Microsoft HoloLens

The power of mixed reality

Mixed reality is the blending of digital objects as 3D holograms in our physical world so you can experience content with the context, format, and people that make it most relevant to you. 3D information helps people learn faster and understand more deeply by letting them interact with information outside of traditional two-dimensional boundaries.

HoloLens in Manufacturing

Microsoft HoloLens is the first self-contained holographic computer, delivering **heads-up, hands-free** computing that enables you to interact with high-definition holograms in your world. This blended environment becomes your canvas, where you can create and enjoy a wide range of mixed reality experiences without disengaging from the task at hand.

Data visualization:
Uncover new insights and business opportunities by seeing large-scale industrial processes as you perform them, realizing small improvements on the fly to drive efficiency.

Spatial planning and mapping:
Experience a warehouse or manufacturing plant like you're physically there. Create and iterate workflows and product designs, and communicate with stakeholders in real time.

Remote collaboration and monitoring:
With the ability to see through the eyes of a remote user, collaborative teams can leverage expertise and work together from anywhere, anytime to minimize disruptions of your production line.

3D modeling and product design:
Construct 3D models and project full-scale trucks, engines, and machinery as holograms in the design process to study them and discover details that can reduce costs.

Simulation training:
Simulate a real-world experience such as maintenance or a training procedure, enabling technicians to learn best practices quickly and reduce machinery downtime.

Next steps

Short-term
A pilot can be developed in-house or with a partner which may include an envisioning or a value-mapping workshop.

Long-term goals
After executing pilots, build a 3-6-month program to deploy HoloLens at a larger scale and explore how HoloLens can be integrated across your organization.

HoloLens in practice

PACCAR

AIRBUS

"Each mistake really adds up because they're compounded on such a phenomenal scale; catching them saves a lot of money. So even if the initial investment in the technology can seem high, it's offset against those savings and definitely starts to look like a much more viable proposition."

Chris Waind, Finger Food Studios Creative Director, Paccar

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Overview

Microsoft partnered with Paccar and Finger Food Studios to create a full-scale truck hologram to envision the design process. This helped minimize production costs, reduce waste, and release the product to market faster.

Impact

Realize gaps of "low-hanging fruit"

Improve design process

Model projects faster

"Quality is very time consuming. With HoloLens, we'll be able to be faster."

Nicolas Damiani, Sr. Expert in Systems Simulation, Airbus helicopters

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Overview

Microsoft partnered with Airbus to create an application to author, execute, and edit "world-locked" instructions on and off the field to improve efficiency and shorten assembly, maintenance, and training time.

Impact

Enable faster transfer of knowledge between experts and engineers

Enhance collaboration, workflow, and improve engineering efficiency

Decrease risks and training costs