

Driving the Digital Enterprise

Digitalization changes everything

Digital is the main reason just over half of the companies on the Fortune 500 have disappeared since the year 2000. ”

Pierre Nanterme, CEO Accenture

Technological forces transforming industry

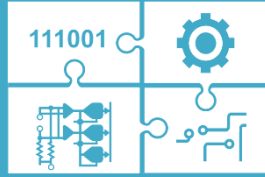
Changing
the way
products
come to life

Changing
the way
products
are realized

Changing
the way
products
evolve



GENERATIVE
DESIGN



INTELLIGENT
MODELS



MACHINE
LEARNING



ADDITIVE
MANUFACTURING



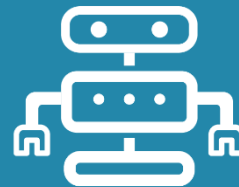
CLOUD
TECHNOLOGY



KNOWLEDGE
AUTOMATION



SYSTEMS OF
SYSTEMS



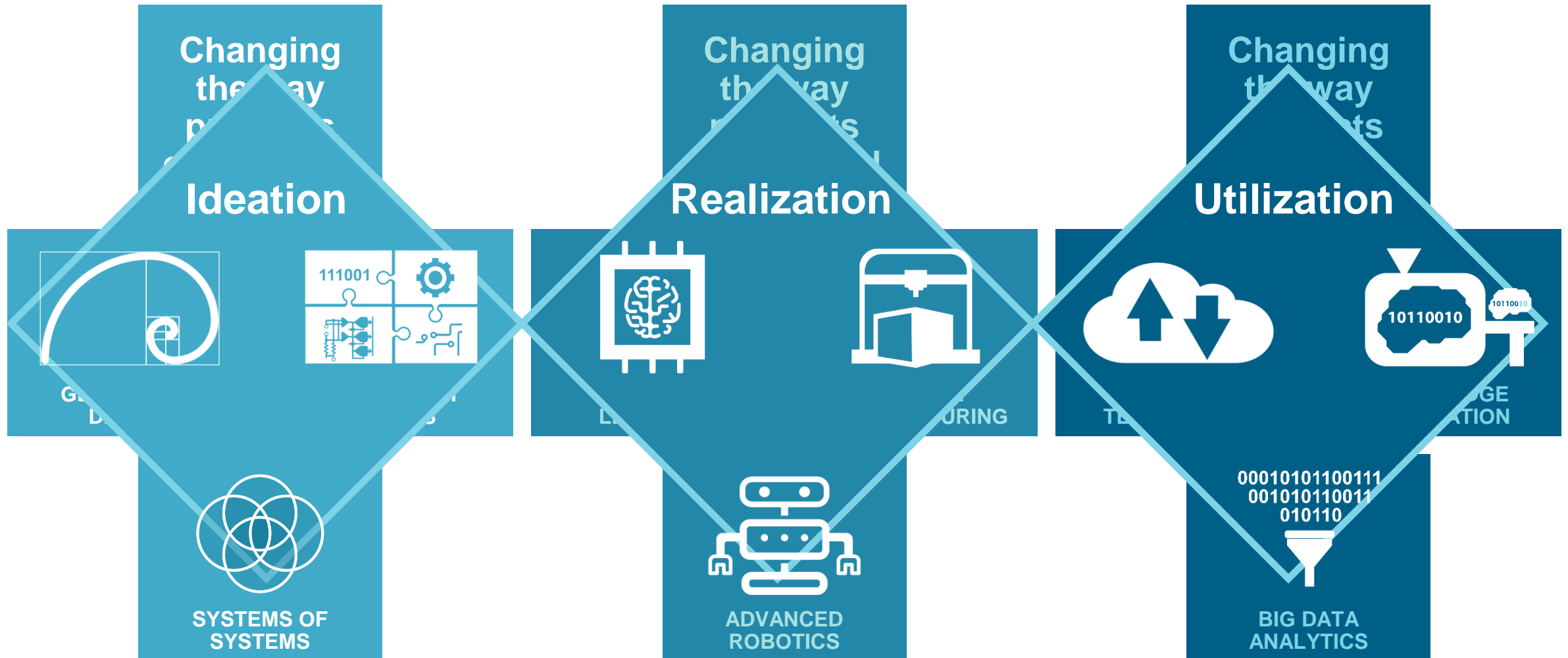
ADVANCED
ROBOTICS

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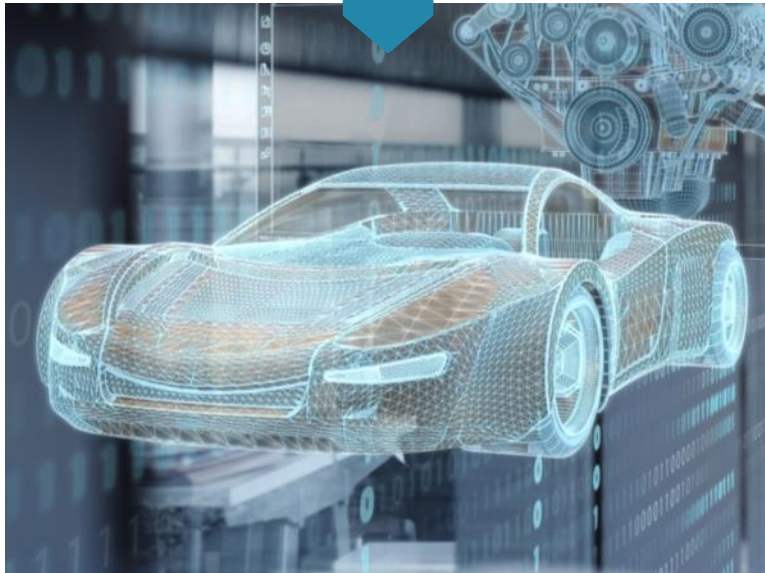
BIG DATA
ANALYTICS

