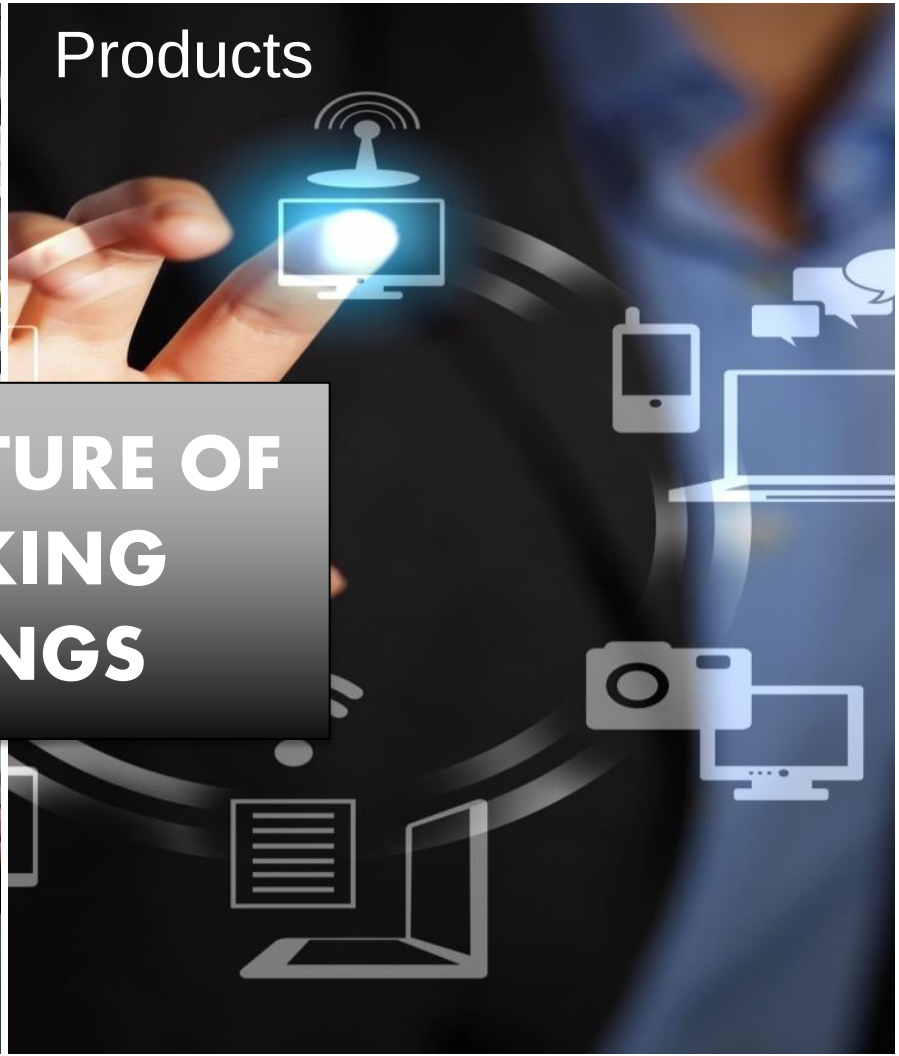
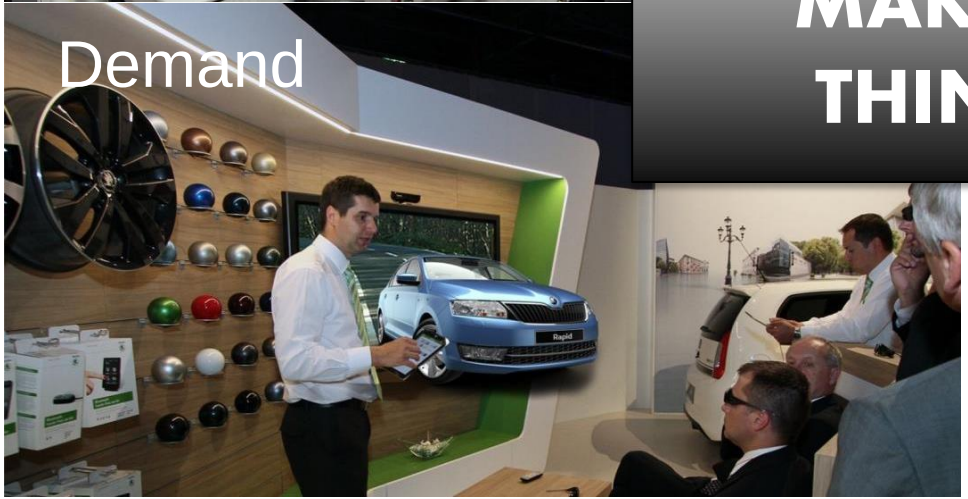
Factory of the Future
生産技術の未来

オートデスク
テクニカルコンサルタント
Swen Niebann

AUTODESK.



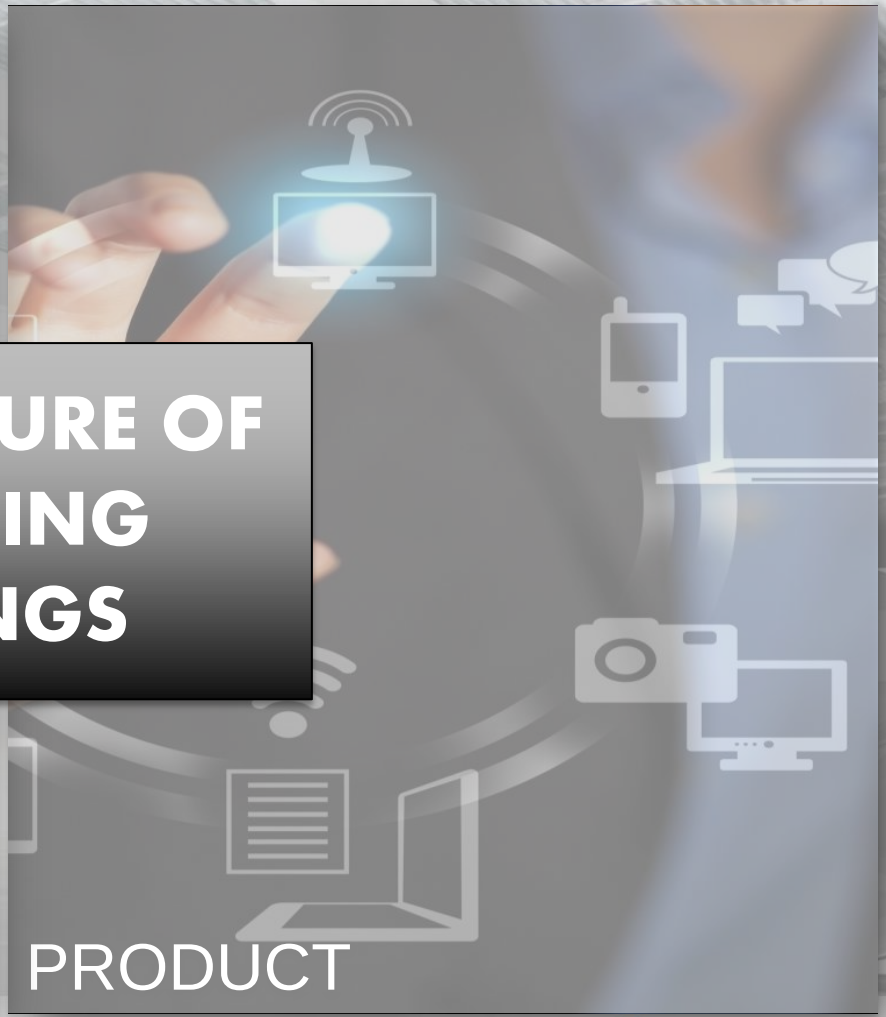
THE FUTURE OF MAKING THINGS



PRODUCTION

THE FUTURE OF MAKING THINGS

CONSUMPTION



PRODUCT

AUTODESK.

Disruptive Environment

Harvard Business Review

INNOVATION

What Happens If Apple Starts Making Cars

by Michael Schrage

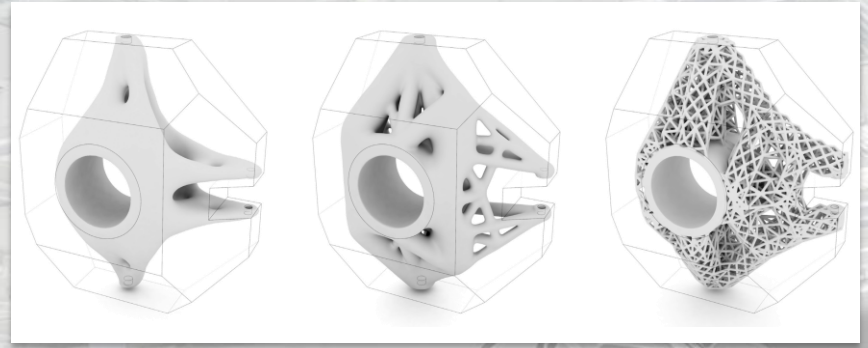
FEBRUARY 19, 2015

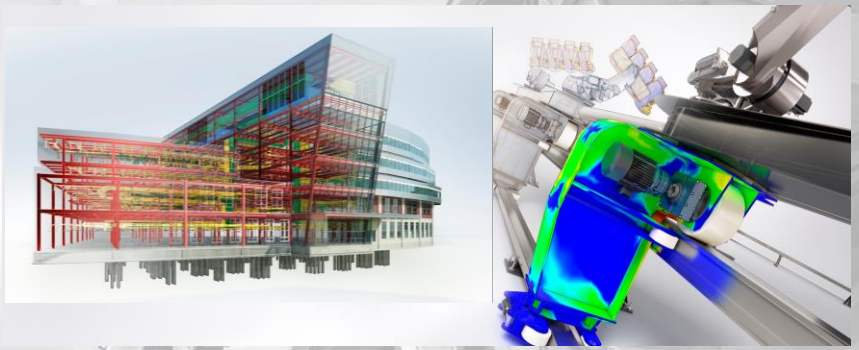
SAVE SHARE COMMENT 6 TEXT SIZE PRINT

Apple fanboys and Samsung's "Next Big Thing"ers would hoot with derisive laughter if *The Wall Street Journal* or *Financial Times* reported that GM or Ford planned to rewrite the rules of smartphone innovation. But when media coverage suggests Apple may redesign the automobile, even the most cynical car-lovers quiver with righteous curiosity. They should.

