Make Digital Twin a reality

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*Using **BIM** means... we manage our buildings and assets continuously, digitally and collaboratively throughout the lifecycle.*

*Using the **Digital Twin** means... we start digital, stay digital and deliver digital*

Digital Twin

Get everyone on the same page

Turning data into valuable information by capturing as-built and Manufacturing details

Transparent and unrestricted view of data from Facility, Engineering, Manufacturing and Maintenance

Multiple systems assets work together, simulating an entire production line, for instance.

Connect our business and data with an end-to-end digital process

Easy browser-based access without software installation and trainings

New way of evaluating and providing information with high usability

Digital Twin

Where do we expect the Digital Twin in future?

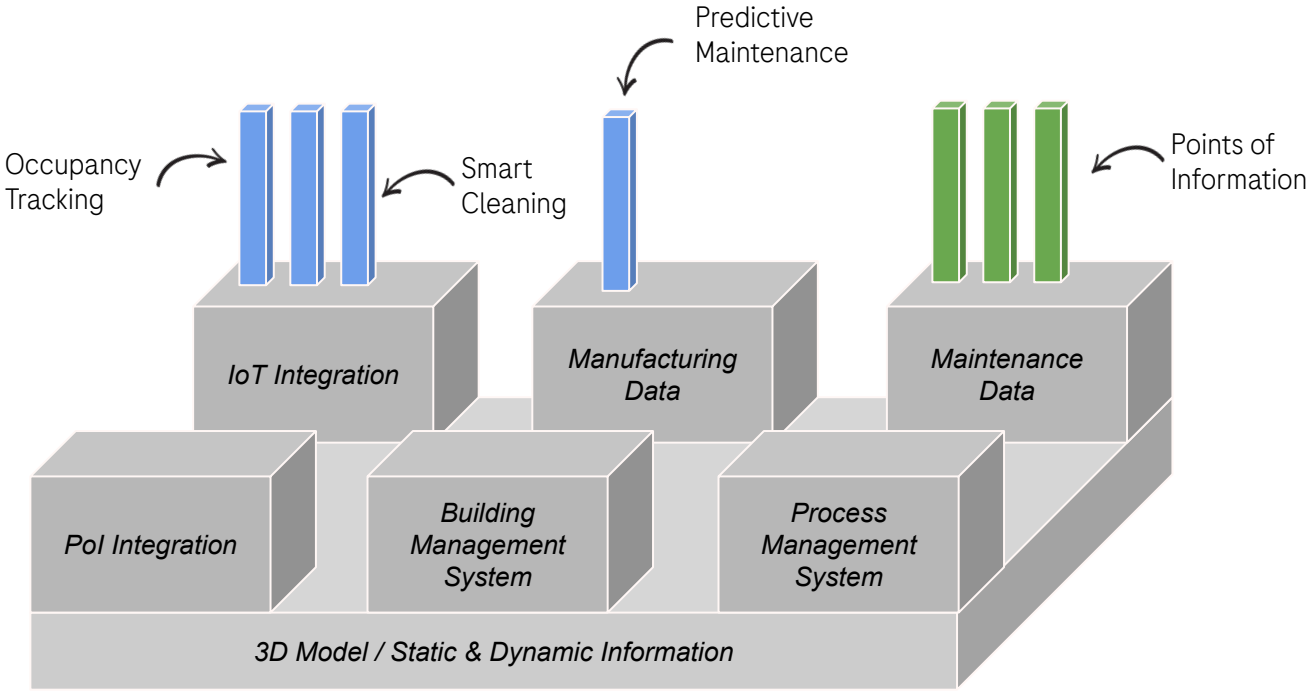
- Easy access point for building and factory information
- Supporting Digital Transformation through a new approach of linking data
- Drive agility and improve business insights
- Enabler to make data FAIR (**F**indable **A**ccessible **I**nteroperable **R**euseable*)*
- Visualization platform for static and dynamic data
- Adaptively expandable and scalable product
- Processing data into new information and generates additional knowledge

Digital Twin

Where IoT becomes visible

Digital Twin

Integrations



Enabler

A functionality or system that in itself is not adopted by the end user but allows the features or use case to work.

Use Cases

A working capability or end product that is assessed and used directly by one or more end users.

Feature

A working piece of functionality that forms part of a use case.

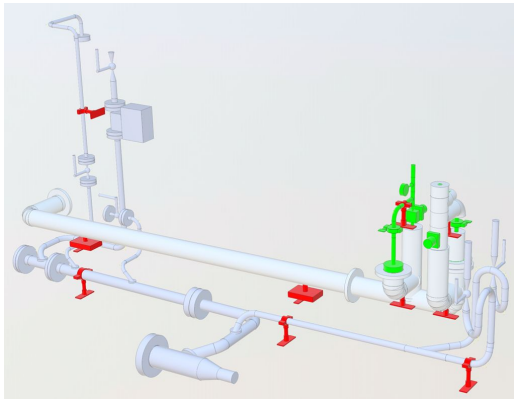
Time for live presentation

Digital Twin

Technical challenges

Task: Merge CSV, GeoJSON and DGN contents with Revit, producing CSV files for use in Autodesk Forge

- Extracting the attributes from legacy MicroStation V7-based system “PDS”
  - Solution: Export sidecar text files with the attributes from the PDS database, export the V7 DGN as structured text and merge in FME. Regex and Python to the rescue!
- Extracting the attributes from MicroStation V8-based system “TriCAD”
  - Solution: Object attributes were hidden in a proprietary and undocumented BLOB in the DGN.
- Assure that we’re always using the most current data
  - Solution: Always read the up-to-date files directly from Autodesk Construction Cloud, ProjectWise, Google Drive, etc.
- Revit performance tip
  - Make sure the FME version matches the Revit version!
    Example: FME 2022 is *twice as fast* reading Revit 2022 than 2021.



Doing now what patients need next