Manufacturers must embrace the technologies and transform their business into a Digital Enterprise

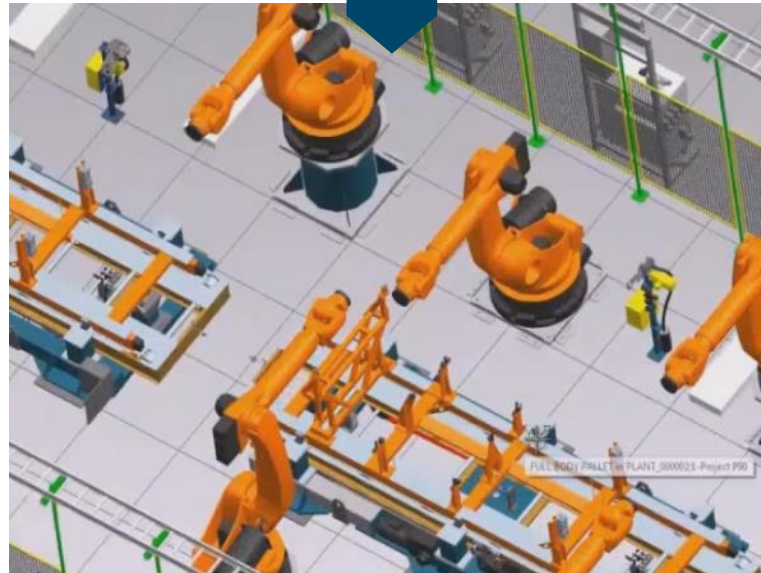




feed back insights to continuously optimize product and production



**Digital Twin of
the product**



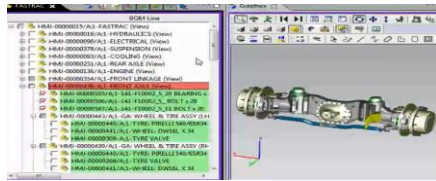
**Digital Twin of
the production**



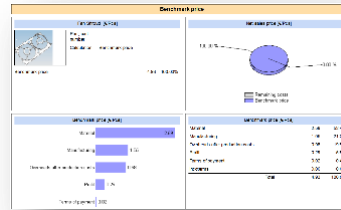
**Digital Twin of
the performance**

Digital Thread - Integrate the value chain

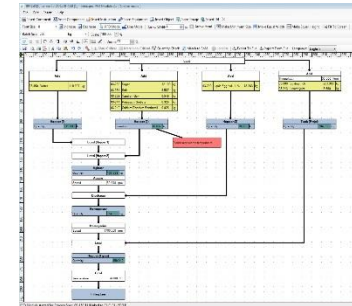
SIEMENS
Ingenuity for life



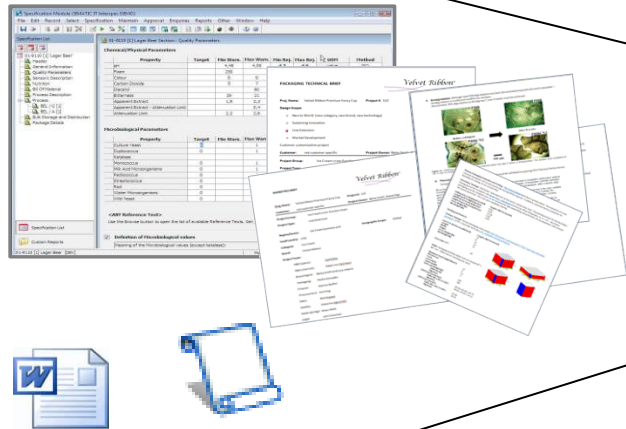
Simulation & Testing



Cost Mgmt / ERP int

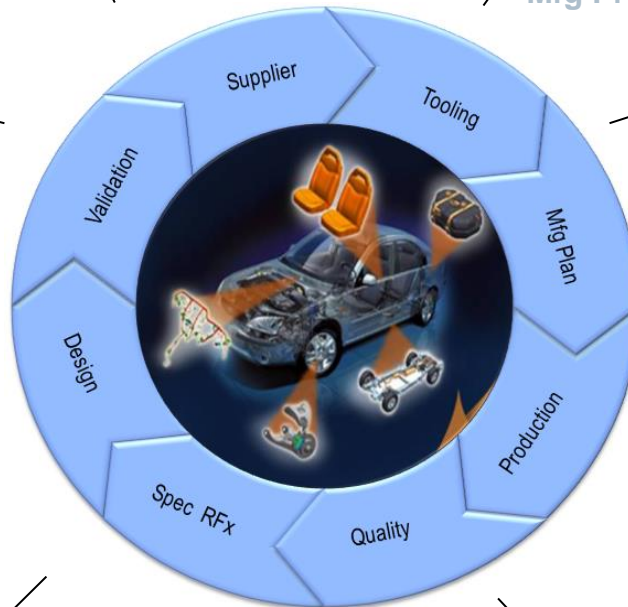


Mfg Process Management



NPD

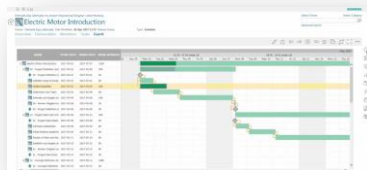
Program Management



Quality Management

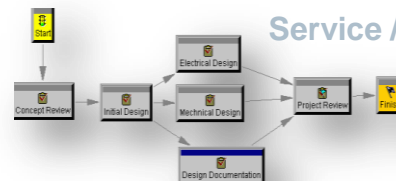


Production Execution



Change Management

Service / Warranty



Target	Plan	ASSEMBLY MAIN LINE				Actual	Delta
400	365					360	5
Previous	Faulted					Next	22
10	20	30	40	50	60	70	80
10 ⁰² 01:43	20 ⁰² 00:43	90 ⁰³ 02:21					
10	10074 Torque tool fault @ K12 11:100/0				01:43		
20	1234567899 Material Stop @ K13				0		
10	10210032 RH Front Wheel Torque fault				123456		
Shift 1 Hr 8 2:30 PM						Monday 1/3/2015	

