Integrating Immersive and Augmented Training into the Metaverse

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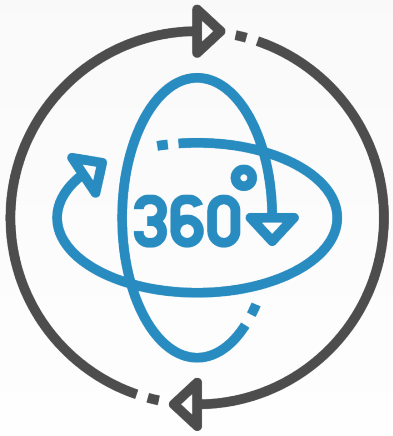
C²'s mission is to be the best performance improvement company

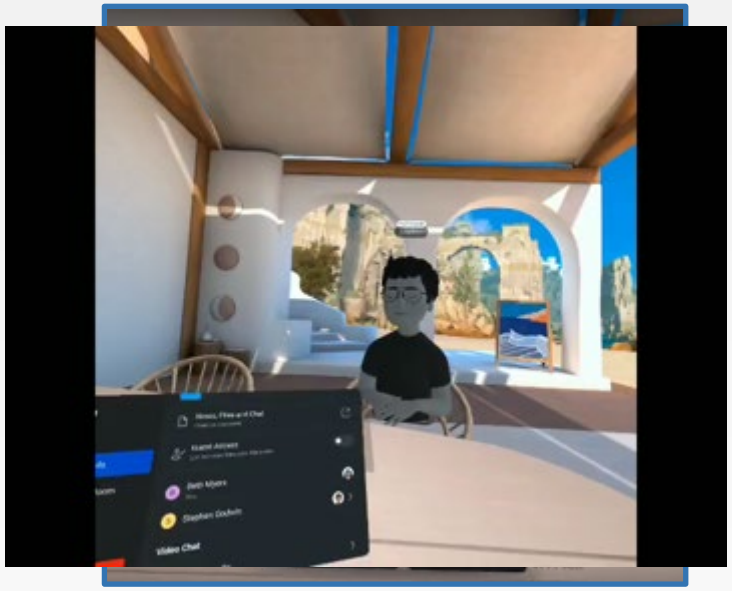
What are the goals for the Metaverse?

1) Establish a shared, common definition of the Metaverse
2) Examine key features of the Metaverse relevant to training & simulation
3) Establish a descriptive taxonomic framework
4) Discuss key related factors and challenges



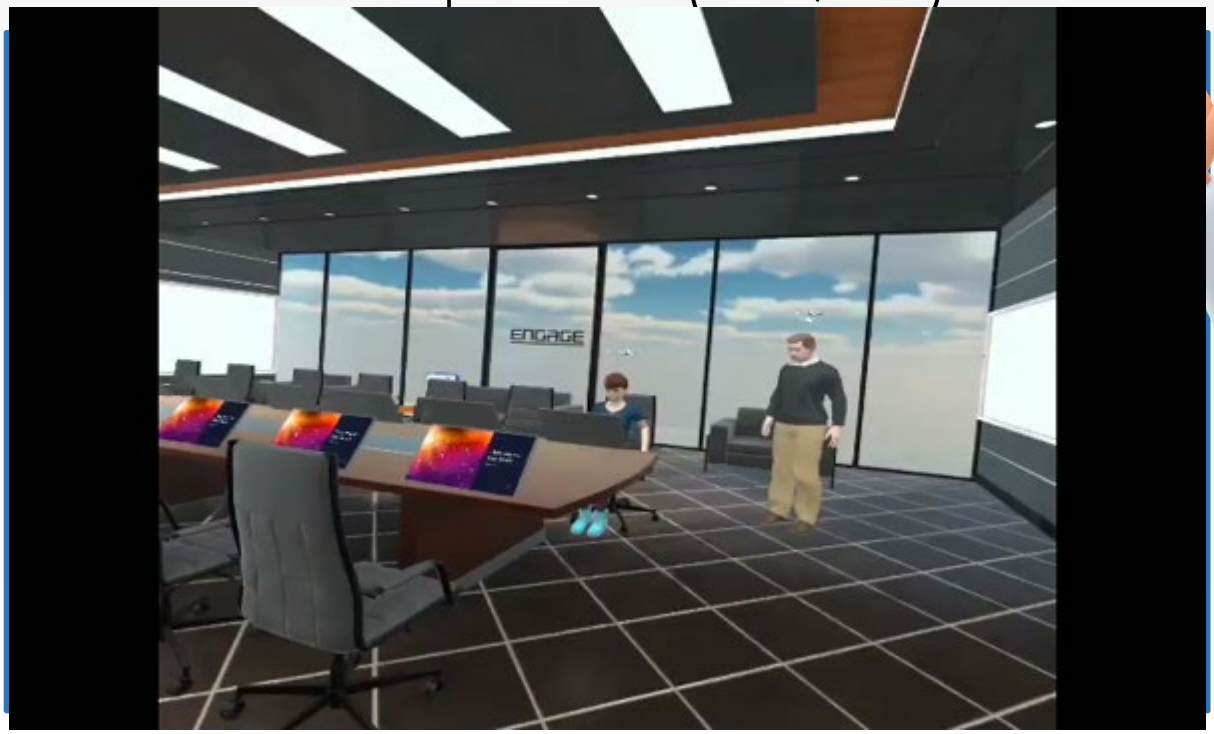
What is the Metaverse?

