



GE ™  
SMART  
INDIA 2022

**FARO**®

# Disruptive Technology Enabling Smart Cities

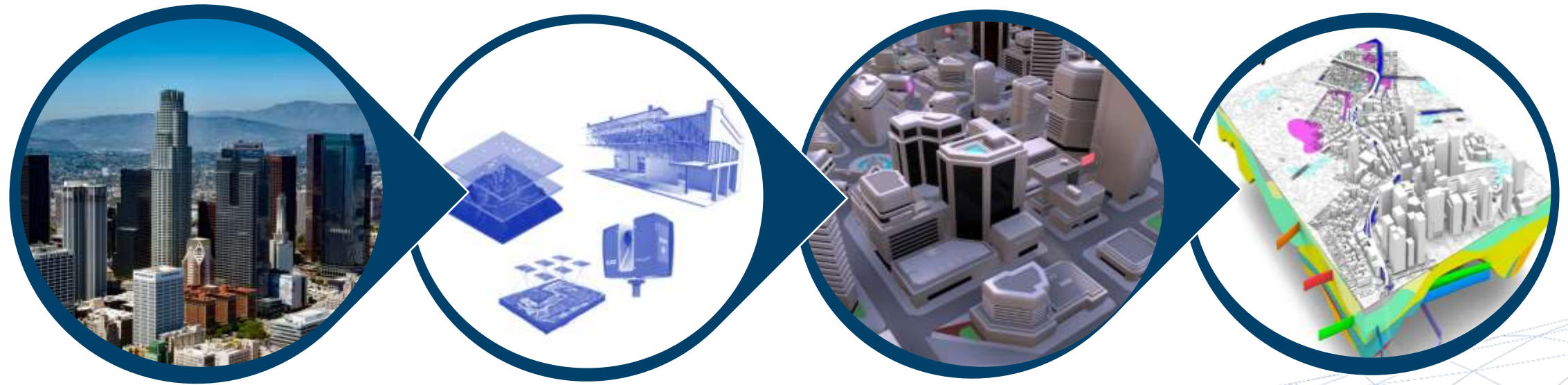
City Information Modelling – 3D Laser Scanning

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# What is City Information Modelling (CIM) ?

# HOW CITY INFORMATION MODELLING WORKS ?



Real Town or City

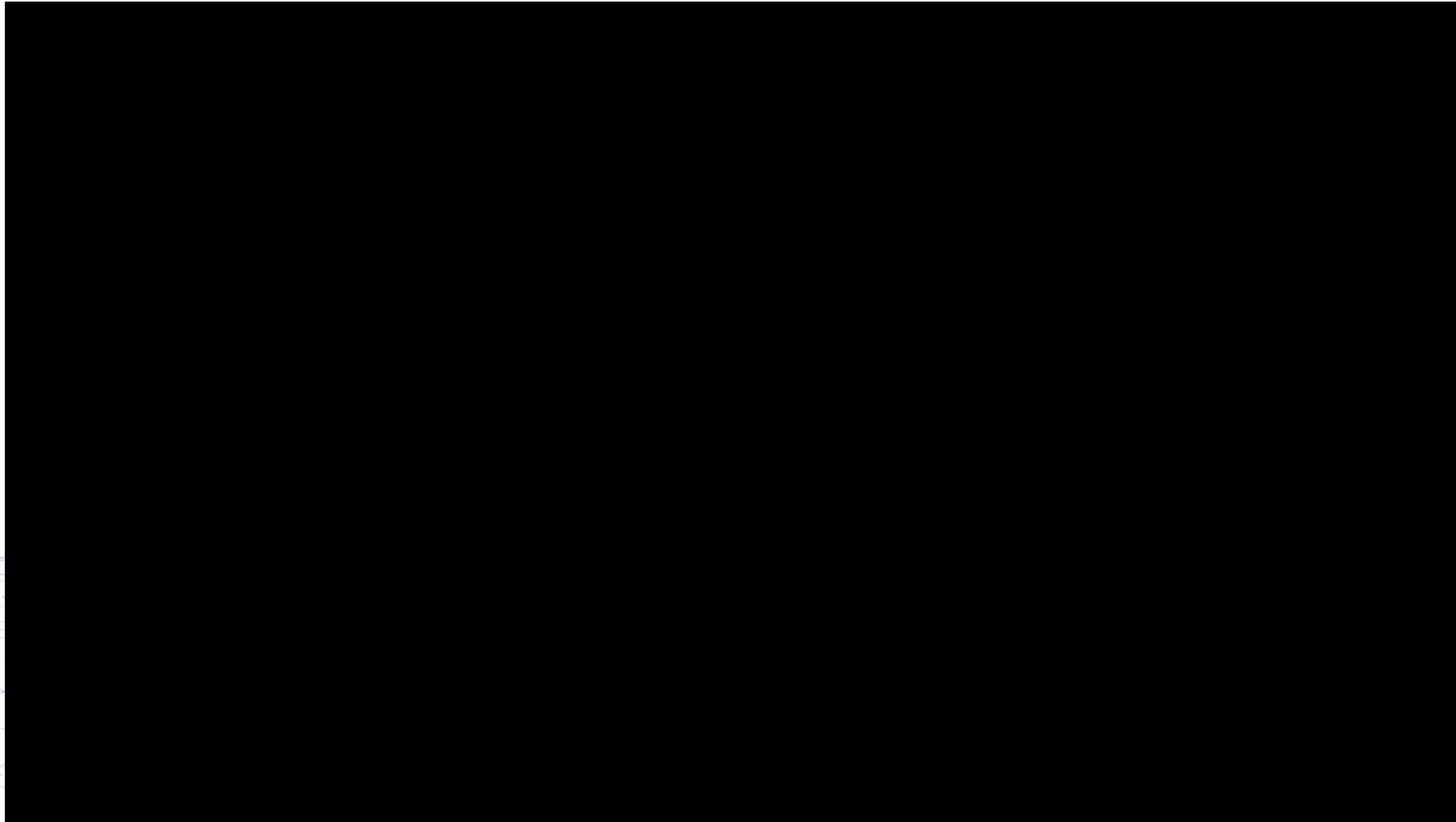
GIS, BIM, Laser Scanning, Photogrammetry