Could Sir Jonny Ive be the next Battista Pininfarina, Harley Earl, or Akihiro Nagaya? Don't bet against him. Steve Jobs' successors are at least an order of magnitude more credible as disruptive innovators

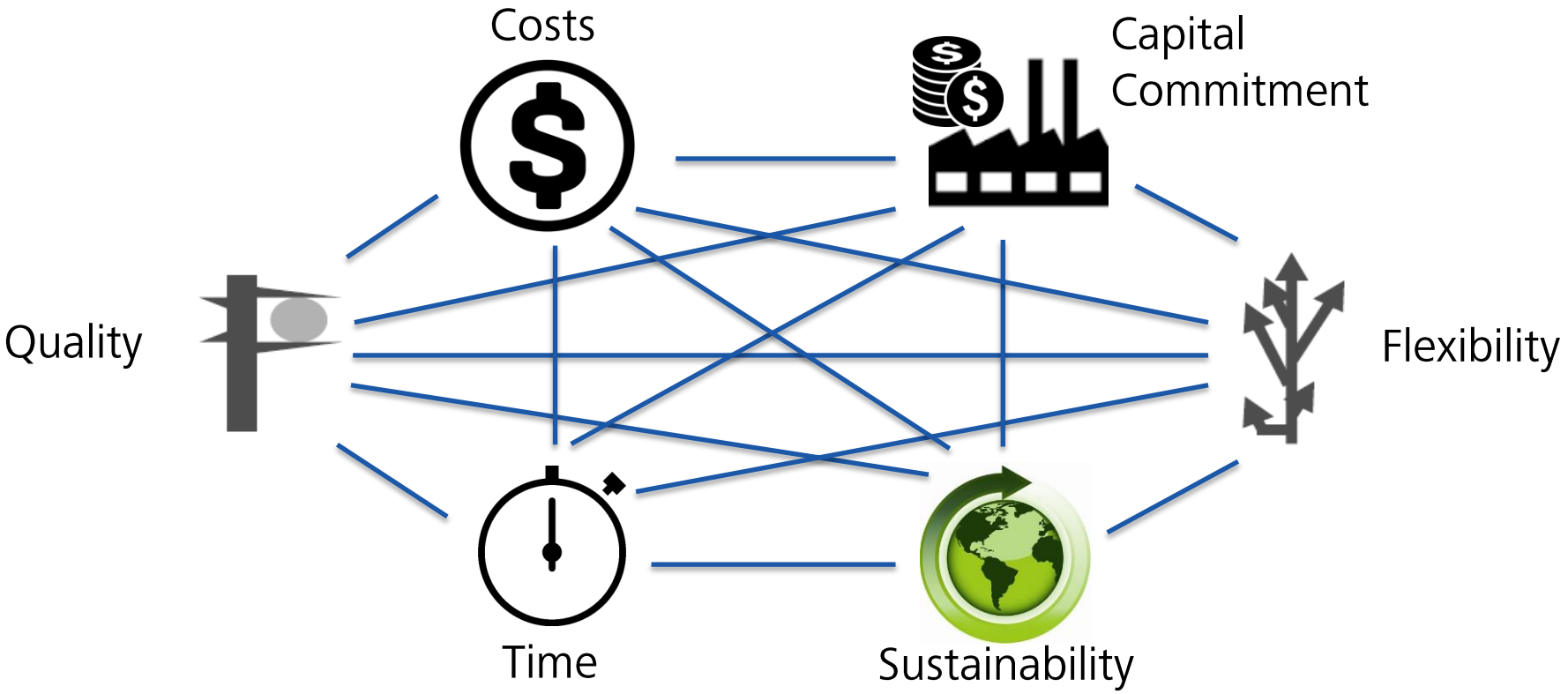
https://hbr.org/





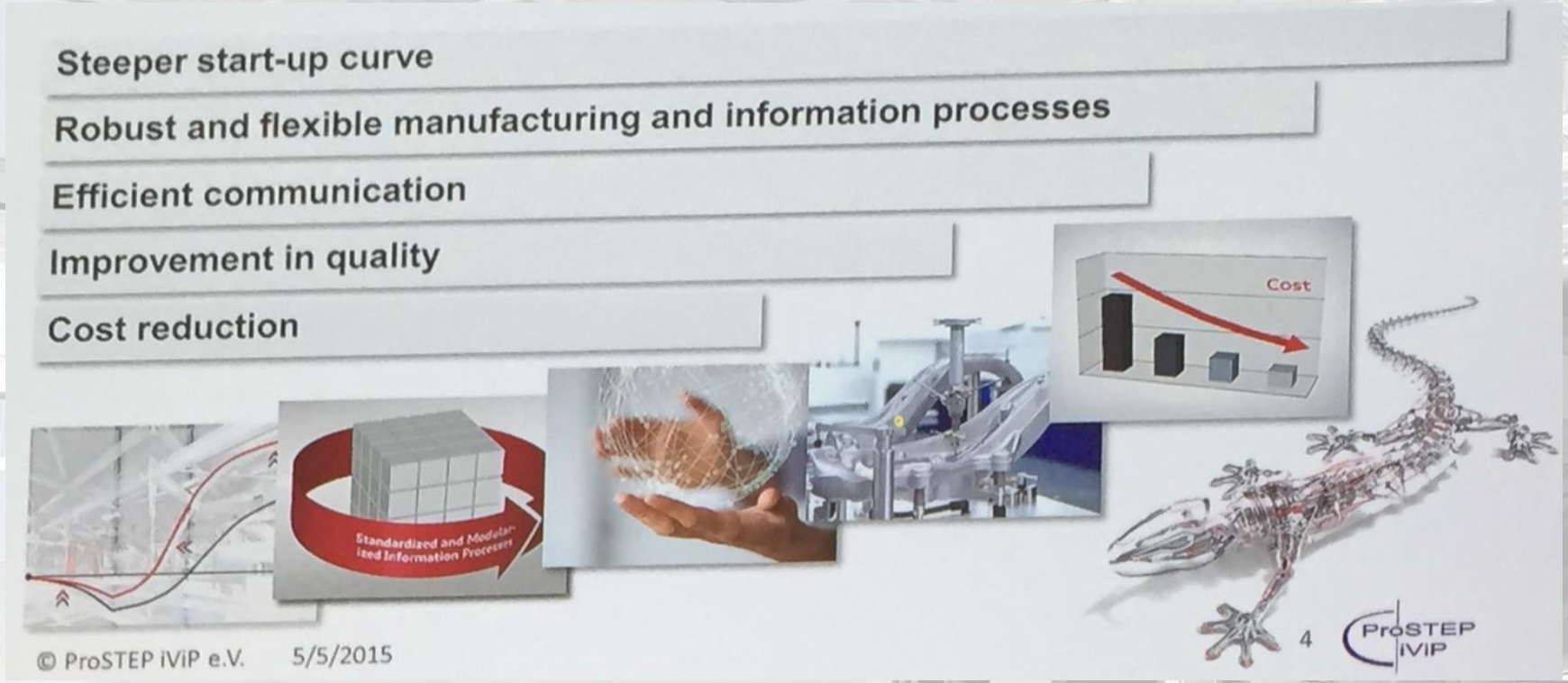
AUTODESK.

Critical Success Factors of Manufacturing Engineering



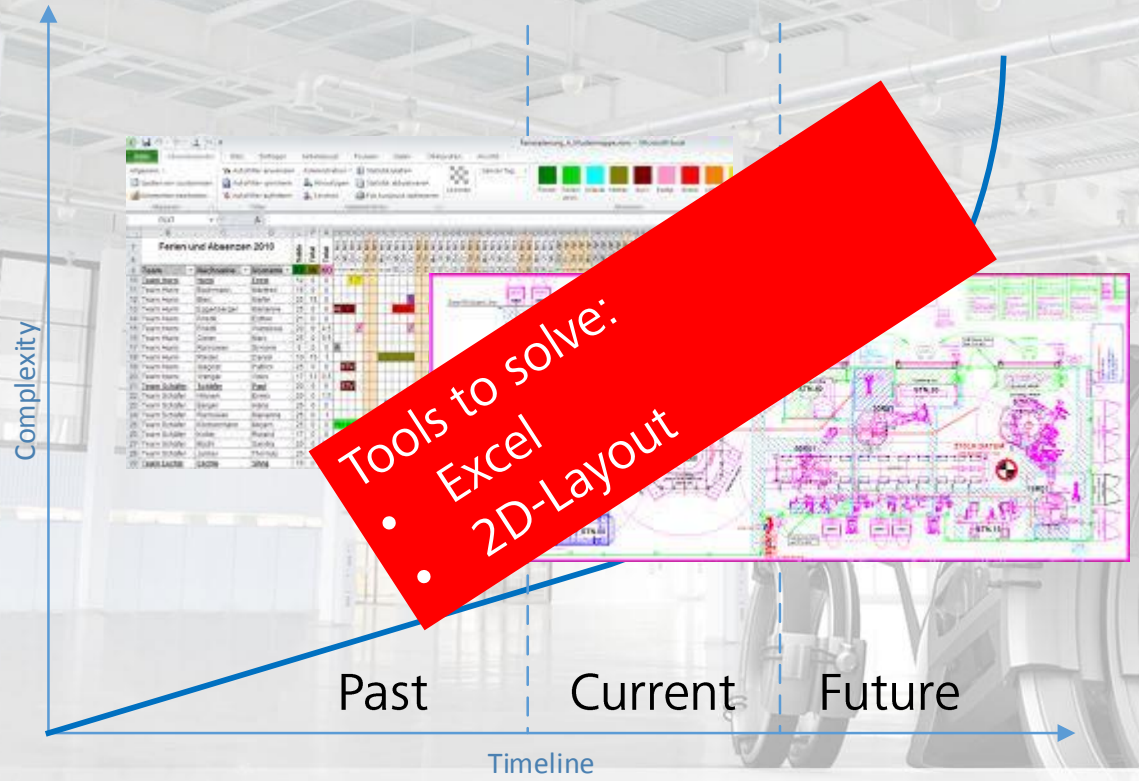
AUTODESK.