- Not simply a ‘re-branded’ Virtual Reality (VR)
- An interconnected set of digital ‘worlds’
  - Most existing digital worlds are closed and centralized
- Allows for rich, effective, portable content across digital worlds
  - ‘Build it once, deploy it anywhere’



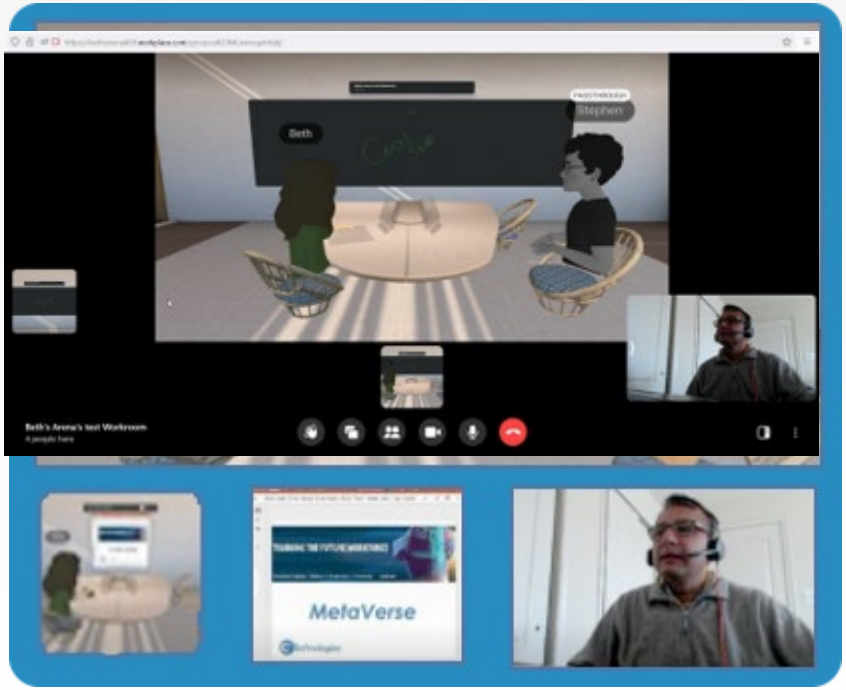
What is the Metaverse?

- Interoperability infrastructure traditionally costly to develop
  - Offers little business incentive to drive profit
- Vision and promise is to be more seamless
- Virtualized content across numerous shared virtual worlds
- Enables whole new implementations of training and simulation capabilities (AAR, JPE)