3D Model or Digital Twin

City Information Model



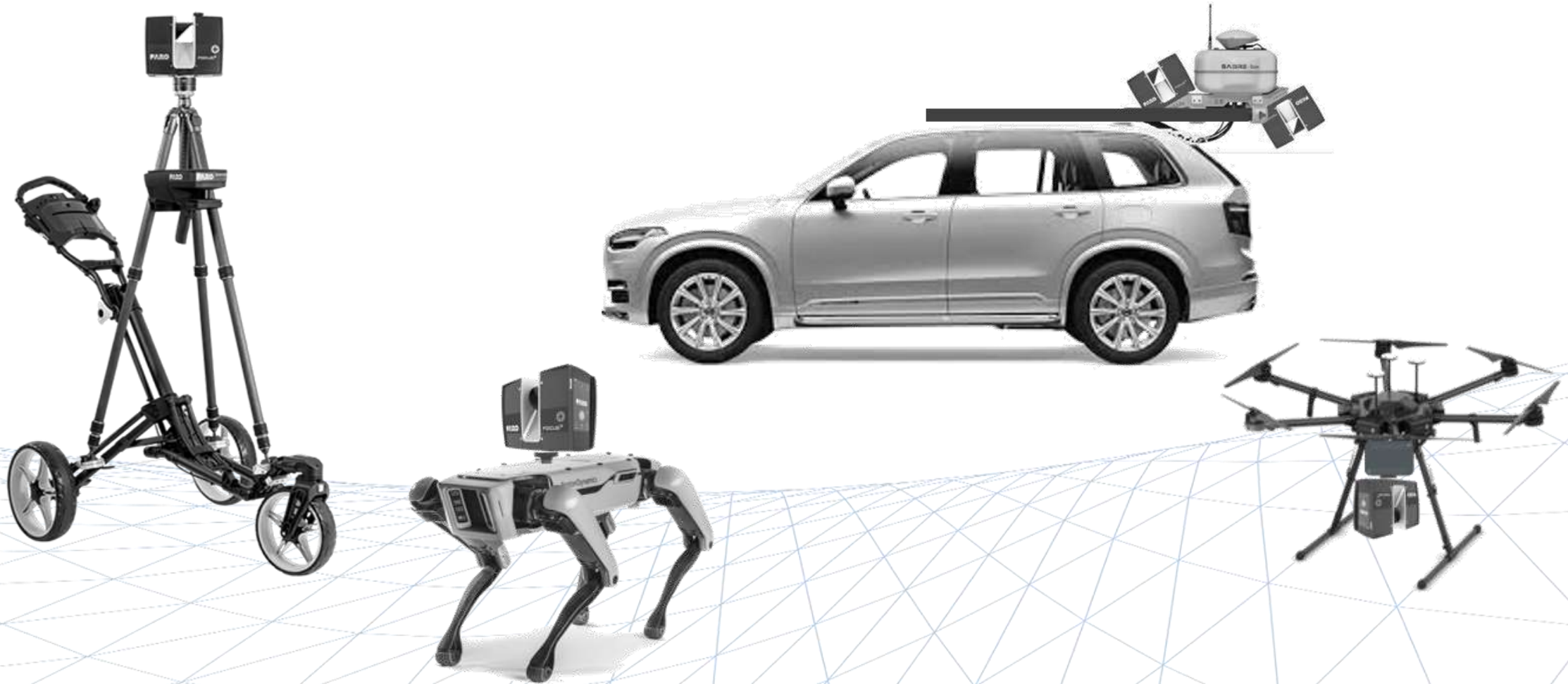
# WHAT DOES THE FUTURE OF CITY INFORMATION MODELING (CIM) LOOK LIKE?

