



Technology Company

# Enabling teams to work together from **anywhere**

Lenovo

When COVID-19 travel restrictions threatened to derail a major infrastructure project, Lenovo harnessed ThinkReality augmented reality technology to connect engineers on opposite sides of the world. By sharing the video feed from handsfree headsets used on the factory floor, engineers in Mexico could receive real-time guidance in context from experts in China. This enabled them to collaborate remotely to transfer an assembly line across the world during a global pandemic.

Lenovo

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## Who is Lenovo?

Lenovo is a truly global company, with centers for operations, research, manufacturing, and sales located all around the world.

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## The challenge

With sales of Lenovo smartphones and tablets growing steadily in North America, the company made the strategic decision to transfer some production facilities to the region. Lenovo chose to move an assembly line from its Motorola plant in Wuhan, China to its primary North American manufacturing hub in Monterrey, Mexico.

Typically, dismantling an assembly line for reuse in another location requires a team of engineers to take the line apart, travel with the equipment to the new facility, and stay at the new site for several weeks to facilitate and supervise the reassembly and startup of the line. However, when the coronavirus pandemic swept around the world in early 2020, these plans suddenly had to change.

# Bringing people together without travel

Lenovo recognized that augmented reality (AR) technology had the potential to connect engineers in China and Mexico in a shared virtual environment, enabling them to work together in real time to rebuild and restart the assembly line.

The project team deployed an innovative remote assistance solution integrated into the ThinkReality AR/VR Platform from holo|one.

With hands-free video calling using Lenovo ThinkReality A6 headsets, which feature integrated cameras, microphones, and speakers, engineers in Mexico could receive guidance in context from the team in China.

## Hardware

Lenovo ThinkReality A6

## Software

Lenovo ThinkReality Platform  
holo|one sphere for remote assistance

Remote assistance from holo|one, a Lenovo ThinkReality Certified Solution, enables headset users to establish contact with colleagues working on smartphones, tablets, laptops, or desktop PCs. Using the outward-facing 13MP camera on the ThinkReality A6, engineers in Mexico were able to show the remote team in China exactly what they saw on the manufacturing floor.

By sharing the video feed from handsfree headsets used on the factory floor, the visibility of the task at hand is better, more actionable, and in real time. Using the Lenovo ThinkReality solution, teams were able to share specific information that could otherwise have been lost when described over the phone or shown in a still photograph shared over email.

It took just five days for the project team to implement and start using the Lenovo ThinkReality solution. The ThinkReality support team held a virtual training session for engineers in both Mexico and China. Within one work week, all team members were conducting their conference calls using the holo|one remote assistance solution.

## **SOC**

Qualcomm Snapdragon 845 Processor

## **Vision Processing Unit**

Intel Movidius

## **Core Box OS**

Android Oreo

## **Optics Type**

Binocular

## **Optics Tech**

Lumus Waveguide



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## Results

By bringing engineers in China and Mexico together virtually with Lenovo ThinkReality, the joint team completed the project on schedule despite COVID-19 disruption.

The line reassembly was a real team effort, not just between the Mexico and China teams but globally. When speaking to colleagues in China, engineers on the manufacturing floor were also able to loop in experts based in Brazil on a couple of occasions.

The COVID-19 pandemic has changed how many businesses operate. Even as travel restrictions ease, the ability to access guidance remotely and collaborate with colleagues around the world virtually is game-changing.

Remote assistance gives engineers an efficient way to share knowledge without having to travel to site, making it quicker and easier to troubleshoot issues. By cutting down on travel, it also has the potential to reduce both costs and carbon emissions. While there will always be circumstances when engineers need to travel between sites, being able to collaborate remotely using AR is a powerful instrument in their toolkit.



13MP RGB camera



1080p resolution  
per eye



380g: lightweight,  
comfortable

# How can engineers share knowledge without having to travel to site?

Adapting to unexpected challenges and solving problems in real time with Lenovo technology.

[Explore Lenovo ThinkReality](#)