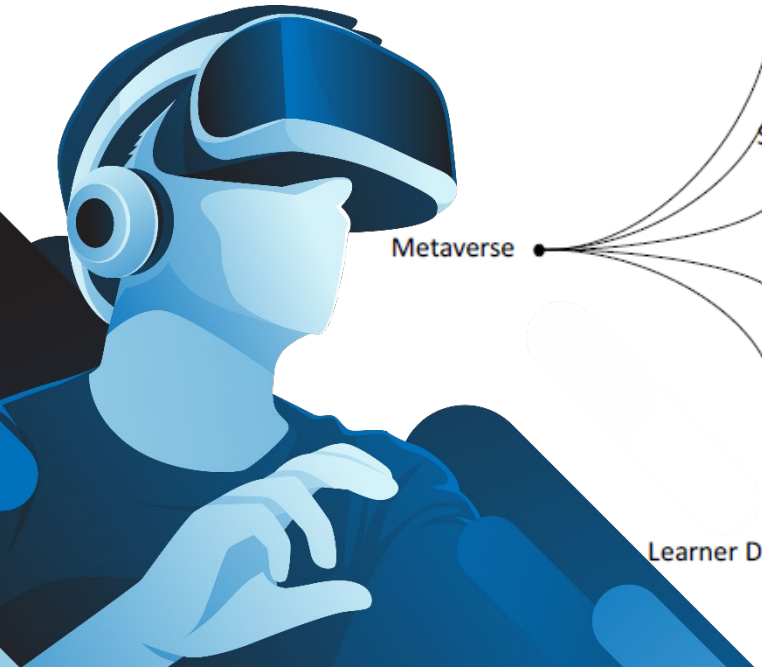
Key Features Relevant to Training & Simulation

- Metaverse focuses on content, social interactions, shared user-curated content
- Applications don't necessarily need to utilize AR/VR
- Infinitely scalable digital persistent worlds