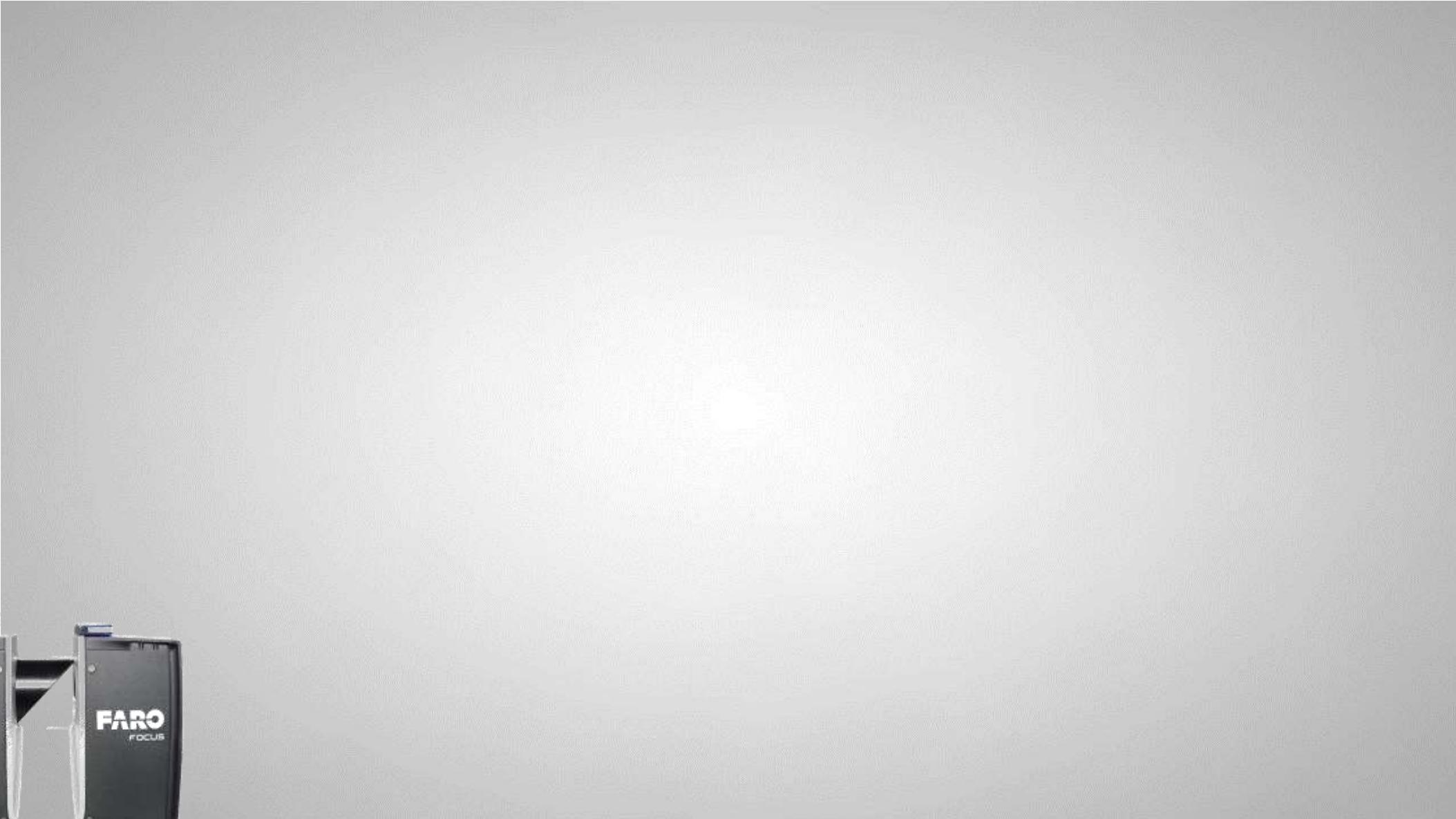


# How can FARO help in CIM application?



# Supported Platforms for FARO Laser Scanner





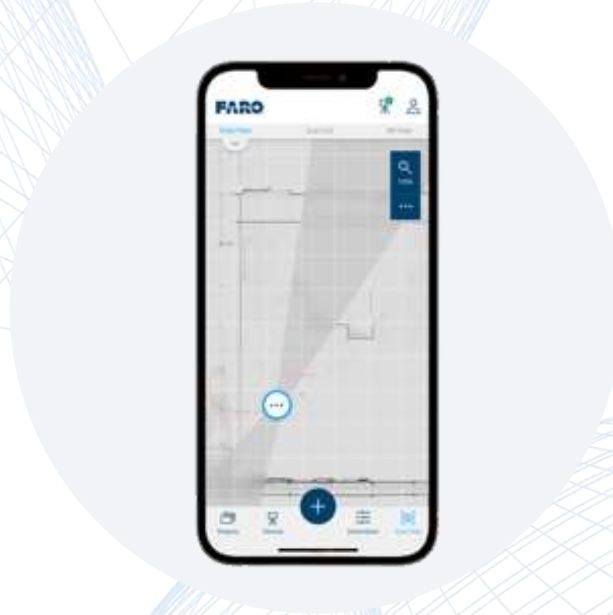


# New Workflow



## Capture (Focus Premium)

Get the same data quality at faster scan speeds to reduce on-site scanning time by over 40%.