Survey Results – What drives Automotive Manufacturer



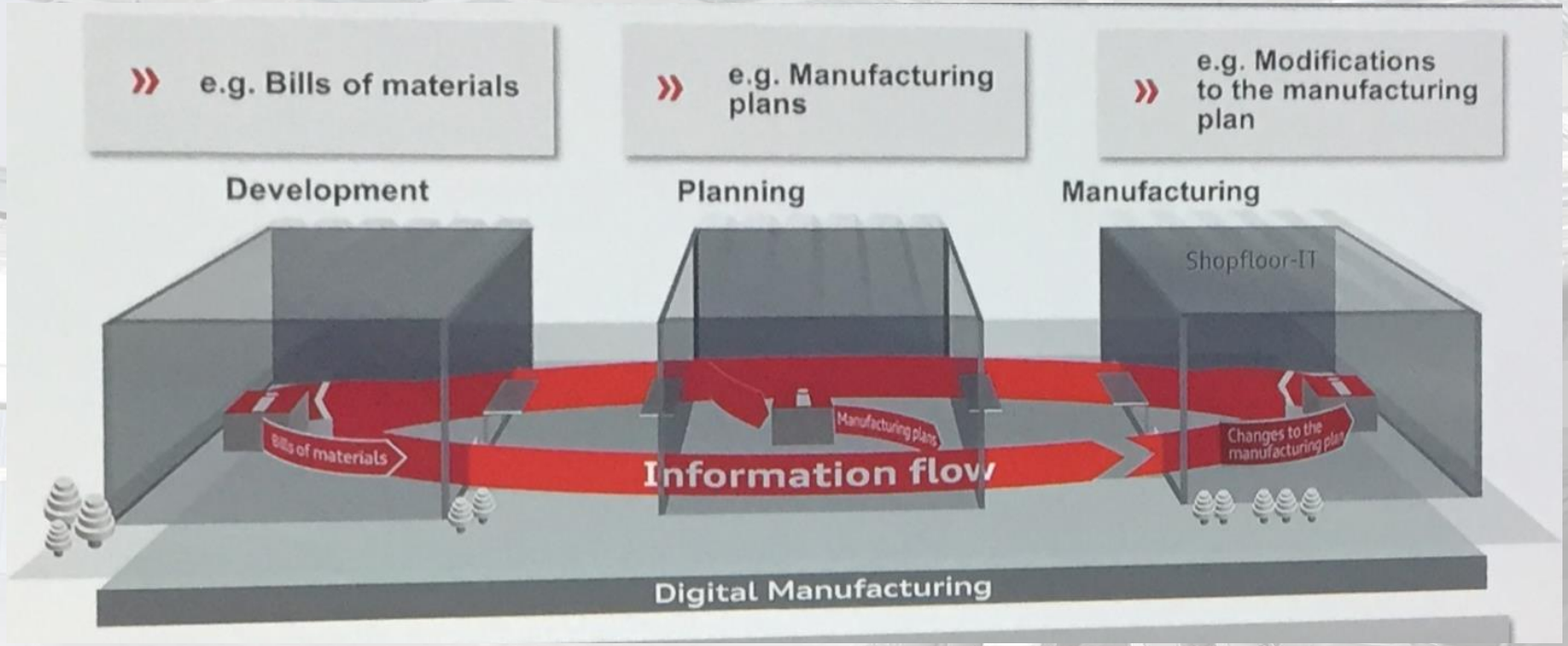
AUTODESK.

Increase of Planning Complexity



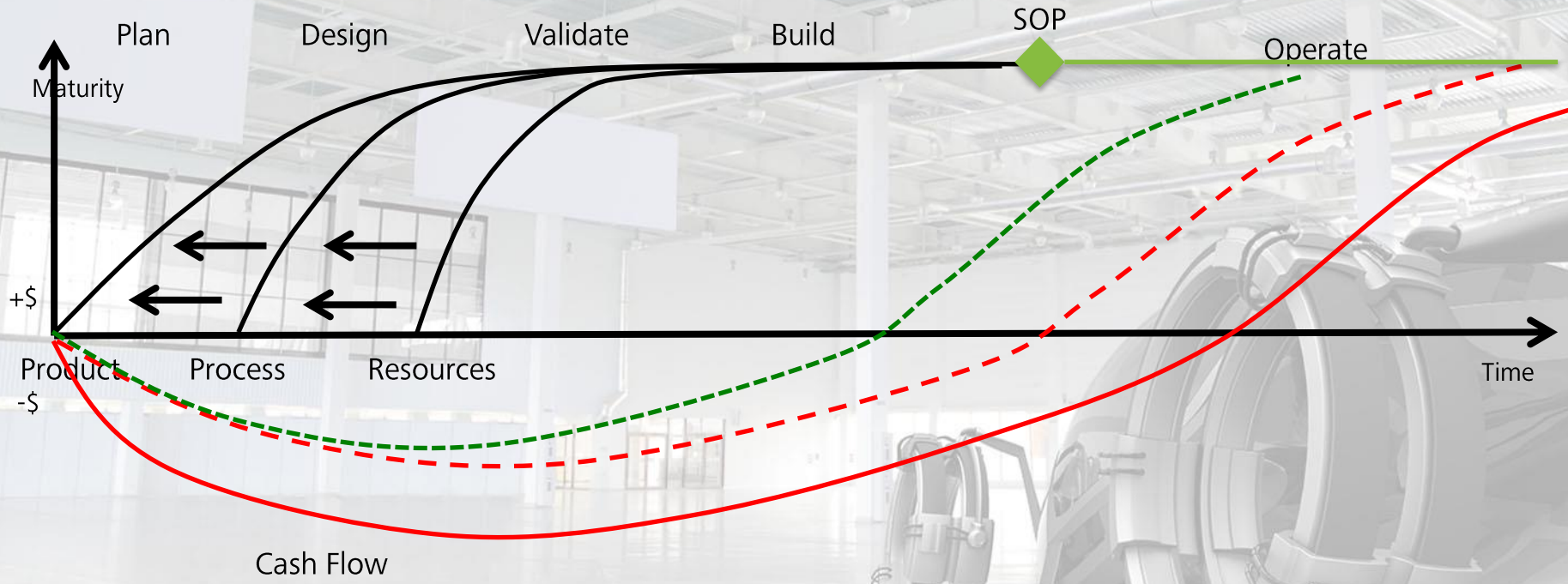
AUTODESK.

Needs for a seamless information flow

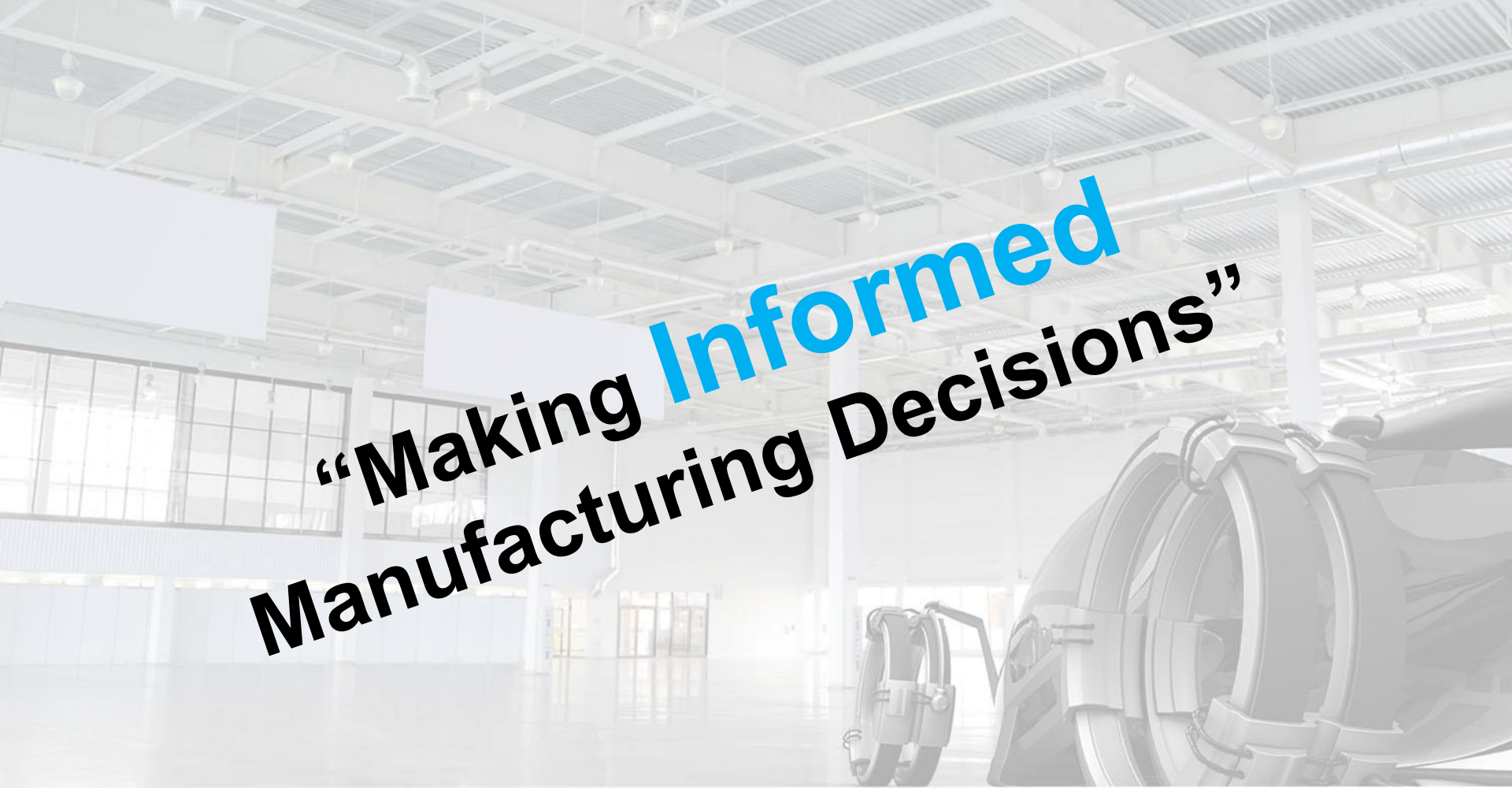


AUTODESK.

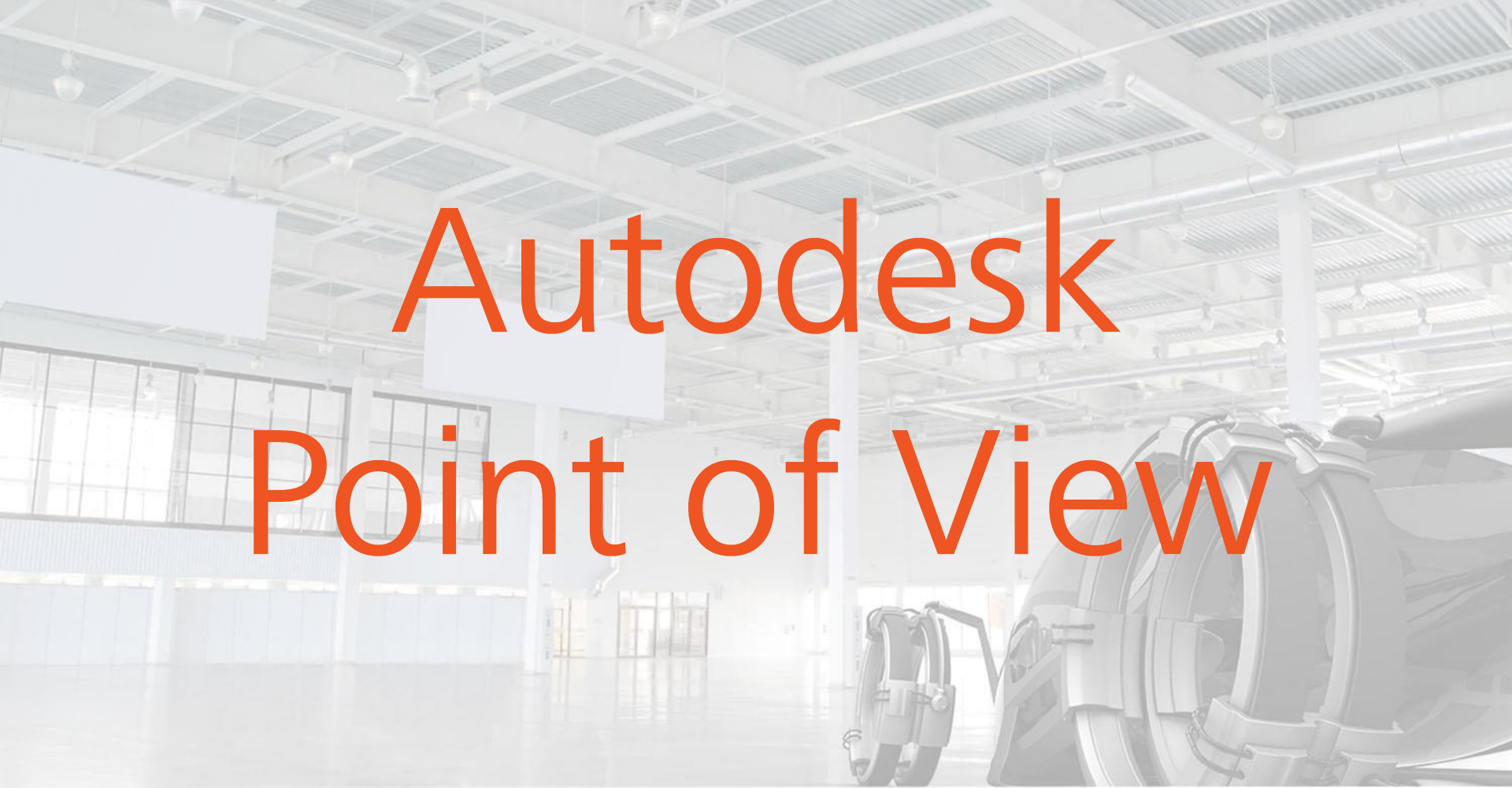
Which Business needs are driving companies to adopt new concepts?