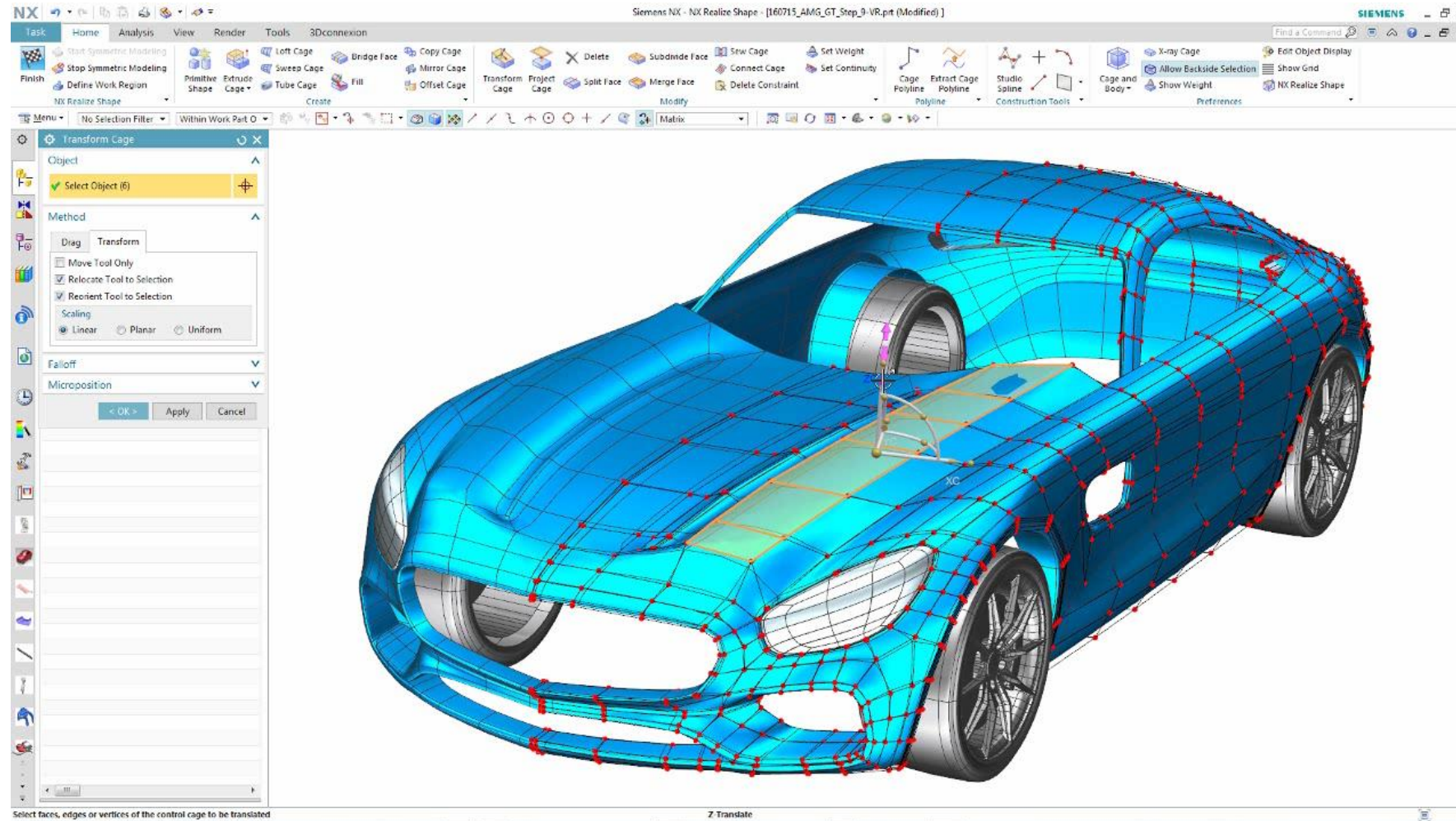
Model Based Systems Engineering

Simcenter



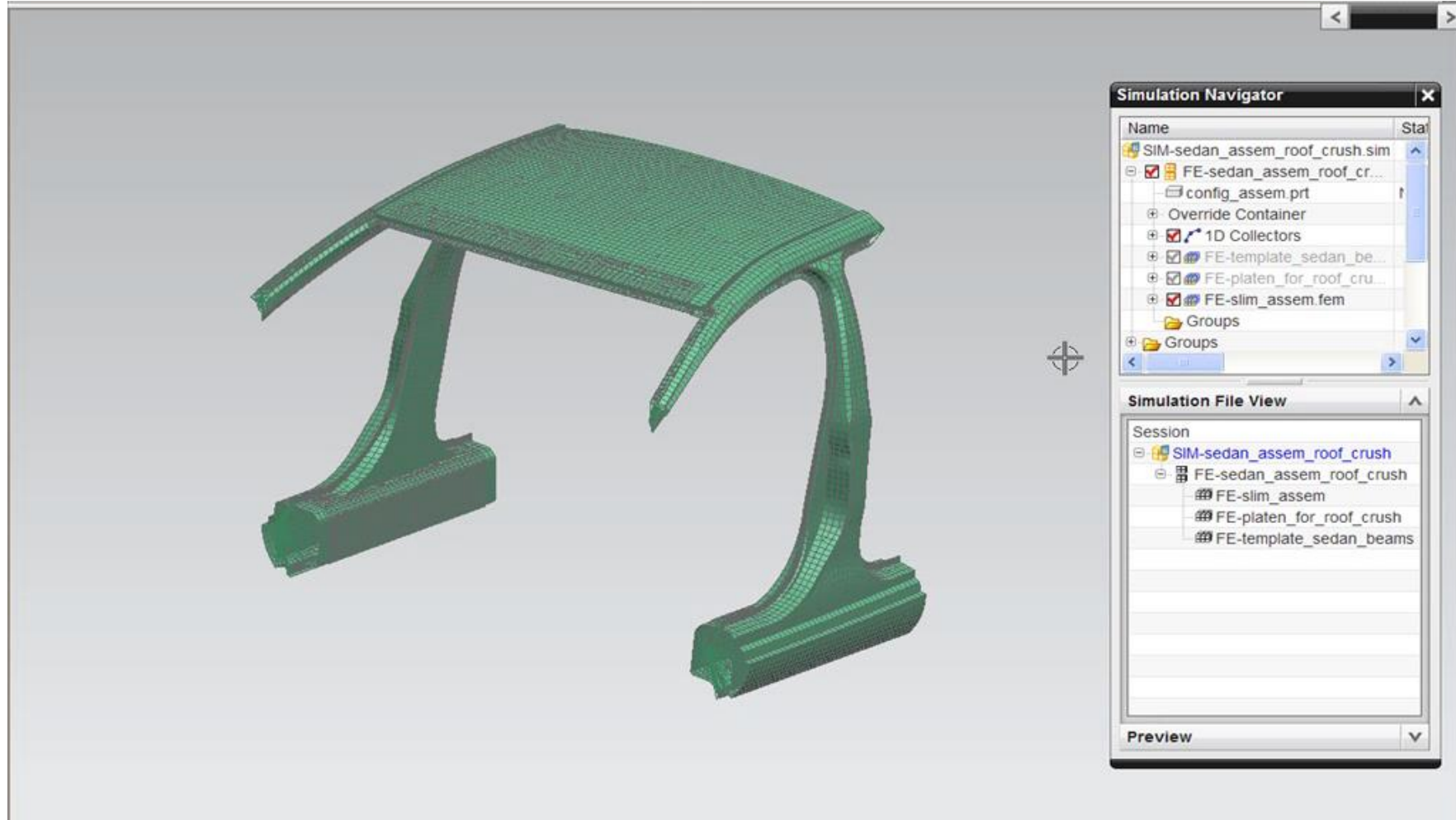
