



AI's impact on Metaverse

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IEC/ISO Joint SEG-15 about Metaverse

Convenors: Ming Li – Maxime Rosello

Kick-off: April 2023 (2 years initiative)

Objectives:

- Define a **common understanding** of Metaverse, identify **boundaries, elements** and corresponding standardization organizations.
- Investigate **current research and technology activities**.
- Evaluate technical **capabilities and applications** in this field.
- Investigate **needs** for Metaverse technologies standardization and suggest a **roadmap for standardization**.
- Make recommendations to SMB as appropriate.

Introduction

Metaverse definition:

Persistent, interactive and collective 3D world

Intersection between physical and digital

Next generation of the Internet

Digital twin of our world



It's not “just a game”

TOY

ENTERTAINMENT

- « I want to enjoy »
- « The experience is the purpose »

Games

Arts

Travel

Music

TOOL

FUNCTIONAL

- « I want to get something done »
- « The experience serves the purpose »

Enterprise/Collaboration

Industrial

Retail

Education

Healthcare

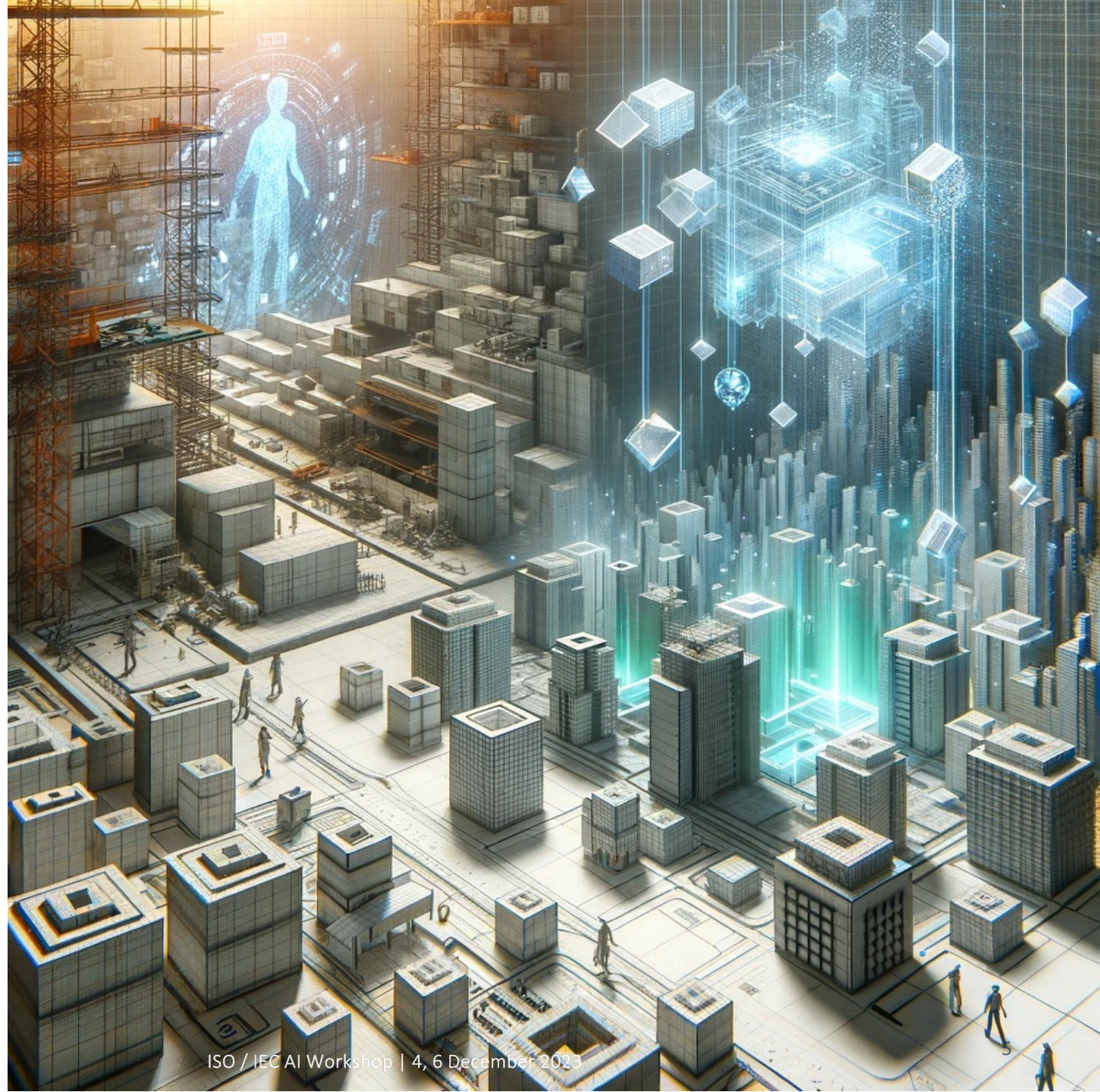
Tool for builders

The Metaverse requires assets and builders

3D CG involves many (complex) fields:

- Modelling
 - Texturing
 - Lighting
 - Rendering
 - Animating
 - ...
-

GenAI could be an enabler



Powering synthetic humans

Avatar + AI

Causal AI and Conversational AI coming together
Contextual, autonomous decision making

Various applications:

- Gaming (NPC)
- Retail
- Customer support
- Home
- Healthcare
- ...