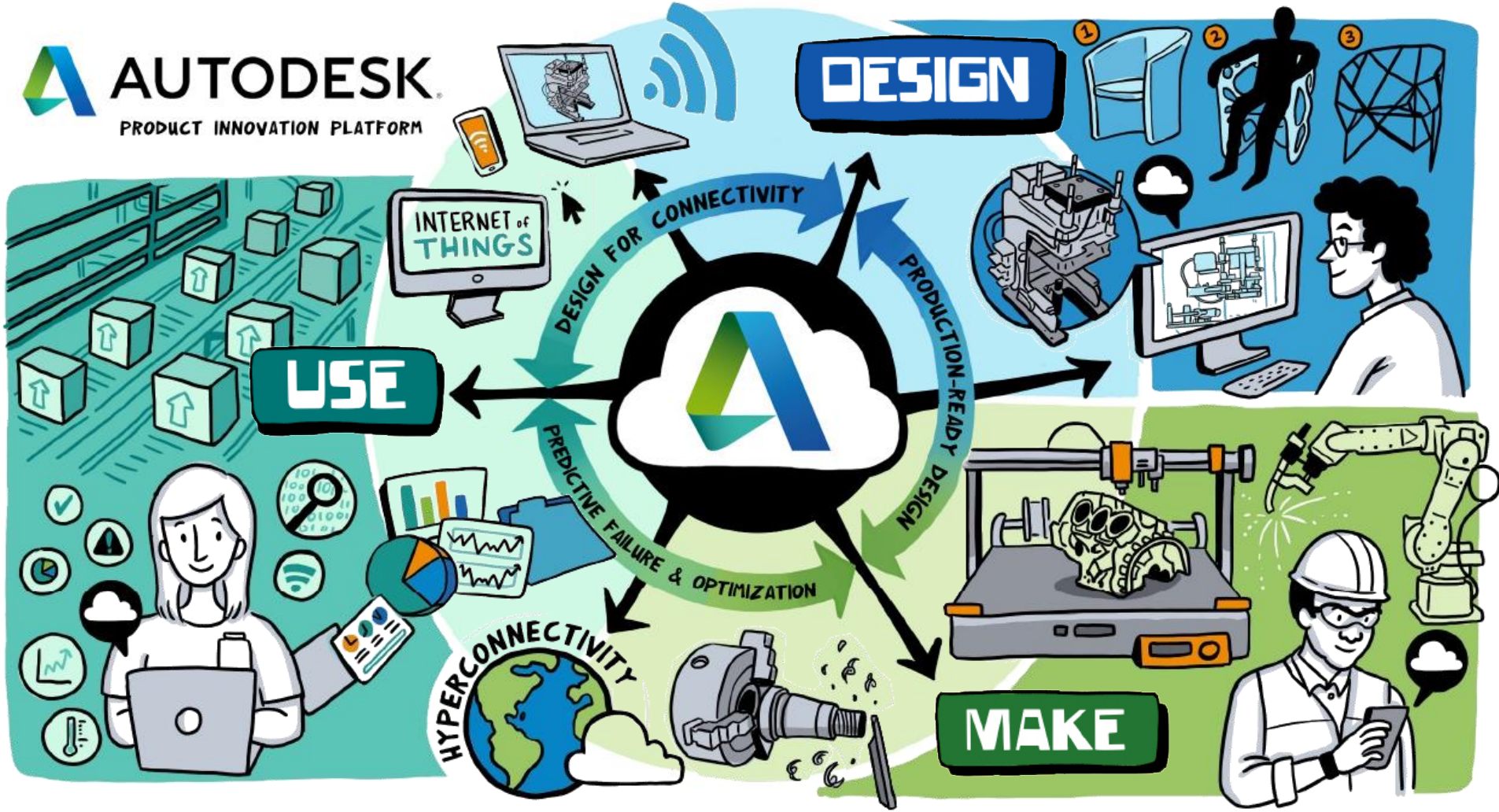
AUTODESK.



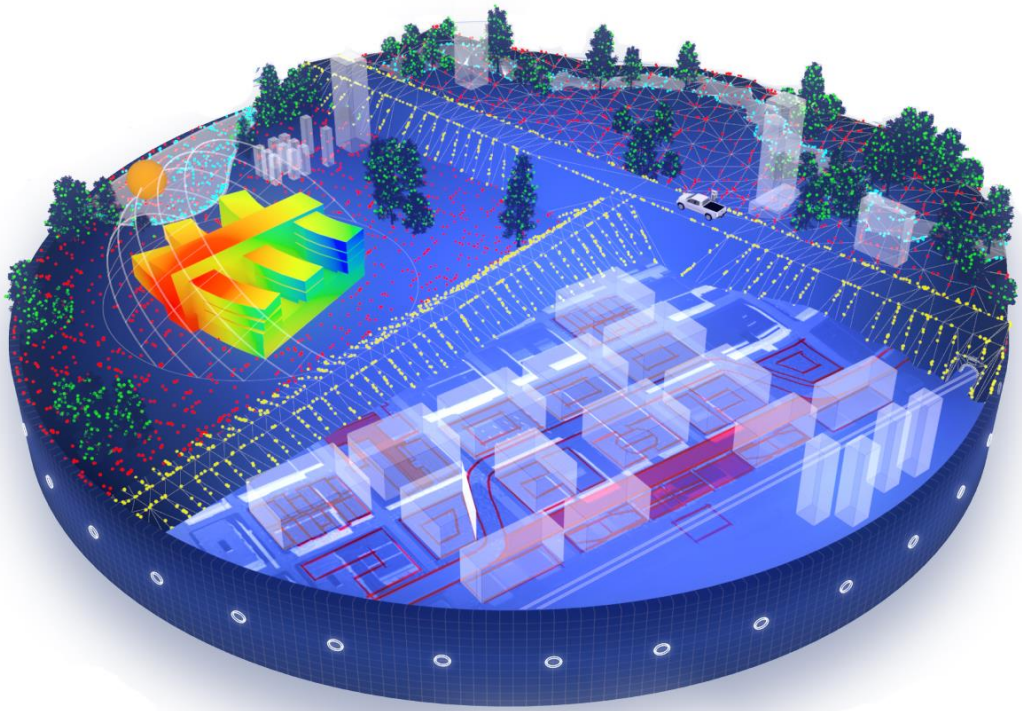
AUTODESK.



AUTODESK.


AUTODESK
PRODUCT INNOVATION PLATFORM
DESIGN
1
2
3
INTERNET of THINGS
DESIGN FOR CONNECTIVITY
PRODUCTION-READY DESIGN
USE
PREDICTIVE FAILURE & OPTIMIZATION
HYPERCONNECTIVITY
MAKE

Integrated Factory Model



AUTODESK.

Integrated Factory Model

One Model – Different Views

AUTODESK.

Integrated Factory Model

Sustainable & Proactive Utilization Planning w/ long-term Perspective

Automated Self-Correcting Production Environment

Proactive Building Optimization Projects

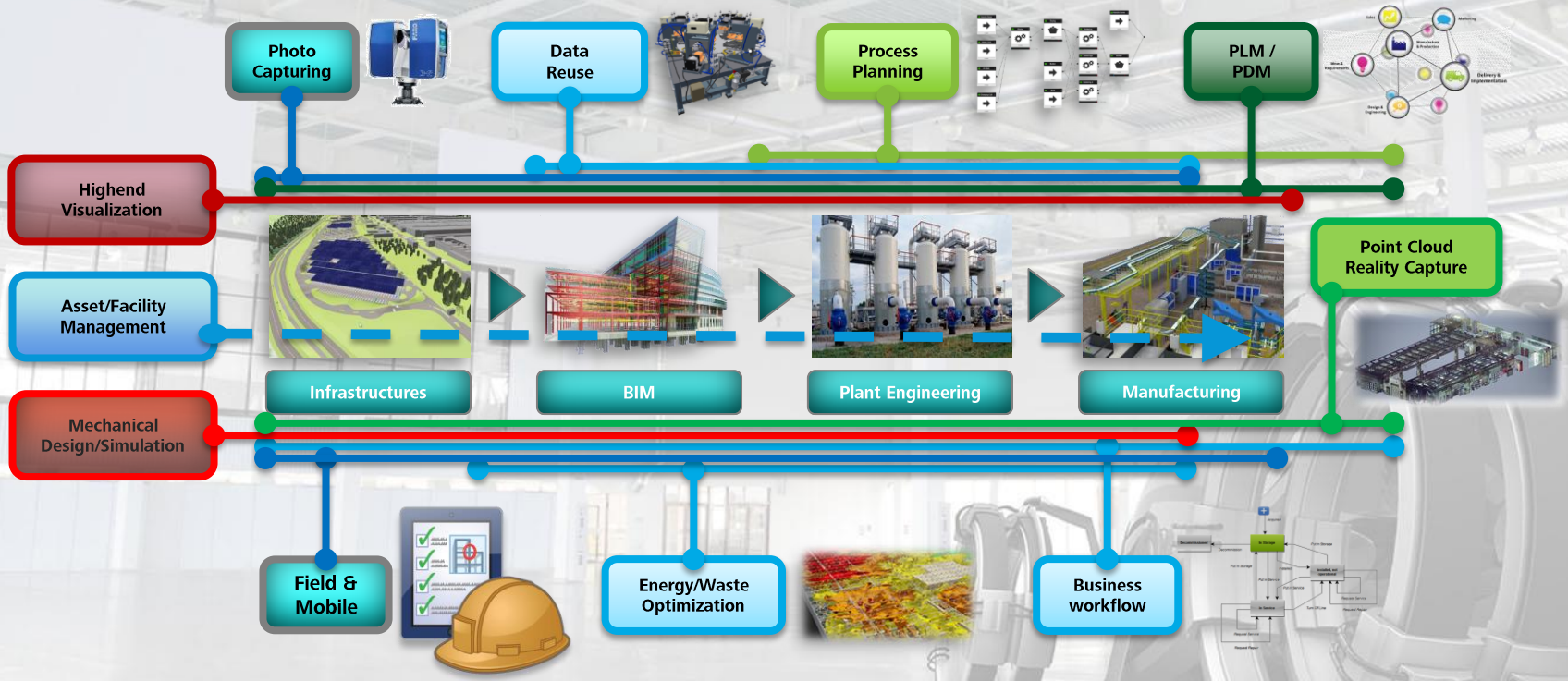
Self-Optimized Building Operation (HVAC, MEP)

Smart Services (Parking Lots, Store Utilization etc.)