Design the product

NX CAD



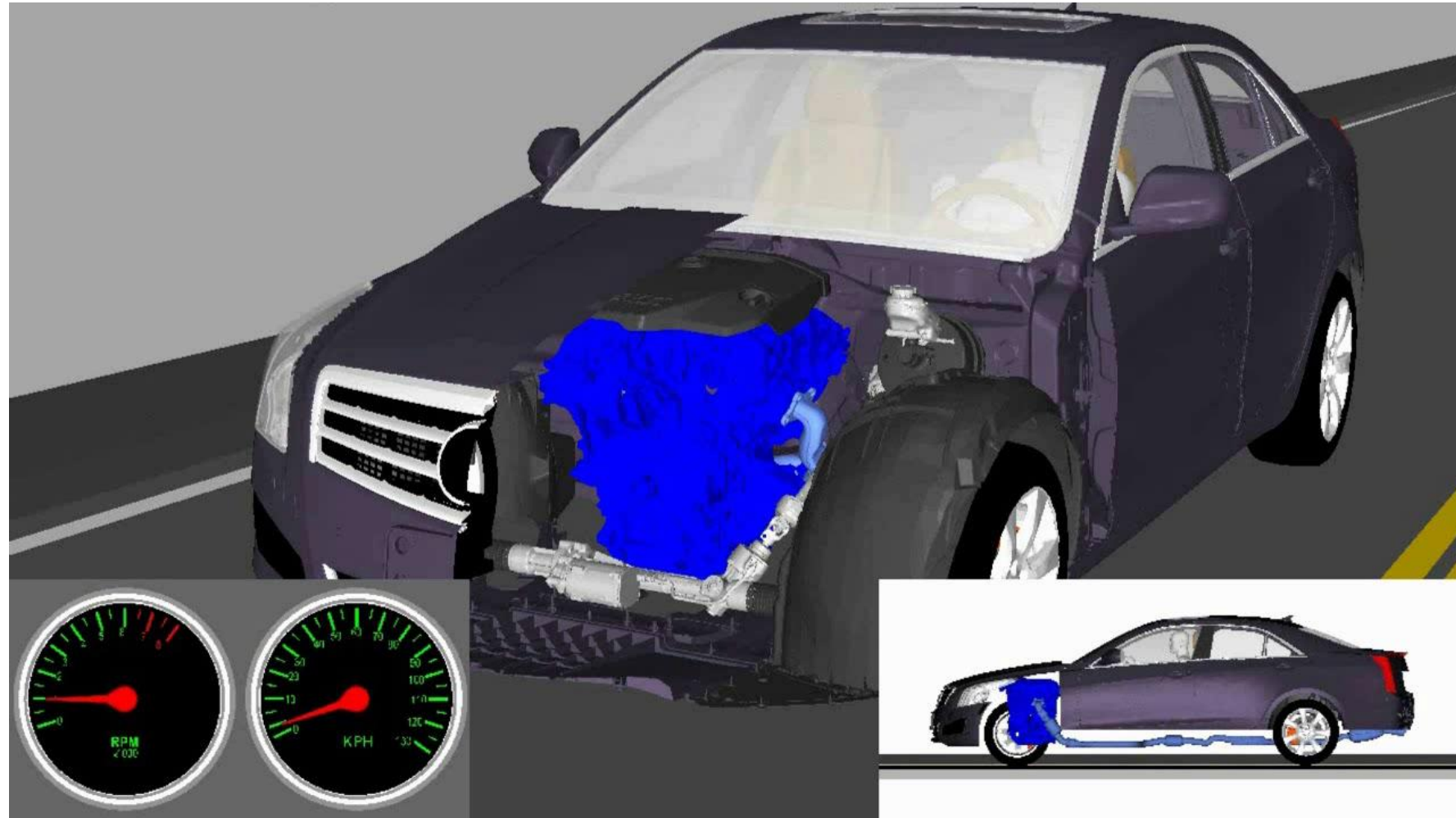
Simulate
the physical
behavior

Simcenter



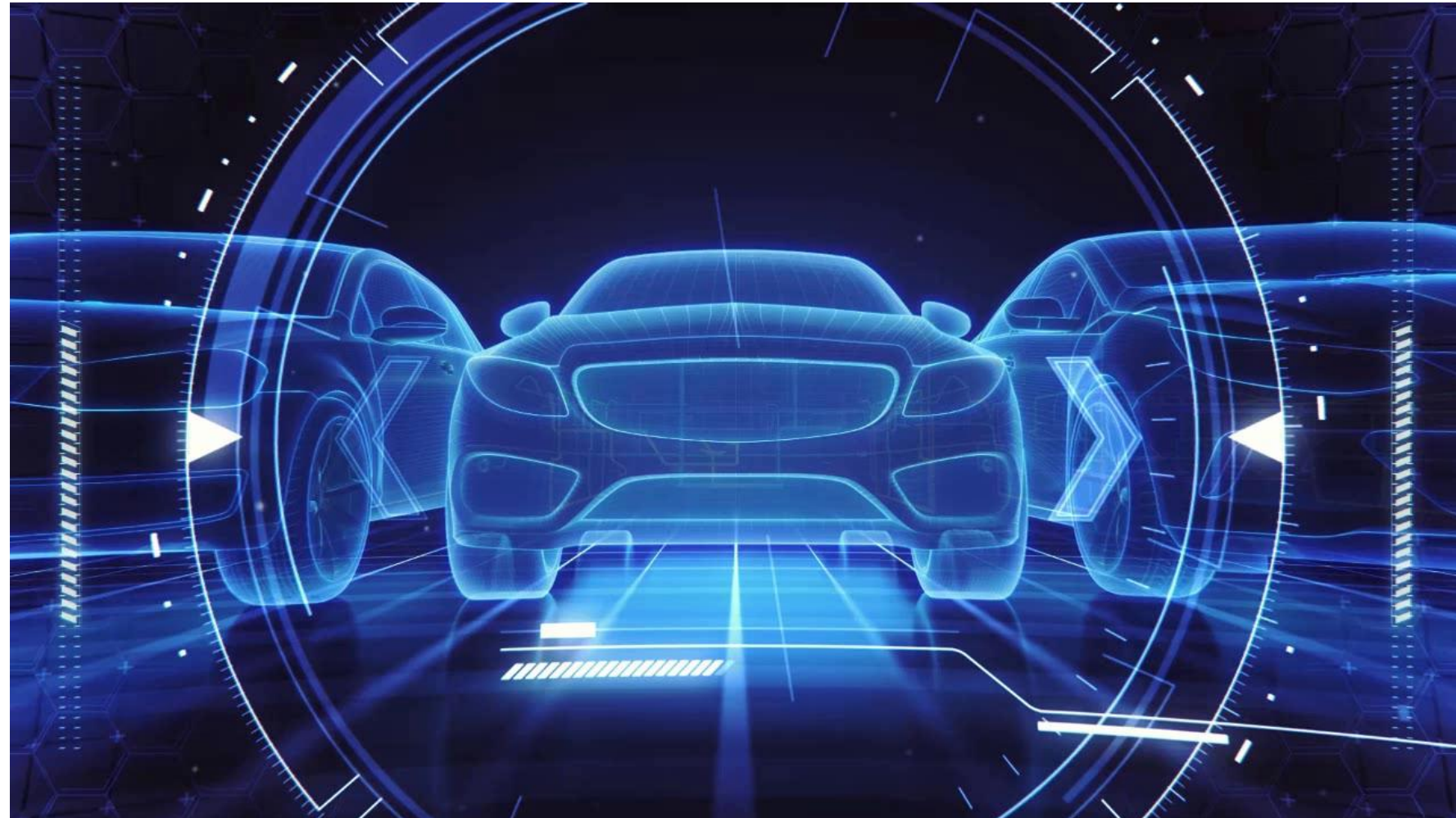