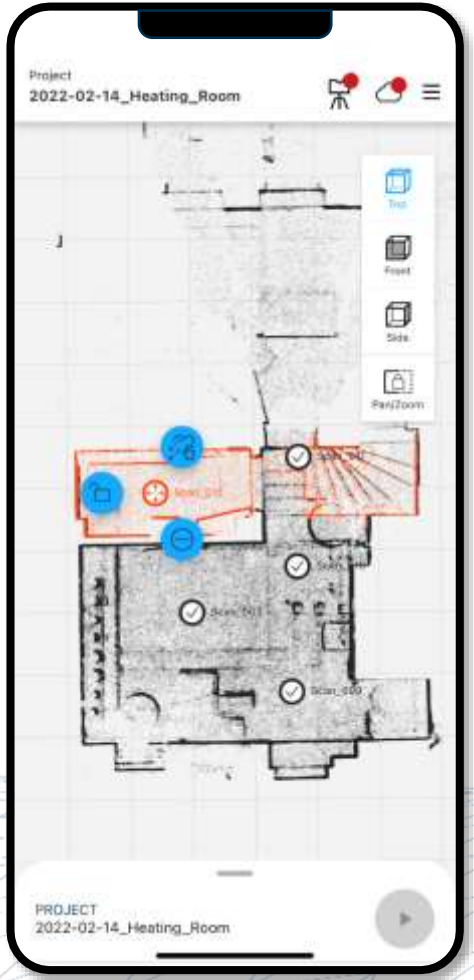
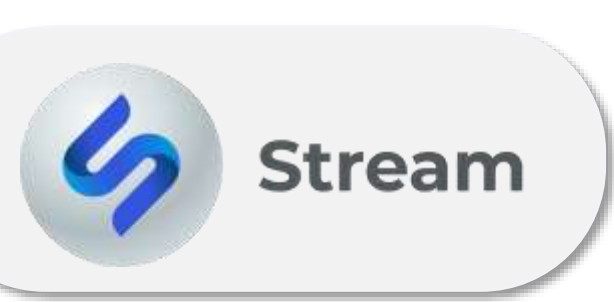
## Process (Stream App)

Have confidence in the accuracy and completeness of your captured scan data on-site in real time – no longer follow up site visits required.



## Deliver (WebShare on Sphere)

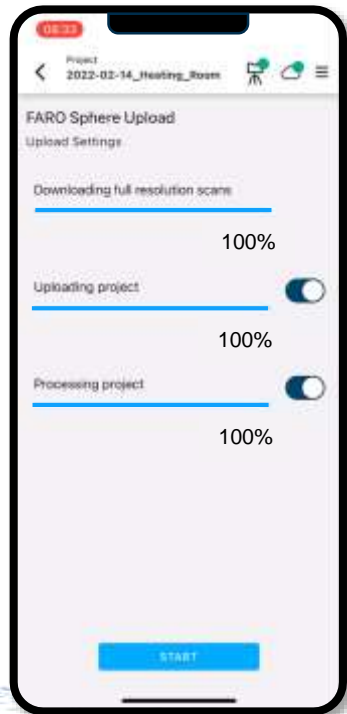
Easily collaborate worldwide with secure viewing, sharing and exploring of all 3D reality data directly in any common web browser - no more data silos.