One Model – Different Objectives

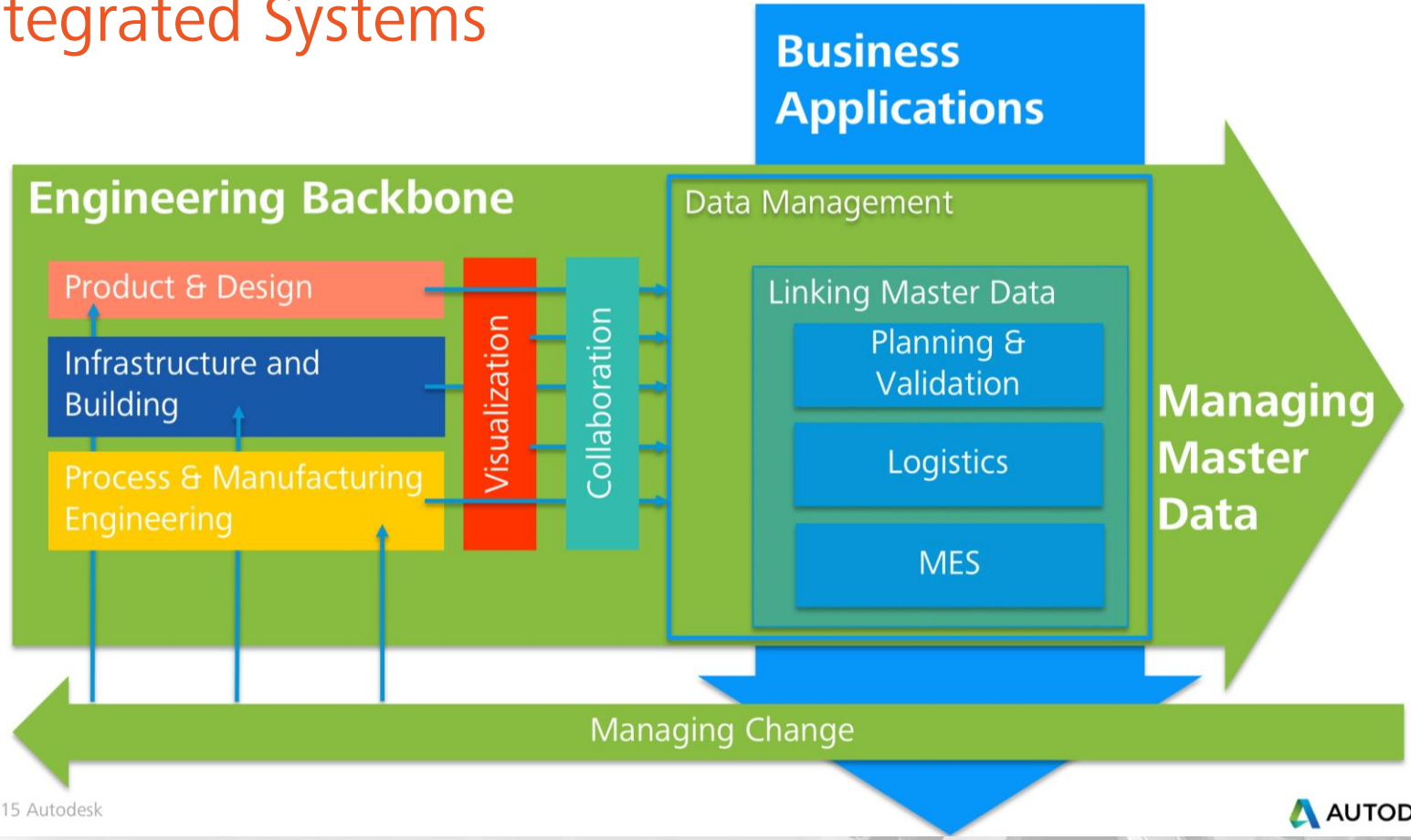
AUTODESK.

Intelligent Technologies Perfectly Connected



AUTODESK.

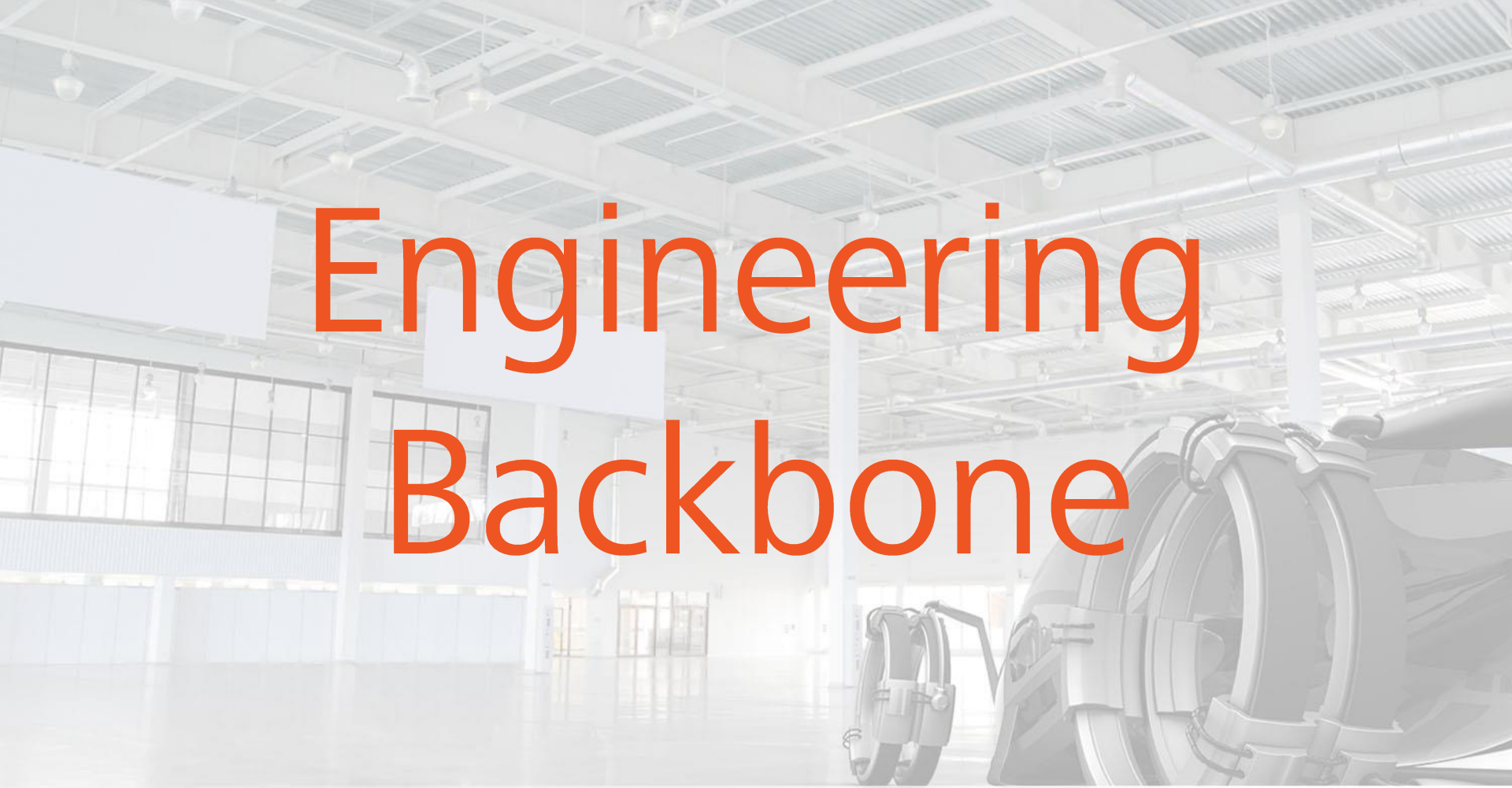
Integrated Systems



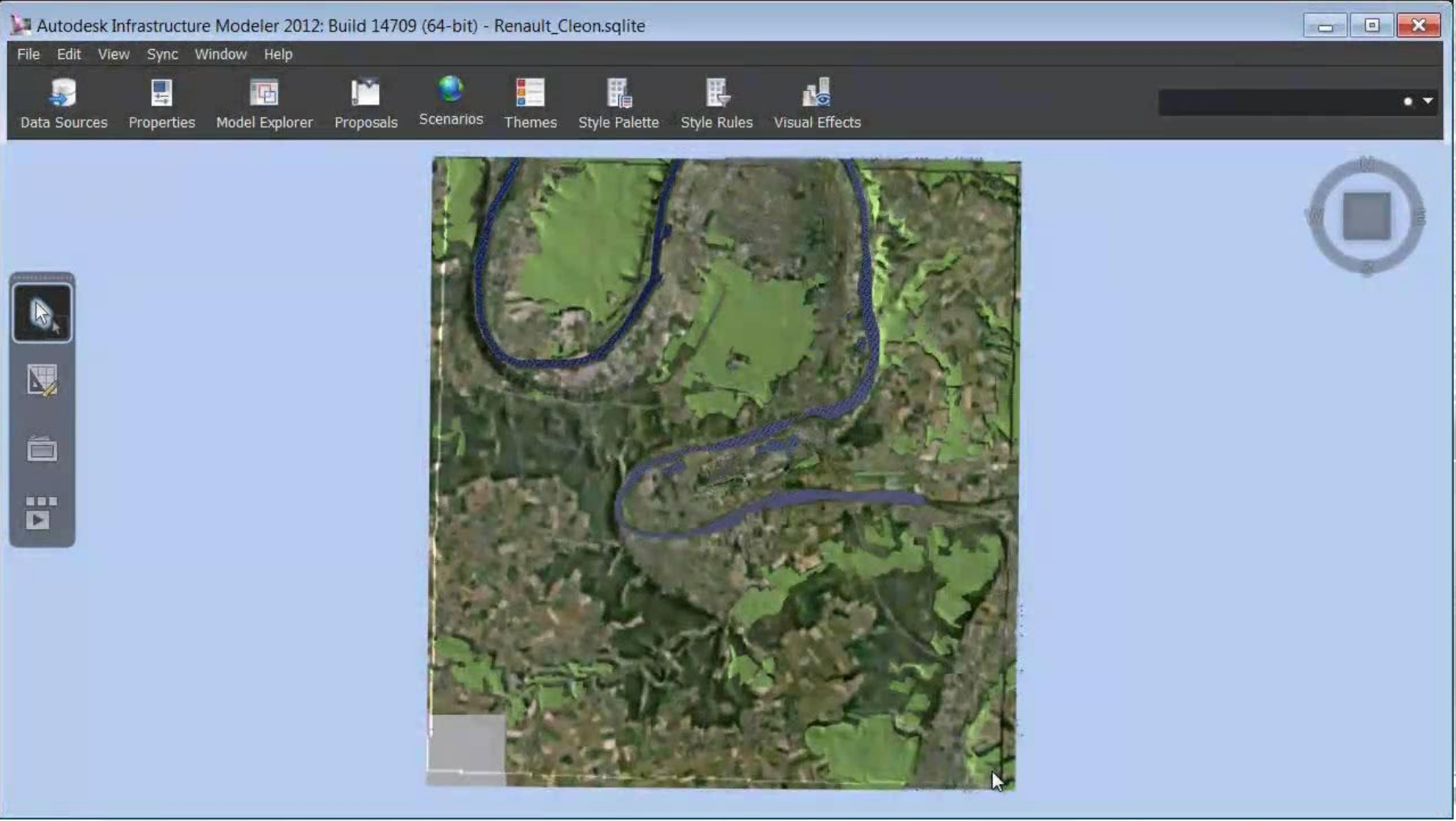
AUTODESK.