Simulate the product

Simcenter



Design and simulate electronic systems

Mentor Graphics

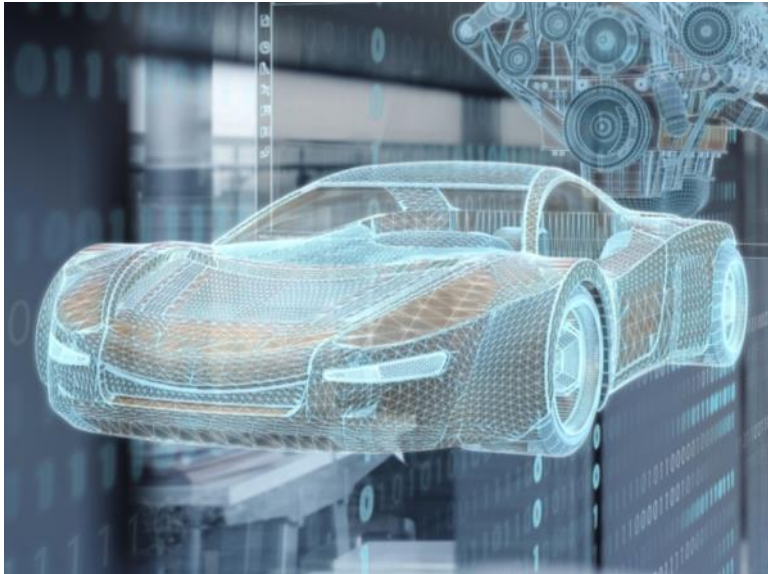


Simulate
complex traffic
scenarios to
validate systems
for autonomous
driving

PreScan
(TASS International)