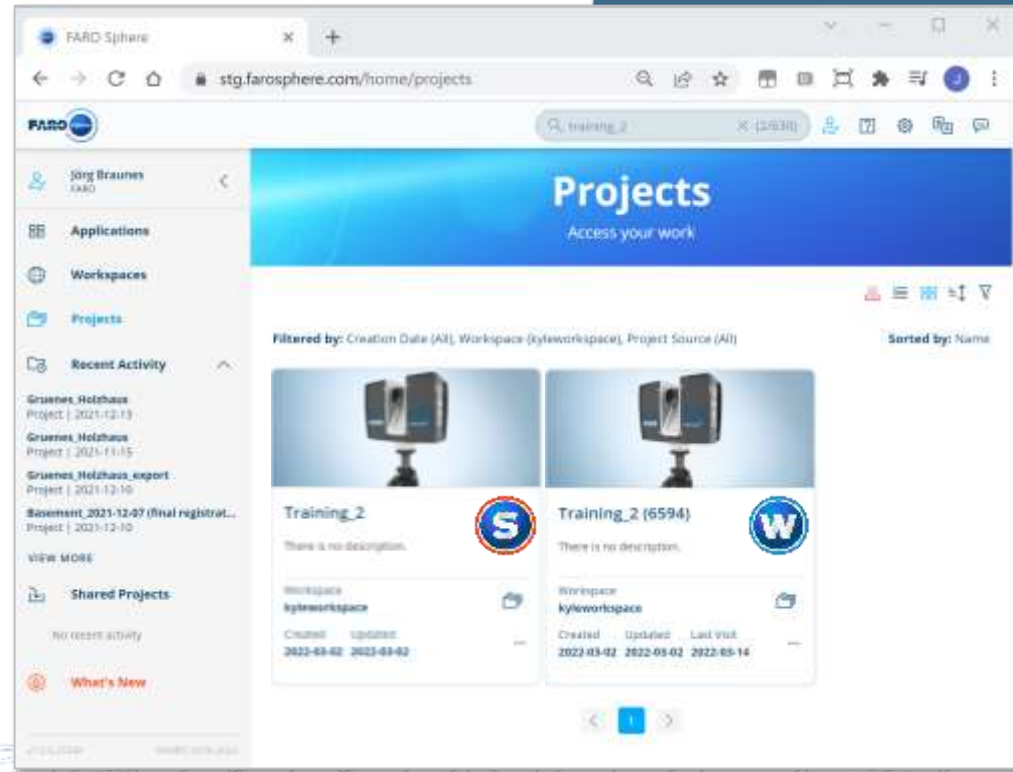
- **Project definition**
  - Attach preview image
  - Set location from GPS
- **Scanner control**
  - start / stop scan
  - Select / edit scan profiles
  - Live feedback during scan capture
- **Scanner on-site compensation**
  - Without artificial natural targets
- **Pre-registration (top-view-based)**
  - Auto-registration against last three or closest three scans
  - Manual scan placement
- **Annotations**
  - With images and/or files attached
- **Direct Sphere upload**

# Upload to Sphere

FARO Sphere



2. Data is uploaded to Sphere

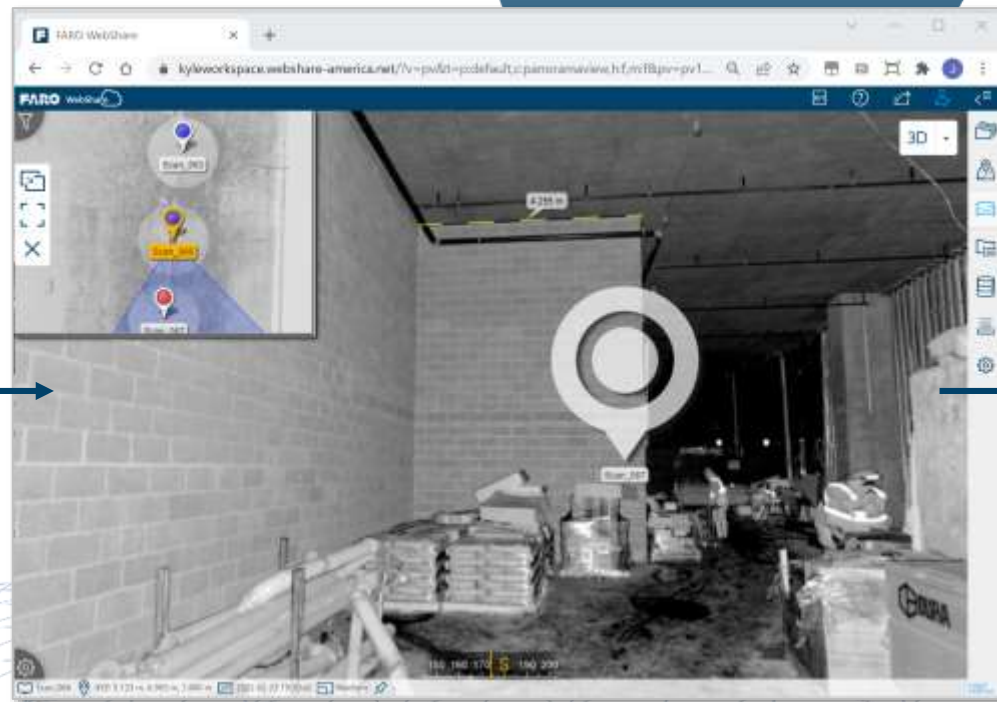
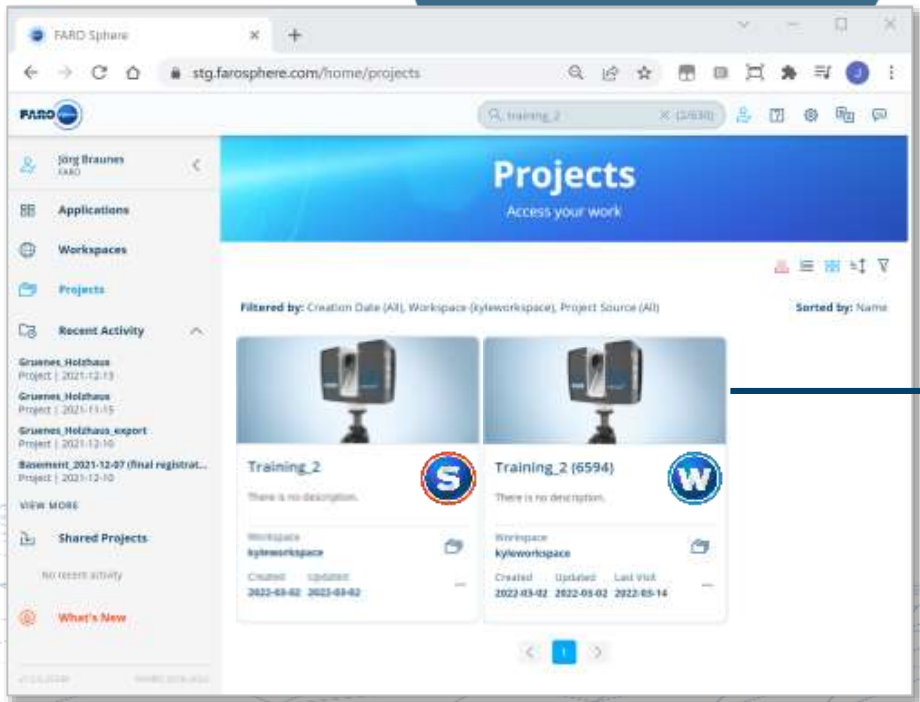


