

## **IoT & Azure Digital Twins: Free POC**

Are you considering using IoT to enhance your environment/equipment reporting and analysis? Kagool provide consultancy services and can provide a free POC to demonstrate how IoT Telemetry Integration and Digital Twins can help your organisation to get the best from its resources through the power of technology and the exciting and evolving world of IoT.

## **What is a Digital Twin?**

Azure Digital Twins bring your data from IoT and other data sources to life, creating an always-up-to-date digital version of your environment that is scalable and secure. Using the HoloLens and sensor telemetries from Azure IoT Hub, Kagool can create a virtual double of your equipment, building, facilities – the possibilities are endless.

The HoloLens provides an interactive hologram displaying near real-time IoT telemetries. Using the IoT Sensors (Vibration Sensors, Temperature Sensors, Camera, etc..) allocated as specific points on the equipment, the Sensor Telemetry is pushed into Azure using Reference Architecture, and then AI is used to determine statistics and report on the allocated areas. The Telemetry data can then be used to report back into a holographic Digital Twin.

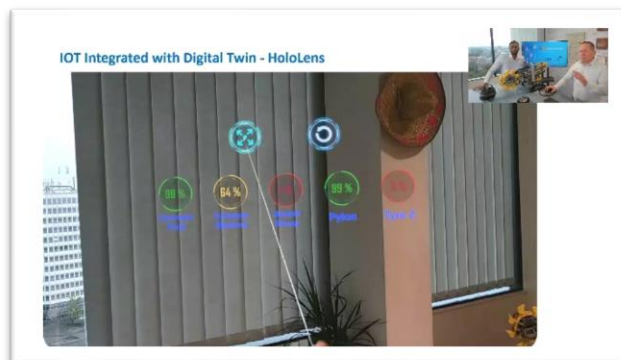
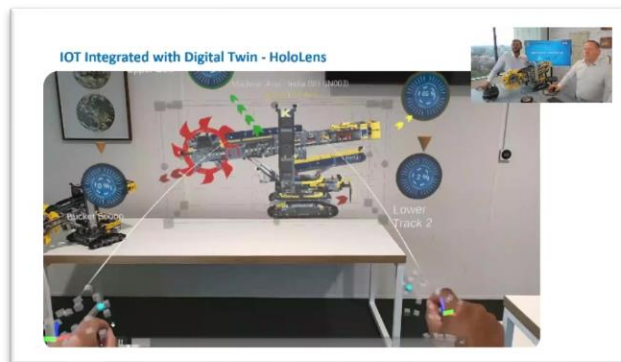
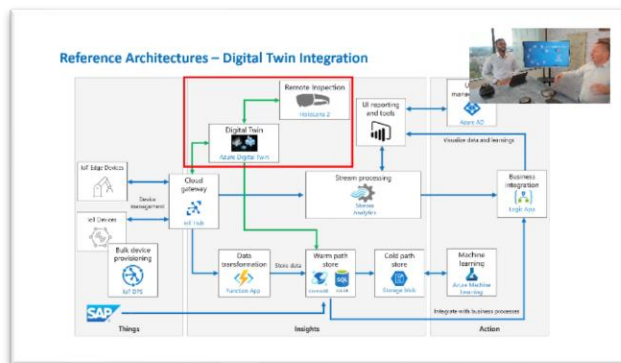
The 3D hologram 'Digital Twin' is visible on the HoloLens device, and it shows the equipment which has been fitted with the sensors in digital form, providing a 3D spatially aware contextual view of the data.

## **Benefits of Digital Twin**

- Equipment can be virtually disassembled to get to root cause of issues, preventing the need to take the physical equipment apart to establish an error.
- Use the Digital Twin to find errors and report back to the maintenance team to rectify the physical equipment, speeding up the maintenance process as the exact location and error is recorded.
- Analytics report back problem areas via alerts to email/phone.
- Time series analysis of failures via Power BI or Azure Time Series Insights.
- Health bars demonstrated for the physical equipment to highlight errors through the HoloLens.
- 360° view of the equipment – especially beneficially for larger equipment.
- Explode the sub-assemblies to explore specific parts in more detail.
- For large environments recreated with a Digital Twin there are no limitations with accessing different areas that physically would have been inaccessible.
- See, move and predict how people move through and interact with the spaces around them.
- Allows user to better understand needs and improve experiences.
- Uncover insights and see problems before experiencing them.

Contact Kagool for a free POC to see how this advanced technology can benefit your enterprise.

## Screenshots for listing:



## Keywords (limited to 3):

1. Mixed Reality
2. Digital Twin
3. IOT

## Video URL

<https://www.youtube.com/watch?v=0nX9sd6GnQ8&t=11m34s>

## Video Thumbnail