AUTODESK.

Engineering Backbone

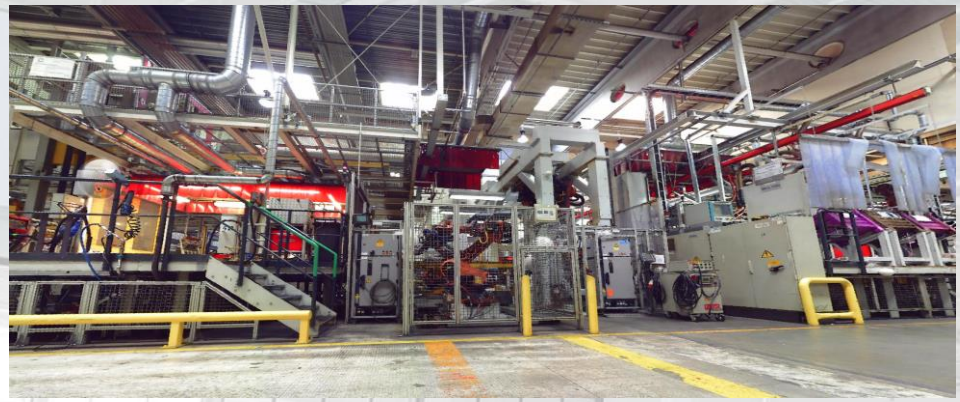


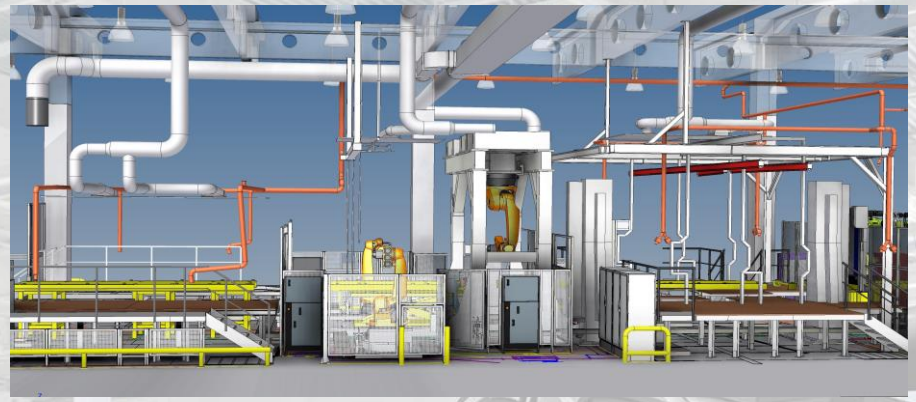
AUTODESK.

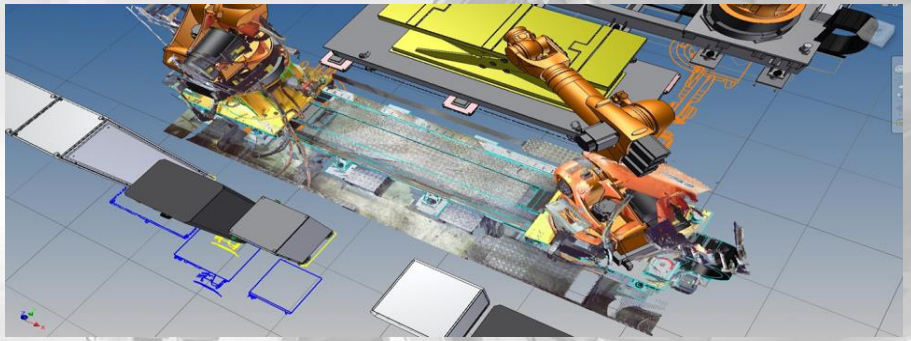


AUTODESK.

Real vs. Digital factory

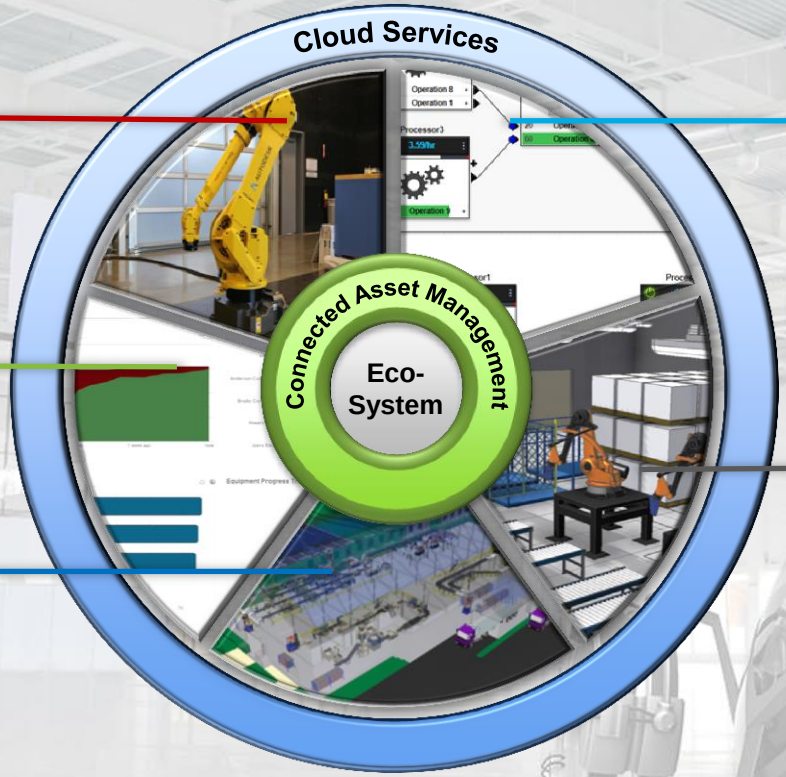






AUTODESK.

Factory of the Future – High Level



Operate
Connected Assets
Maintenance
Local Update

Validate
Training
Start Up
Hand Over

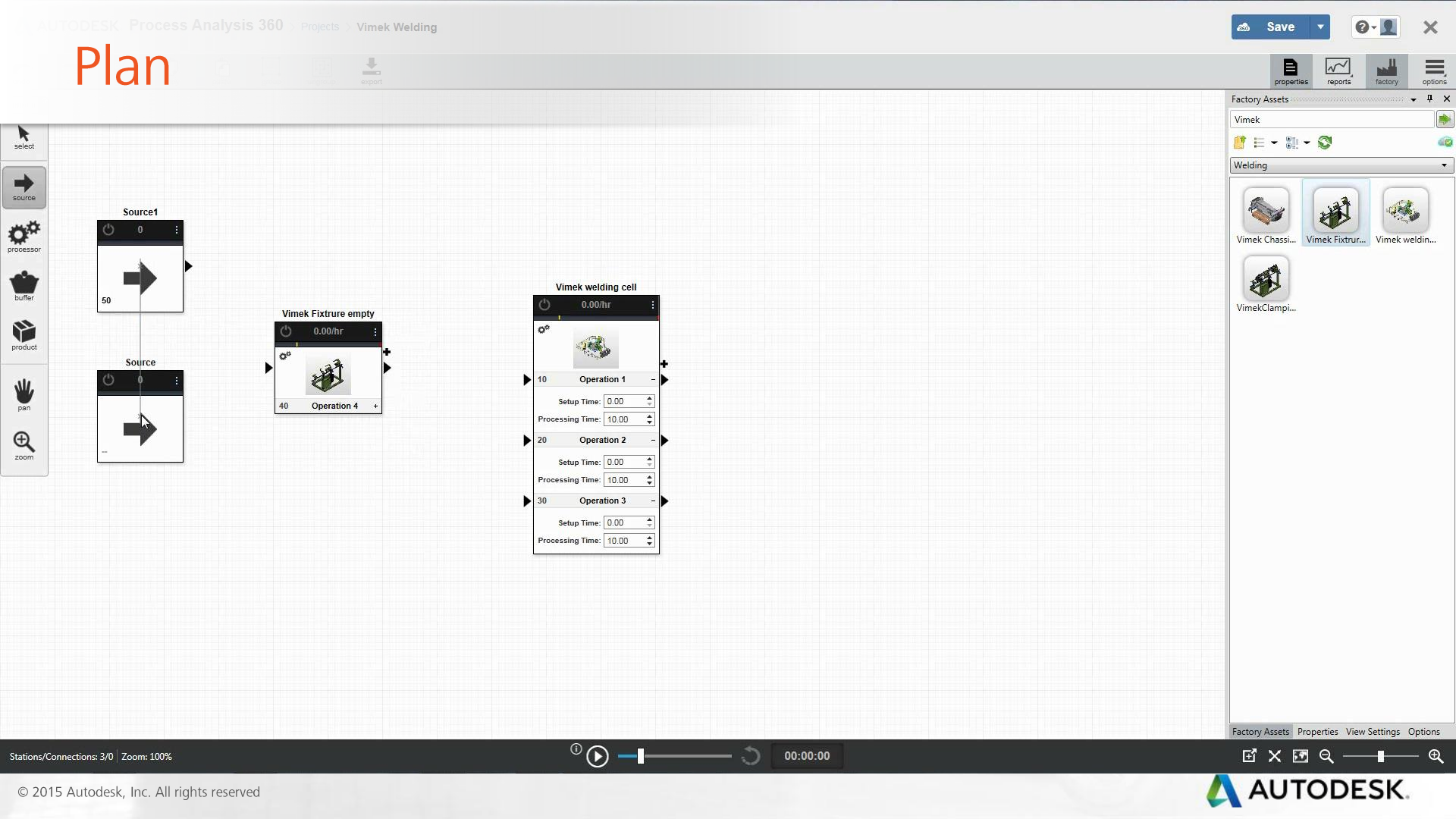
Build
4D & 5D Planning
Asset Sign Off
Site Management

Plan
Process Simulation
Pre-Planning
Site Knowledge
.