1. Full scan data is downloaded to phone

3. SCENE project is created

4. WebShare project is created

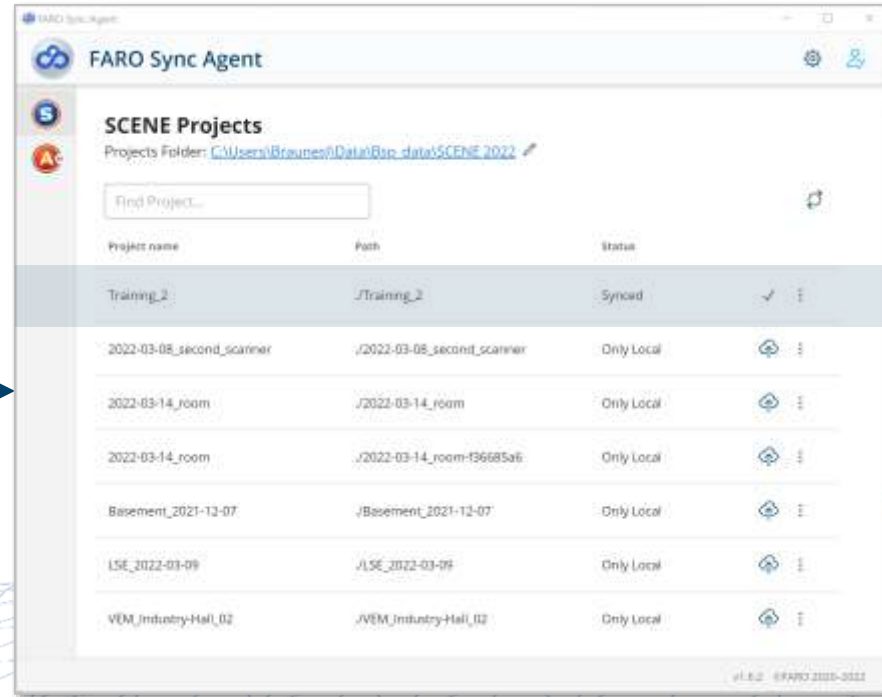
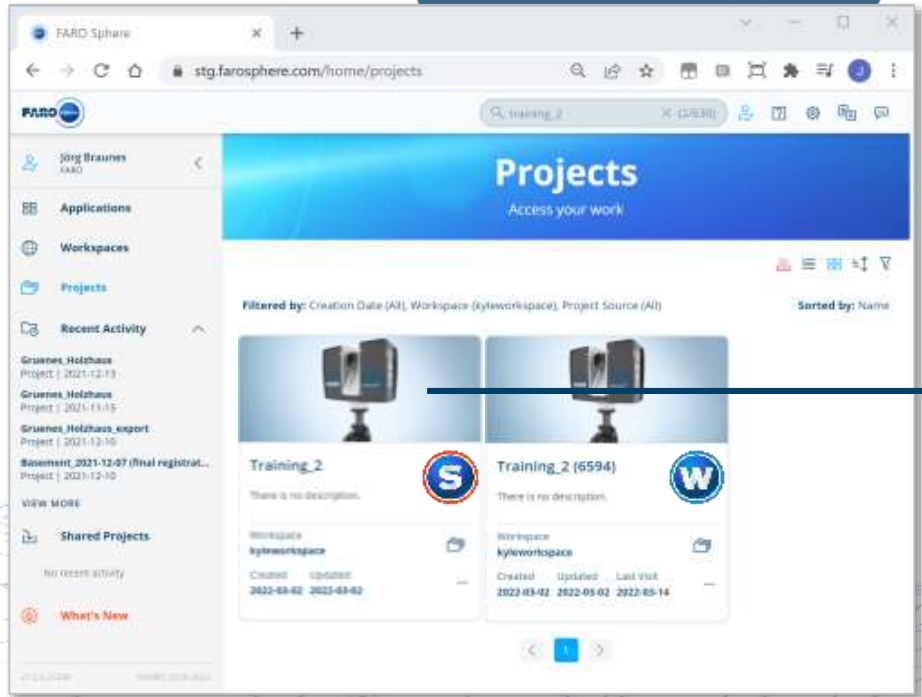
# Project Access on Sphere