Key Features Relevant to Training & Simulation

Training Technology Integration in the Metaverse



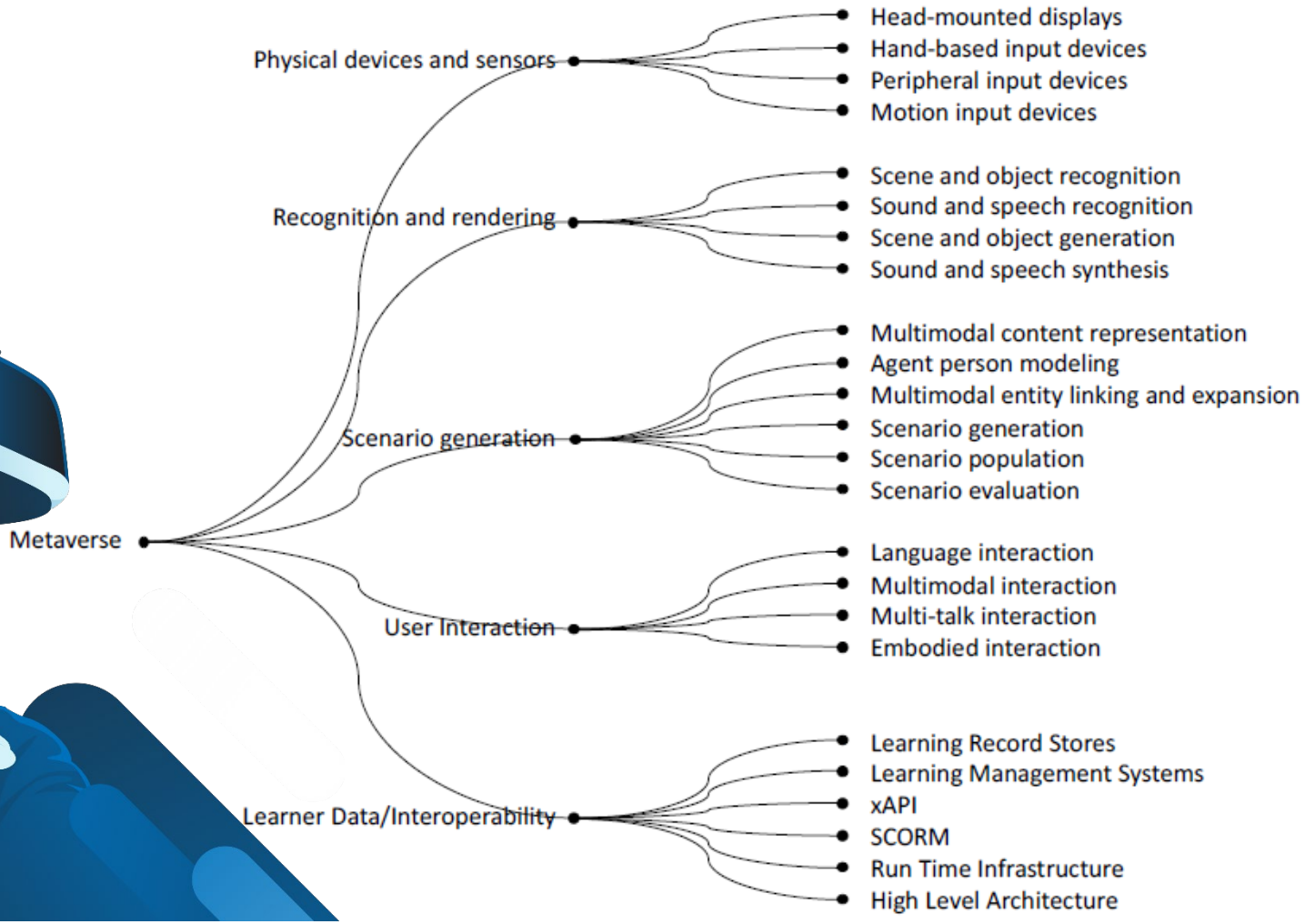


Figure 1. Metaverse Learning Technology Integration Taxonomy – Adapted from Park & Kim (2022)

Challenges for Metaverse Adoption in the Training Community

- Virtual embodiment
- High cost of equipment
- Health & safety concerns
- Data privacy & security

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Smart Supply Chain Management

Digital Twins in the Metaverse

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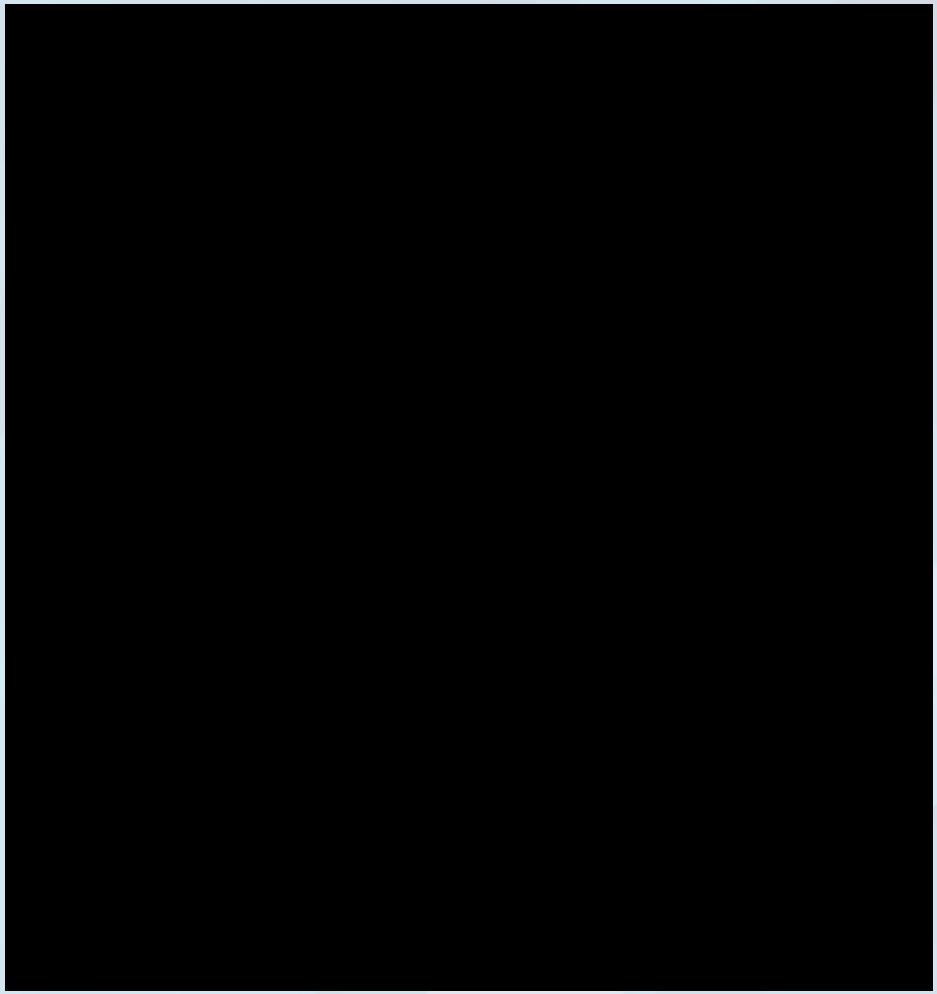

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