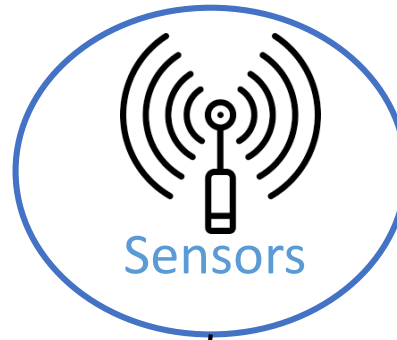# Physical World (LVL-01)

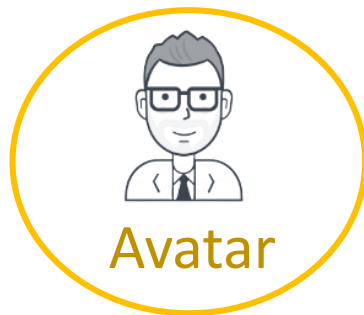Patients / Therapist

Sensors

Virtual Manager

Connection between the physical and virtual worlds

Data Transfer from physical to virtual world

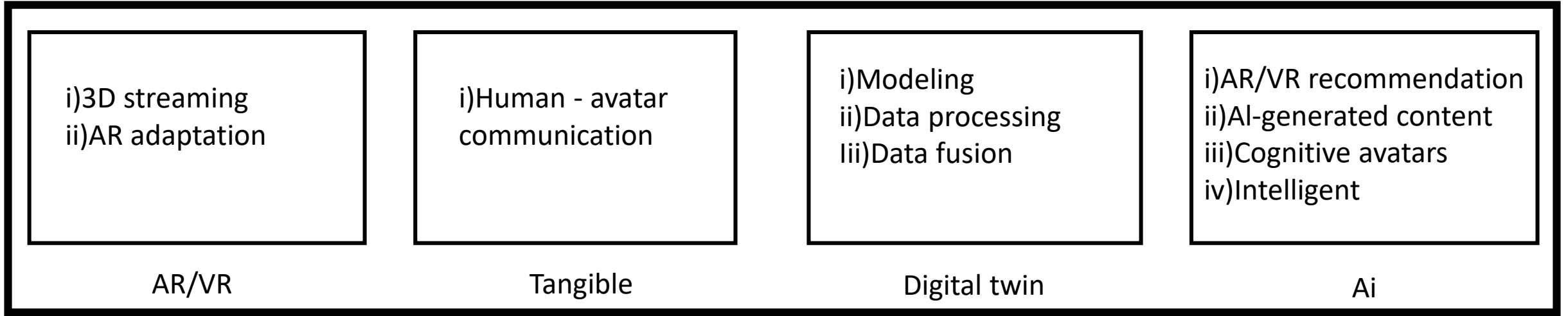# Virtual World (LVL-02)

Development

Avatar

Virtual Environment

Virtual Goods

For Virtual World Navigation
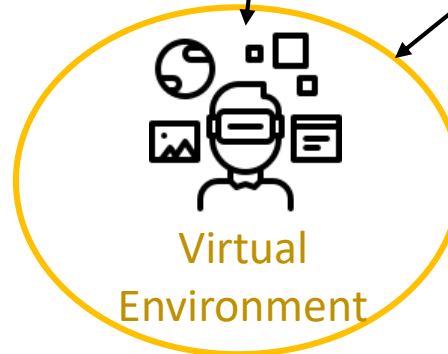
Virtual T.C.

Rehabilitation

Metaverse Engine(LvL-03)

i)3D streaming ii)AR adaptation	i)Human - avatar communication	i)Modeling ii)Data processing Iii)Data fusion	i)AR/VR recommendation ii)AI-generated content iii)Cognitive avatars iv)Intelligent
AR/VR	Tangible	Digital twin	Ai

Infrastructure(LvL-04)

i) Resource Allocation for VR Streaming ii) Resource Allocation for AR Adaptation iii) Real-time Physical-Virtual Synchronization	i) Cloud-Edge Ai model training ii) Cloud-Edge block chain mining	i)Device to device caching ii)Optimal cache replacement iii)AI model caching
Communication	Computation	Storage