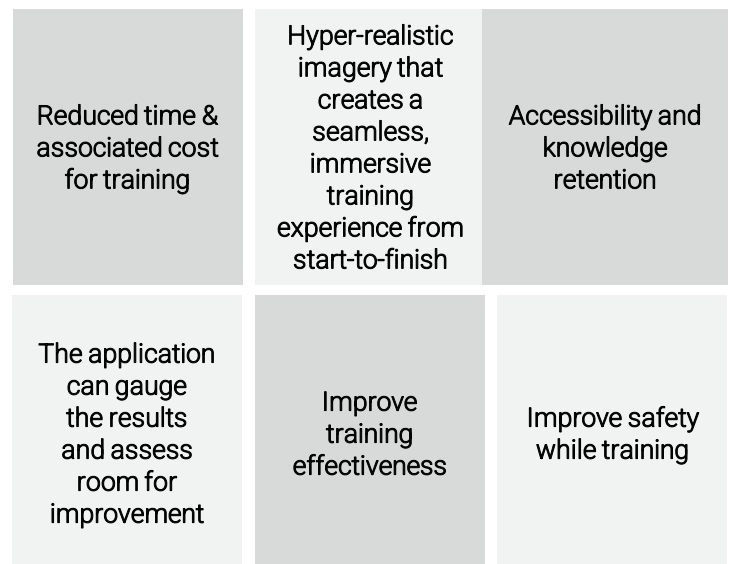
TechM NXT.NOW™ Advantage

Tech Mahindra's Technology Expertise Across XR

VIRTUAL REALITY
| 6 DOF | 3 DOF | Desktop |

AUGMENTED REALITY
| 6 DOF | 3 DOF |

MIXED REALITY
| Mobile AR | Eye Wear |

Tech Mahindra's E2E Capability

BEST PRACTICES

CONSULTING — DELIVERY MANAGEMENT

GOVERNANCE — TECHNOLOGY

REUSABILITY — QUALITY

TechM XR

- Technology Consultation
- User Experience Design
- Custom App Development
- 3D Content Creation
- Deployment and Integration

Value Propositions

Reduced time & associated cost for training	Hyper-realistic imagery that creates a seamless, immersive training experience from start-to-finish	Accessibility and knowledge retention
The application can gauge the results and assess room for improvement	Improve training effectiveness	Improve safety while training

Tech Mahindra as Your Partner of Choice for XR

SOP Training in Mixed Reality

- Interactive training that enables step-by-step holographic illustrations and audio overlay
- Assessment module for error alerts, score board, sequence monitoring, and skill level assessment
- Remote training to enable collaborative training with multi network participants

Reduced Training Cost Using Virtual Trainings

- Service technician training in virtual reality using life size 3D models of the equipment and its surrounding data
- Learning in context along with procedural tools
- VR analytics to capture trainee behavior performance
- Virtual assistant to guide learner through the VR training

Tech Mahindra