Share with project stakeholders

Explore the project preview a short time after the upload from the field on WebShare

# Project completion



Finalize the project in SCENE

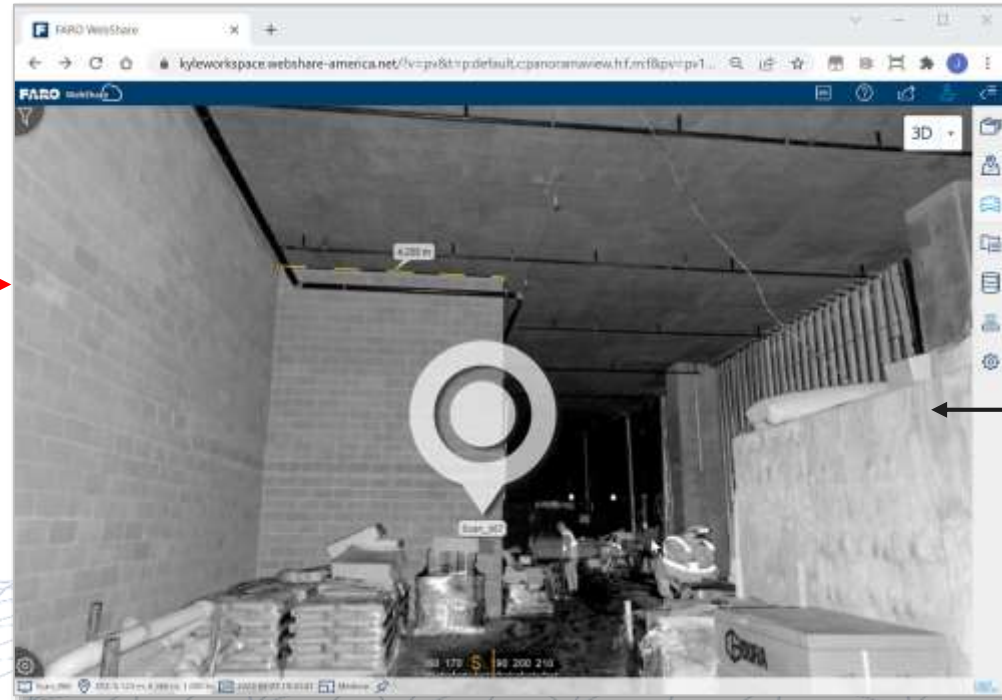
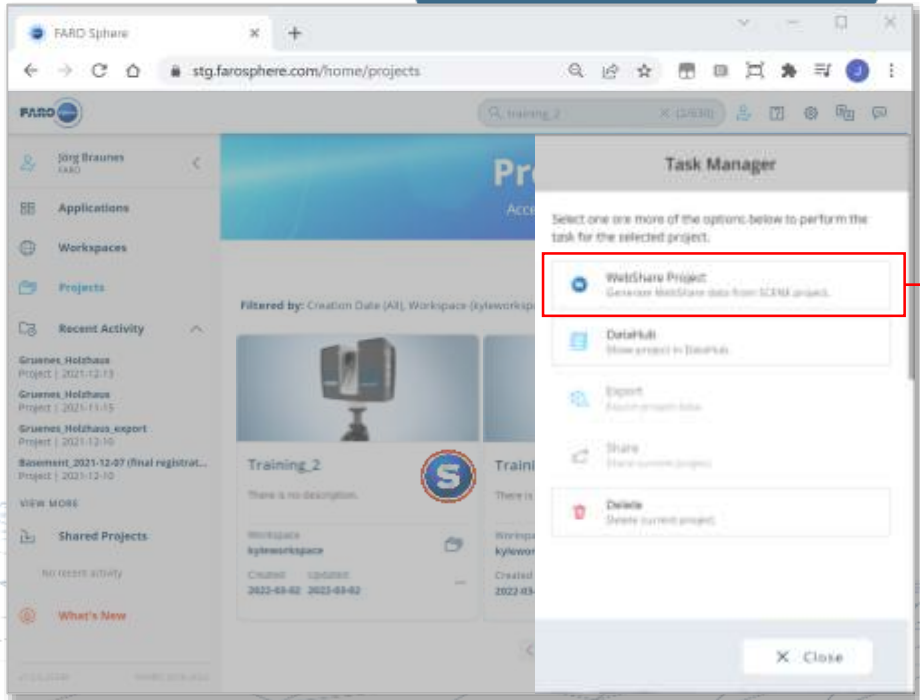
Sync the SCENE project data with your desktop