Digital Twin



**Digital Twin of
the product**



**Digital Twin of
the production**

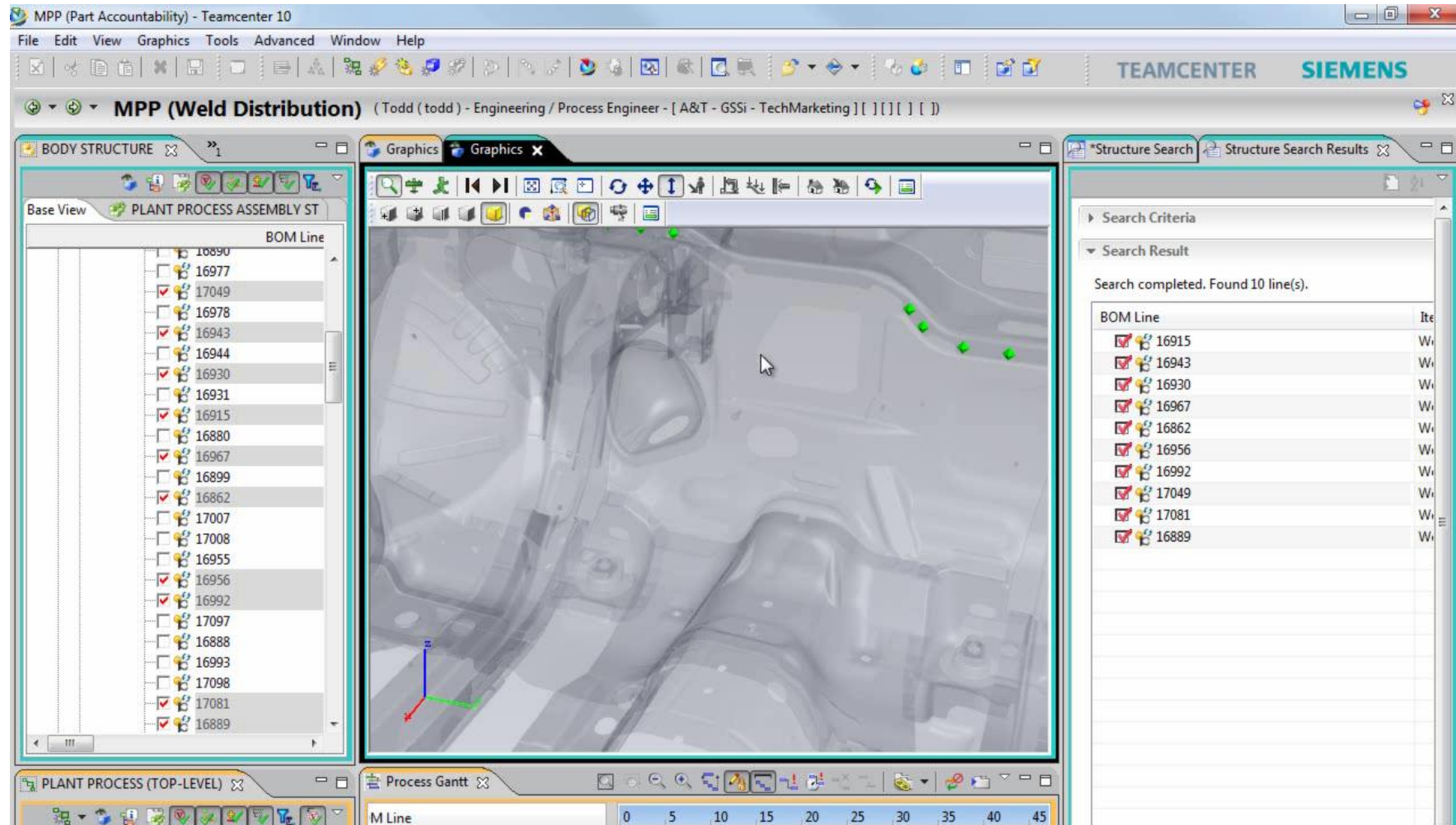


**Digital Twin of
the performance**

Production planning

Plan your
production
process

Teamcenter
Manufacturing