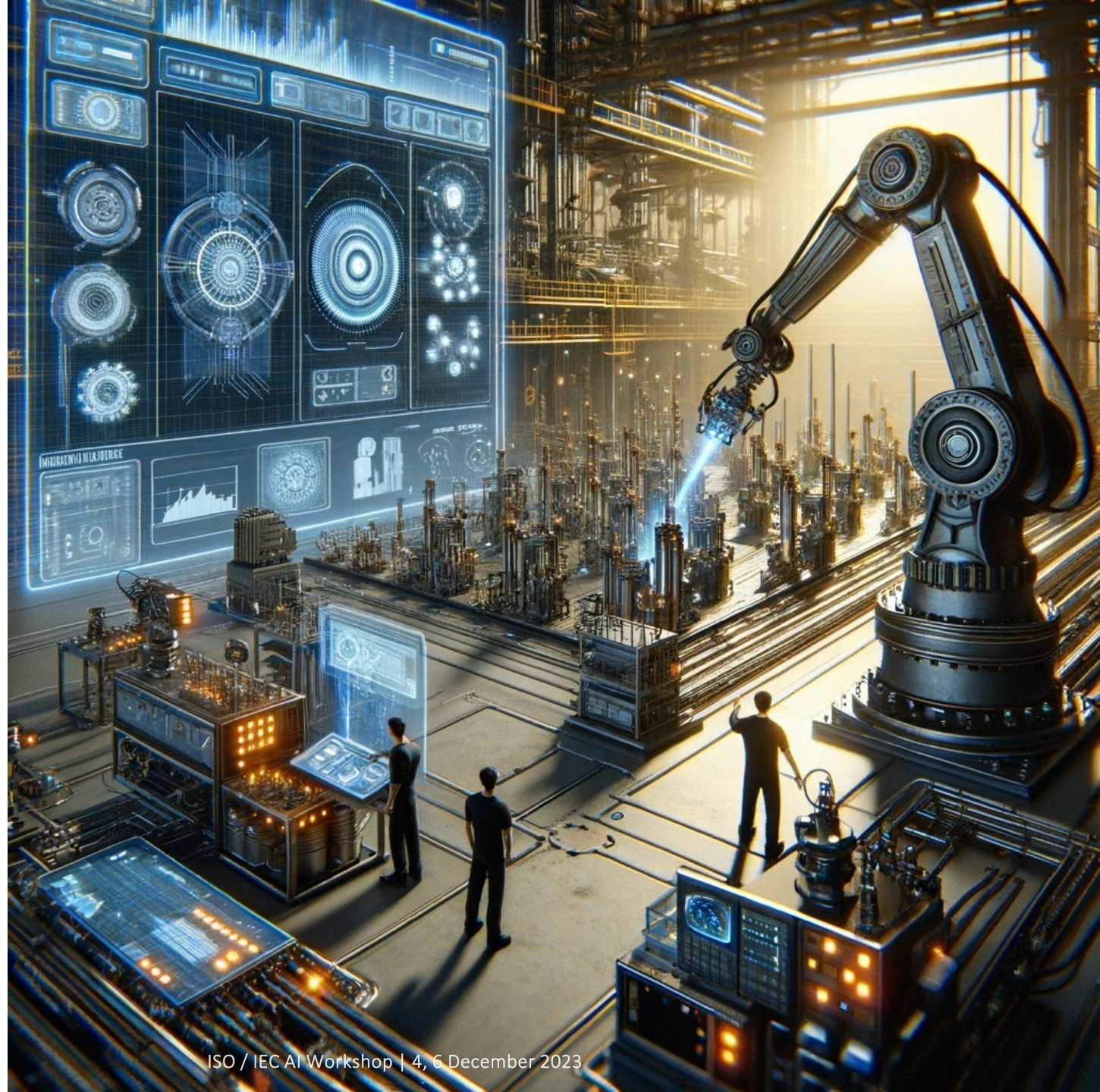


Industrial Metaverse

AI + Digital twins

Various applications:

- Training frontline workers
- Processes & workflow optimization
- Monitoring
- Data visualization
- Simulation
- Training robots
- Remote operations and support



Thank you

Maxime Rosello

