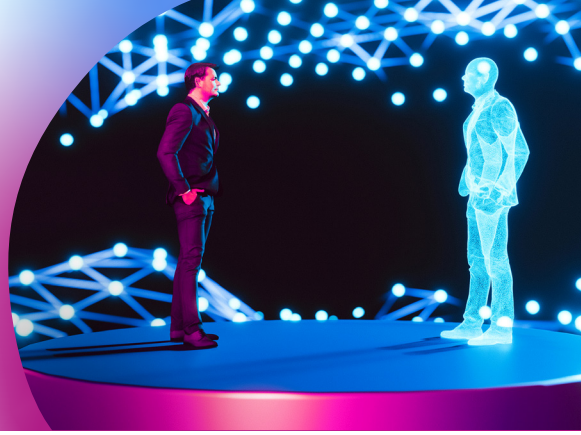
Digital Twin as a Service

Transform your physical assets into digital opportunities.



Business challenge

Businesses often struggle to effectively showcase critical physical assets like facilities, equipment, and new products. An immersive approach can boost operational efficiency, reduce errors, and unlock deeper insights by allowing teams to visualize and interact with complex information in a real-world context. But, geographical barriers inflate costs and hinder remote team training – while the adoption of vital emerging technologies, like advanced scanning and spatial computing, remains a daunting operational hurdle.

How we help

Digital Twin as a Service (DTaaS) empowers your business to overcome these hurdles. Insight will help you create and leverage lifelike, interactive virtual representations of your physical assets. Benefit from a process that uses cutting-edge advanced scanning – including 360-degree photography for intuitive navigation, and detailed 3D model reconstruction for truly immersive experiences. Coupled with thorough technology assessments to optimize performance and content management, DTaaS gives you a seamless pathway to mastering digital twin and spatial computing.

What to expect

DTaaS is an entry-level spatial computing/immersive service led by our experts that helps you understand how this technology can benefit your organization. Completed over approximately eight weeks, this service includes:

Discovery of your needs to define a user journey and identify the locations to be included in the scan

Using the Matterport® Pro3 3D Camera, on-site scanning, and 360-degree photos of one specified location for a maximum of 8-hours

Creation of a dollhouse view reconstruction and interactive app

A recommended roadmap and recommendations for spatial computing and immersive technology in your organization.

Deliverables

This engagement is delivered in four phases with deliverables that include:

- Definition of user journey
- Delivery of digital assets
- A final report and roadmap recommendations for spatial computing in your organization

The digital assets you will receive include:

Digital twin: A comprehensive digital twin of a specific location hosted in the Matterport cloud for easy access and visualization

Interactive features: Embedded tags, videos, and pictures – providing rich, interactive content within the environment

360-degree photos and auto-tour: 360-degree photos that correlate with specific locations in your scanned environment, complemented by an auto-tour feature

Sharing links/embed code: An external sharing link to your assets will be provided for easy access along with embed code to use on a website

Additional files/assets: Access to assets for download and import into third-party programs via MatterPak™

Experience advanced spatial computing.

Built on trusted technology platforms

To ensure utmost reliability in our Digital Twin as a Service (DTaaS) solutions, Insight leverages a strong partnership with Matterport, the leading spatial data company – renowned for creating accurate and immersive 3D digital twins. Matterport's cutting-edge Light Detection and Ranging (LiDAR) scanning technology and real-time 3D graphics allow for detailed virtual exploration and interaction with these environments. For this specific service offering, Insight will be leveraging the advanced Matterport Pro3 camera to capture precise data. The result is comprehensive, dependable, and meticulously tailored DTaaS solutions to meet diverse client needs across industries.

Disclaimer

This base DTaaS offering is an entry-level solution for clients starting with digital twins and spatial computing. It operates within defined limits, including up to one day for on-site scanning and a restricted number of post-publishing edits to features like Mattertags or dollhouse images. This provides a core digital twin, paving the way for future enhancements, add-on services, and deeper integrations as your needs develop.

Related services

- Data Integration
- Virtual Reality (VR), Augmented Reality (AR), and Mixed Reality (MR)
- Device Procurement Services
- Device Lifecycle Management
- Warehousing and Stock Management
- Provisioning and Deployment
- Additional Development Services
- Full Device Fleet Management
- Custom Application Development
- Integration with Client Systems

Methodology

Kickoff, discovery, & design

Guidelines
Access and define brand guidelines for the design of the digital twin content.

User journey
Define the user journey that is required from application launch to exit.

Location
Define what location will be scanned and plan scan mapping.

Mapping
Define how many navigational hotspots and interaction points are required in the locations, and map them.

Capture & construction

On-site scanning
Utilize LiDAR applications and devices to capture 3D scans of the locations.

360° photos capture
Capture all required 360° photos for navigational points, ensuring comprehensive documentation.

Quality check and refinement
Conduct quality checks and refine all 3D captures from the on-site sessions for accuracy.

Exporting formats
Host and export all 3D scans/360° photos to the desired formats and platforms for further use.

Development

Dollhouse view reconstruction
Utilize Matterport Pro3 scans to create a detailed dollhouse view for improved visualization.

Mattertags
Employ Mattertags to emphasize and interact with key areas of interest within the dollhouse view.

Digital twin interaction
Integrate advanced digital twin tools to enhance user interaction and engagement with the model.

Deployment & sustainment

Matterport scan delivery
Deliver the Matterport scan via the Insight Matterport Web Portal, accessible on web and VR devices for enhanced user experience.

Digital twin code delivery
Provide the digital twin embedded code, allowing clients to publish it on their own websites easily.

Testing across devices
Conduct tests on the client's instance across various platforms – such as PC, mobile, web, and immersive devices – to ensure compatibility.

Sustainment enhancements
Allow up to 10 changes within the digital twin content post-delivery, serving as sustainment enhancements for continuous improvement.