Design
2D & 3D Design
As built scanning
Optimization
Supplier Integration

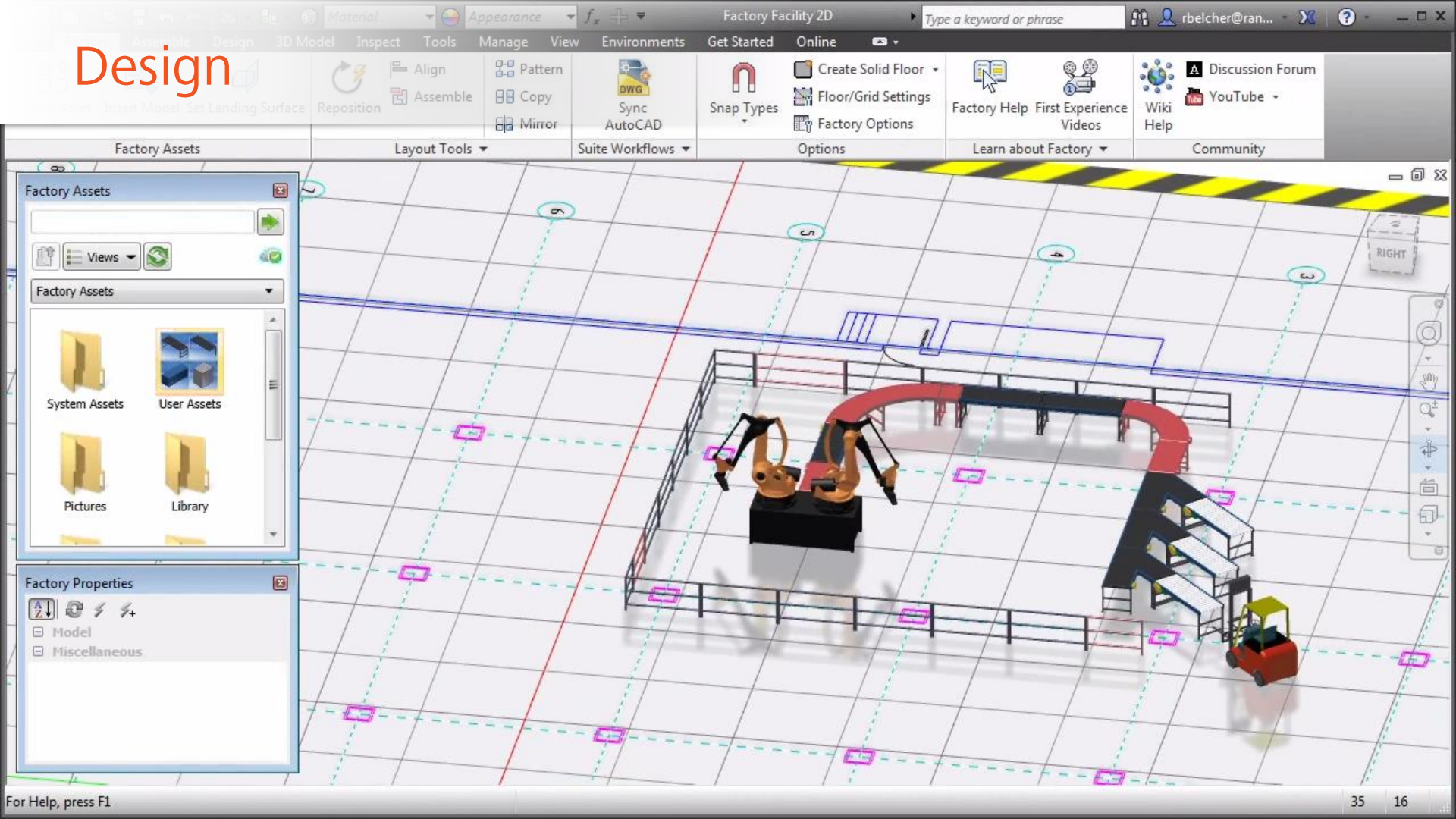
AUTODESK.

Plan

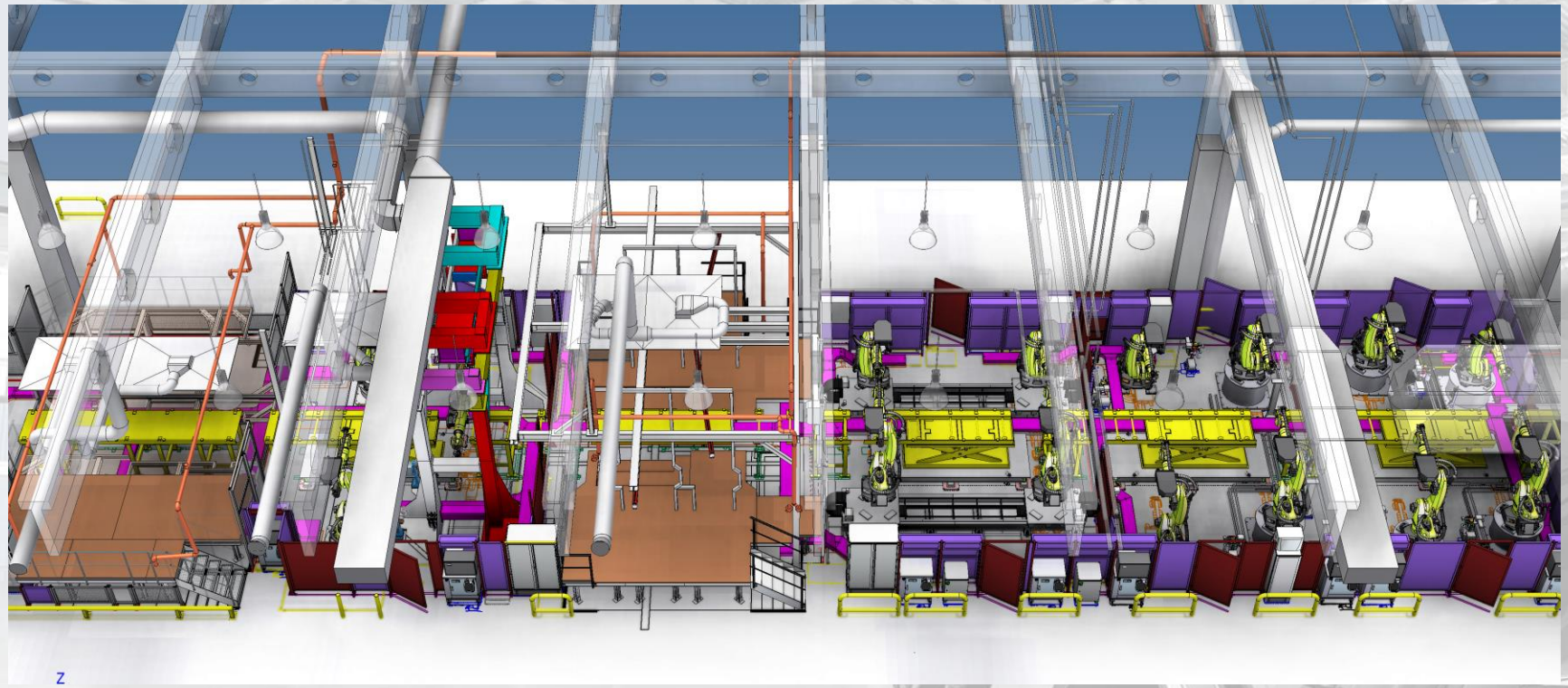


AUTODESK.

Design


Factory Facility 2D
Type a keyword or phrase
rbelcher@ran...
Assemble
Design
3D Model
Inspect
Tools
Manage
View
Environments
Get Started
Online
Align
Assemble
Pattern
Copy
Mirror
Reposition
Sync AutoCAD
Snap Types
Create Solid Floor
Floor/Grid Settings
Factory Options
Factory Help
First Experience Videos
Wiki Help
Discussion Forum
YouTube
Factory Assets
Layout Tools
Suite Workflows
Options
Learn about Factory
Community
Factory Assets
Views
Factory Assets
System Assets
User Assets
Pictures
Library
Factory Properties
Model
Miscellaneous
RIGHT
For Help, press F1
35
16

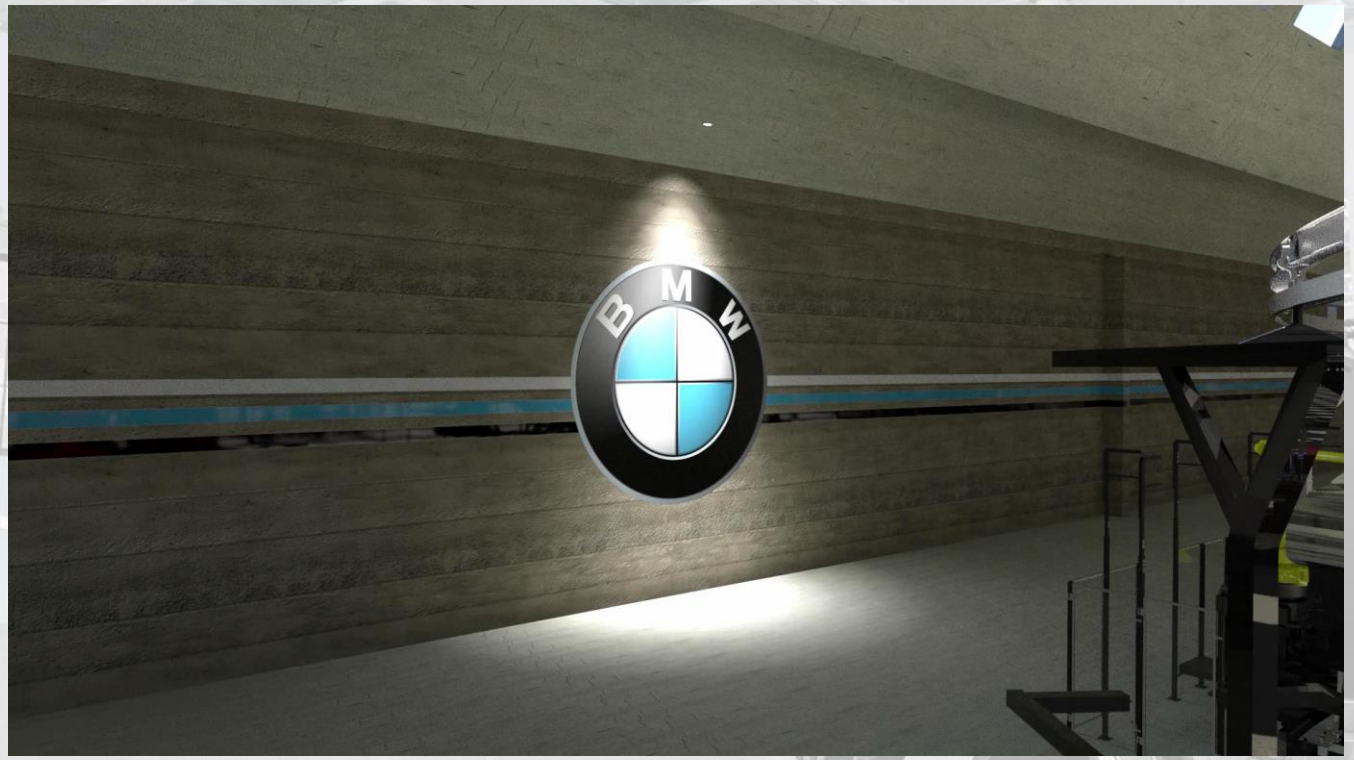
Production Line incl. MEP and Logistics



AUTODESK.

