VTT

A Human-Driven Industrial Metaverse

The Metaverse

The metaverse is a collaborative, social and immersive environment that blends both the physical and virtual realms to the point that data exchange and interactions become fluid and affect each other.

Our ambition is to be a forerunner in developing metaverse solutions for the industrial context
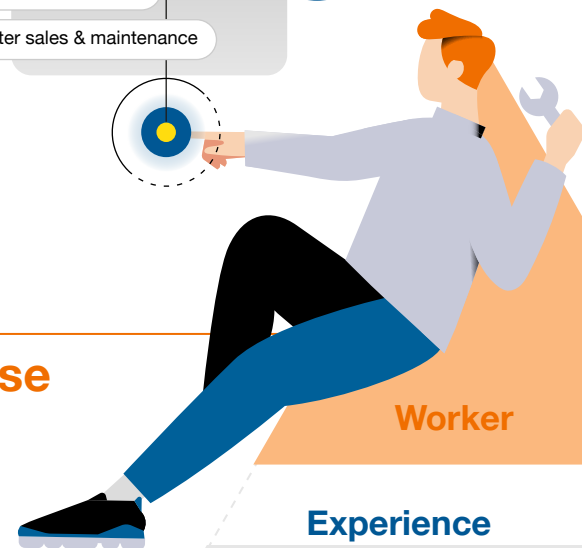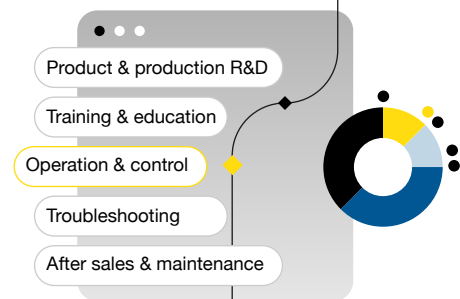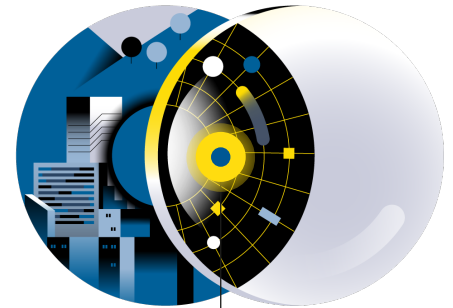

The Industrial Metaverse

The industrial metaverse seamlessly integrates the physical and virtual in work environments and work tools. It combines real-world elements with contextualised and meaningful data in order to keep workers informed and to ensure that processes are operating efficiently. In the industrial metaverse, employees can work in a purely virtual environment or combine both virtual and physical environments. Users may access the industrial metaverse by using XR technologies or more traditional user interfaces.

Our target is to improve productivity, flexibility, safety and multi-profession collaboration across organisations, especially focusing on future industrial hands-on tasks in different branches of industry.

Product & production R&D

Training & education

Operation & control

Troubleshooting

After sales & maintenance

The Human-Driven Industrial Metaverse

In the human-driven industrial metaverse, human–technology–AI teams work smoothly together in hybrid work environments. Employees feel empowered and engaged, and their well-being is ensured. This attracts young and skilled employees. Moreover, the design and development of new solutions and ways of working are based on a systemic view that considers all the physical and virtual actors in human–technology teams.

Our target is to co-design and develop highly economically scalable solutions that are applicable for all industrial segments. It is important to understand the needs of employees and create solutions that people can trust and want to use. The goal is to create an industrial metaverse in which people want to work and which provides business benefits for companies – both in terms of industrial productivity and well-being.

Worker

Experience
Create, collaborate, analyse, plan, design

Ecosystem
Regulations, standards, security, virtual economy

Technical foundation
Infrastructure, platforms, networks, hardware

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Developed in cooperation with:

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