# Project completion

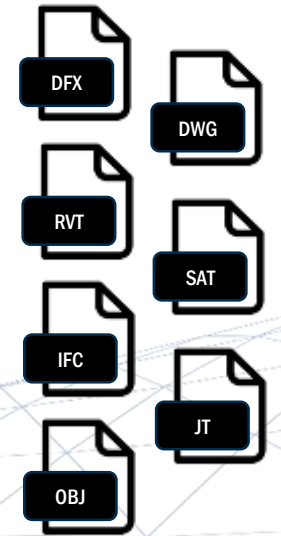


- Processing already completed on Sphere:
  - Import filter
  - Scan colorization
  - Scan Point Cloud creation
- Scans are already pre-registered from Stream

# Project completion



Generate an updated WebShare Project

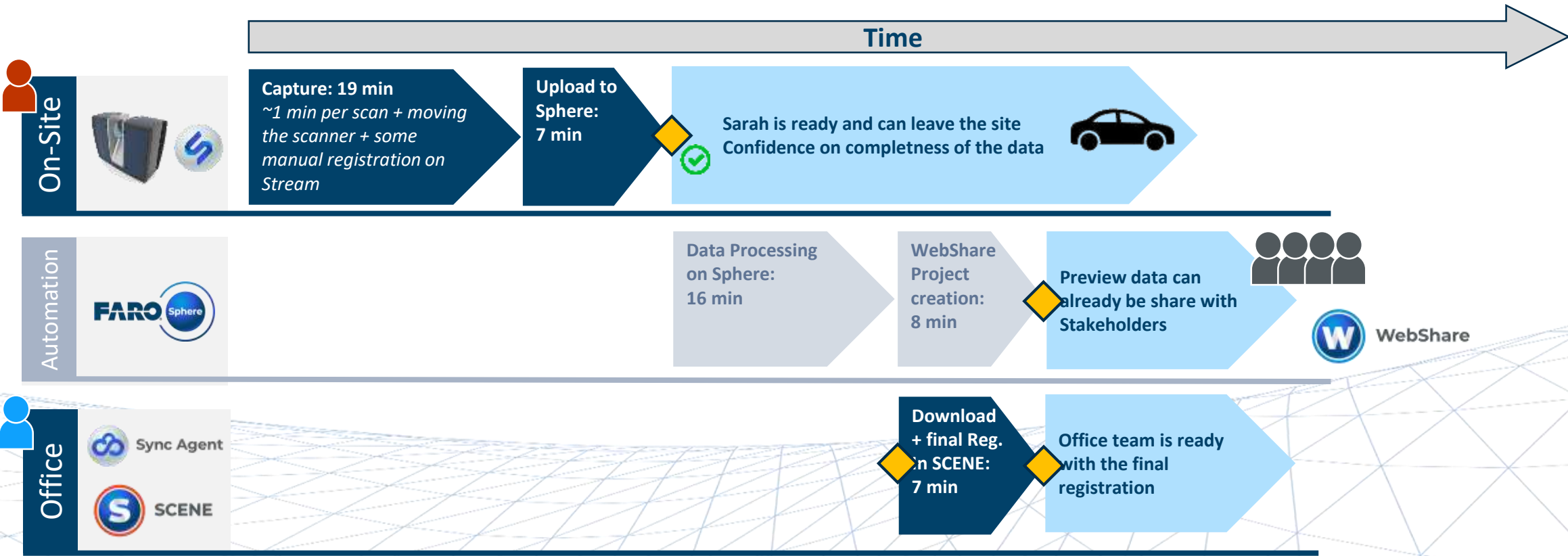


Import CAD to compare design vs. point cloud

# Focus Premium + Stream + Sphere



Test project: 11 scans 1/8 resolution 3x quality b/w



~ 23 min after the completion of the work on site, the project is completed in the office



# FARO Sphere Offerings



### Sphere Base

20 GB 2 project
Unlimited viewer user
1 user (fixed)
View projects
Edit projects Export Data CAD Models
Project upload to cloud
Cloud sync with desktop

### Sphere Professional

1000 GB (fixed) Unlimited projects
Unlimited viewer user
5 user (fixed)
View projects
Edit projects Export Data CAD Models
Project upload to cloud
Cloud sync with desktop

### Sphere Enterprise

2500 GB (expandable) Unlimited projects
Unlimited viewer user
10 user (expandable)
View projects
Edit projects Export Data CAD Models
Project upload to cloud
Cloud sync with desktop

Let's have a look...



**Q&A**

**Thank You for  
Listening**

