Design Interactive
Virtual Maintenance Assistant

PROBLEM STATEMENT

- Technical procedures and training content are often **static, difficult to update, and disconnected from the point of work**, limiting their effectiveness for learning and operational execution.
- Traditional XR solutions can improve training and performance but are often **costly and time-consuming to develop**, requiring specialized developers to create or modify each experience.
- Organizations need a **scalable, reusable approach** for transforming existing technical content and expert knowledge into interactive XR experiences that can support users throughout the lifecycle of a procedure—from learning and practice to execution.

BENEFITS

- Reduces XR development time and cost by shifting content creation from specialized developers to subject matter experts and content authors.
- Supports training and operations using the same underlying procedural content.
- Proven effectiveness and ROI in government and commercial use cases.
  - Government fielding of XR training instances resulted in 92% improvement in pre- vs. post-knowledge testing and 74% increase in critical hands skills, while preventing skill decay.
  - Commercial maintenance use cases using XR training and performance support resulted in 90% increase in jobs performed by advanced technicians, 60% improvement in task efficiency, 50% reduction in rework and 20% savings in operation costs, including parts and labor.

TECHNOLOGY SOLUTION

End-to-End XR Pipeline
Create, deliver, and use XR content across training and operations for any use case

AI-Driven Technical Data Ingestion
Automatically ingest & detect updates to technical documents, accelerating XR content authoring

Platform Agnostic
Author once and deploy to any XR enabled device (smartphone, tablet, headset)

Remote Collaboration
Expert guidance for distributed teams and mission coordination

GRAPHIC