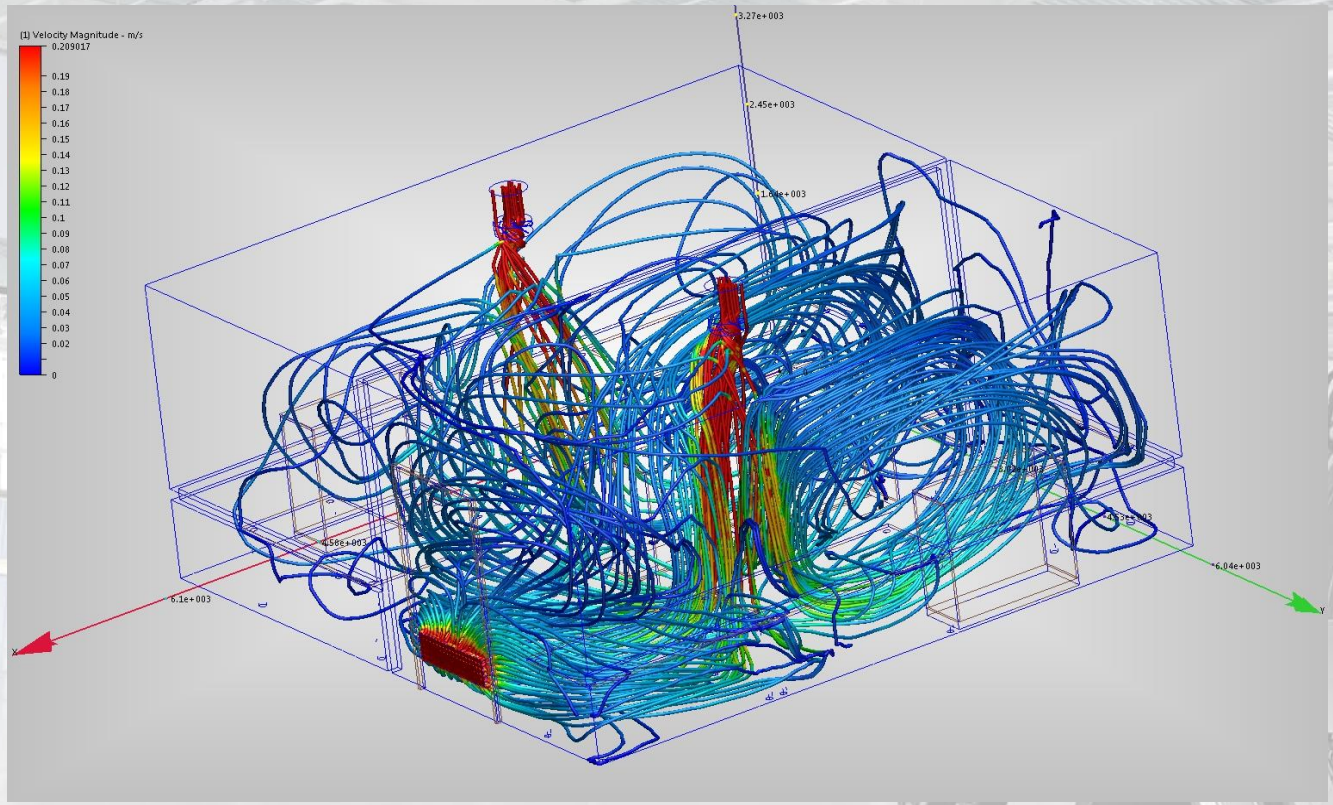
Validate

High End Visualization



AUTODESK.

Simulation Light, Heating and Airflow



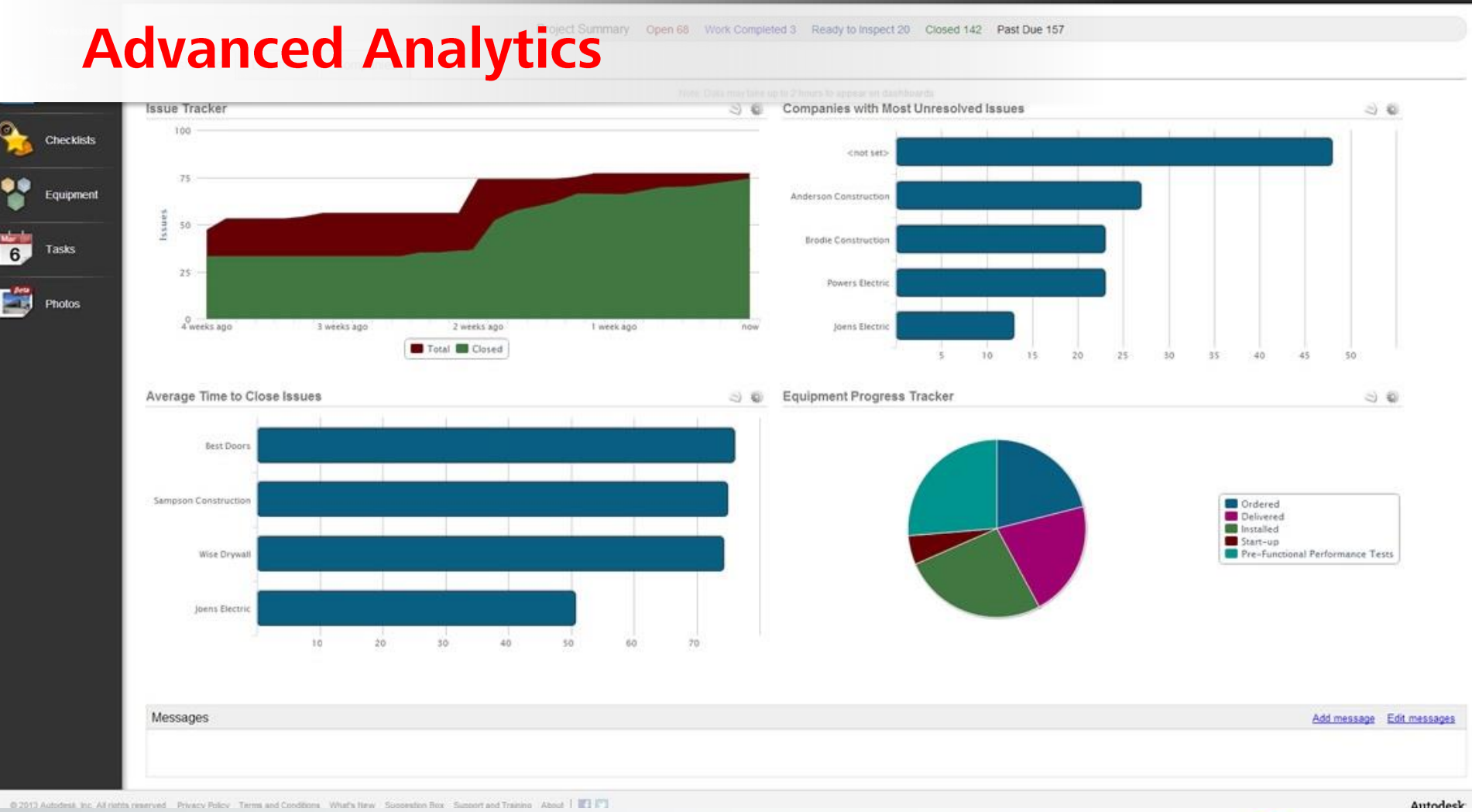
AUTODESK.

Collaboration

Build

AUTODESK.

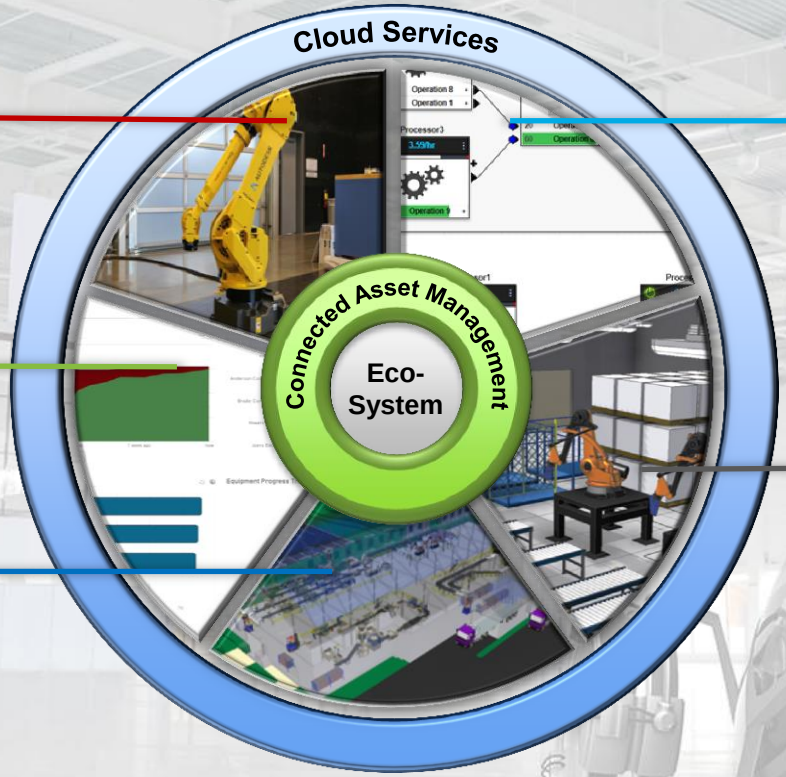
Advanced Analytics



Operate

AUTODESK.

Factory of the Future – High Level



Operate
Connected Assets
Maintenance
Local Update

Validate
Training
Start Up
Hand Over

Build
4D & 5D Planning
Asset Sign Off
Site Management

Plan
Process Simulation
Pre-Planning
Site Knowledge
.

Design
2D & 3D Design
As built scanning
Optimization
Supplier Integration

AUTODESK.