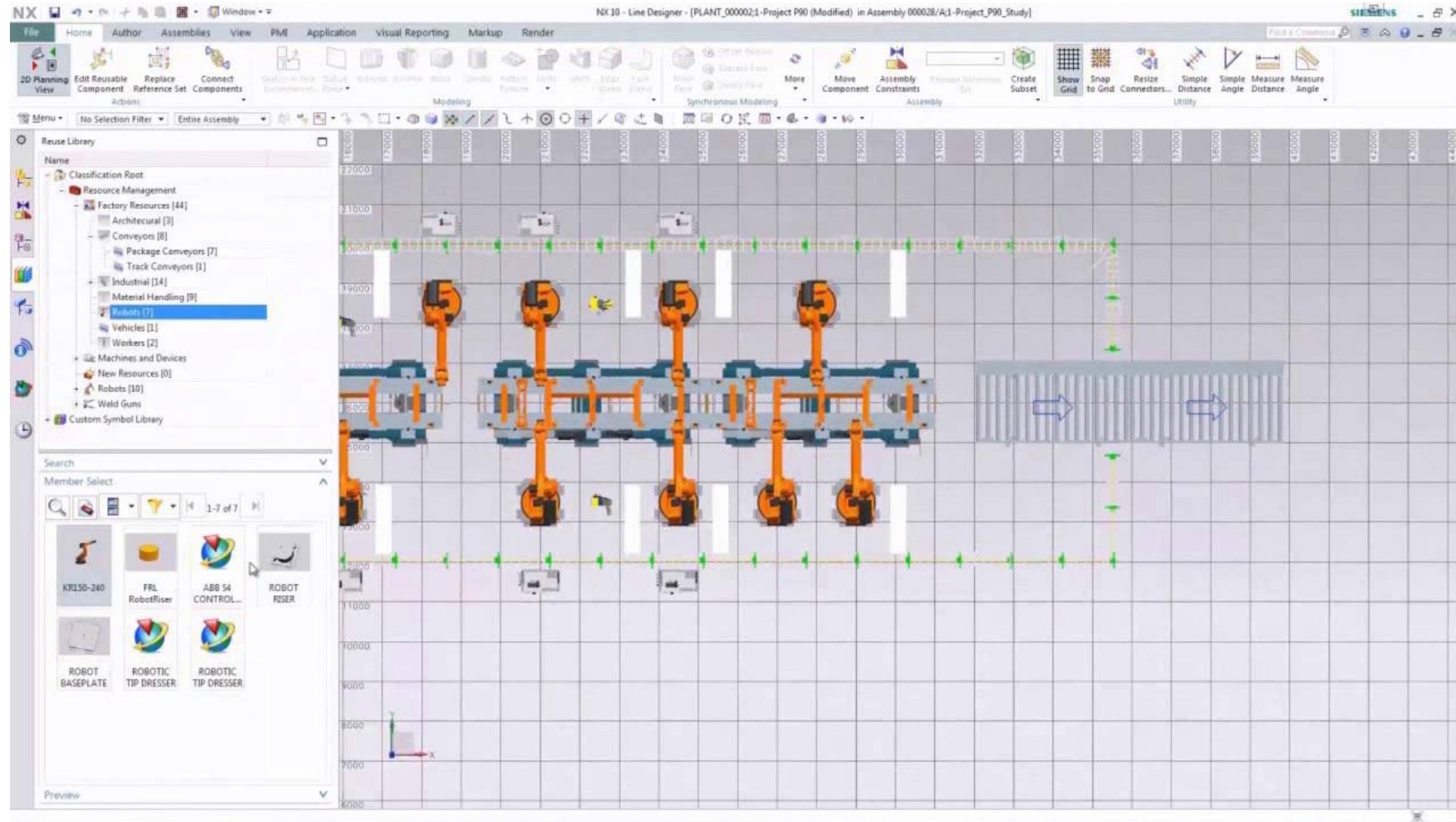


Production planning



Create the layout and select the equipment

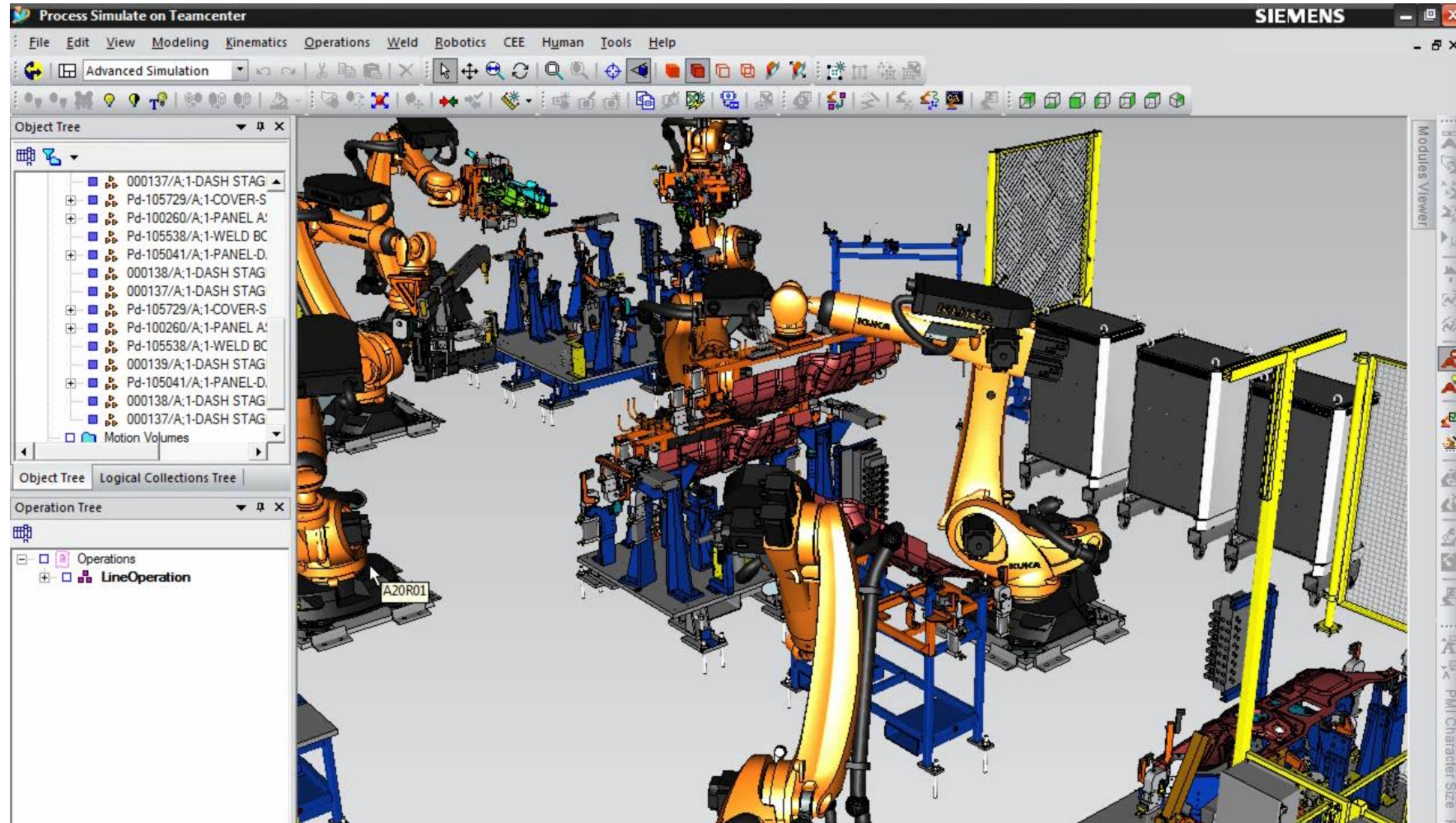
Line Designer



Production planning

Simulate and optimize your production process

Tecnomatix
Process Simulate

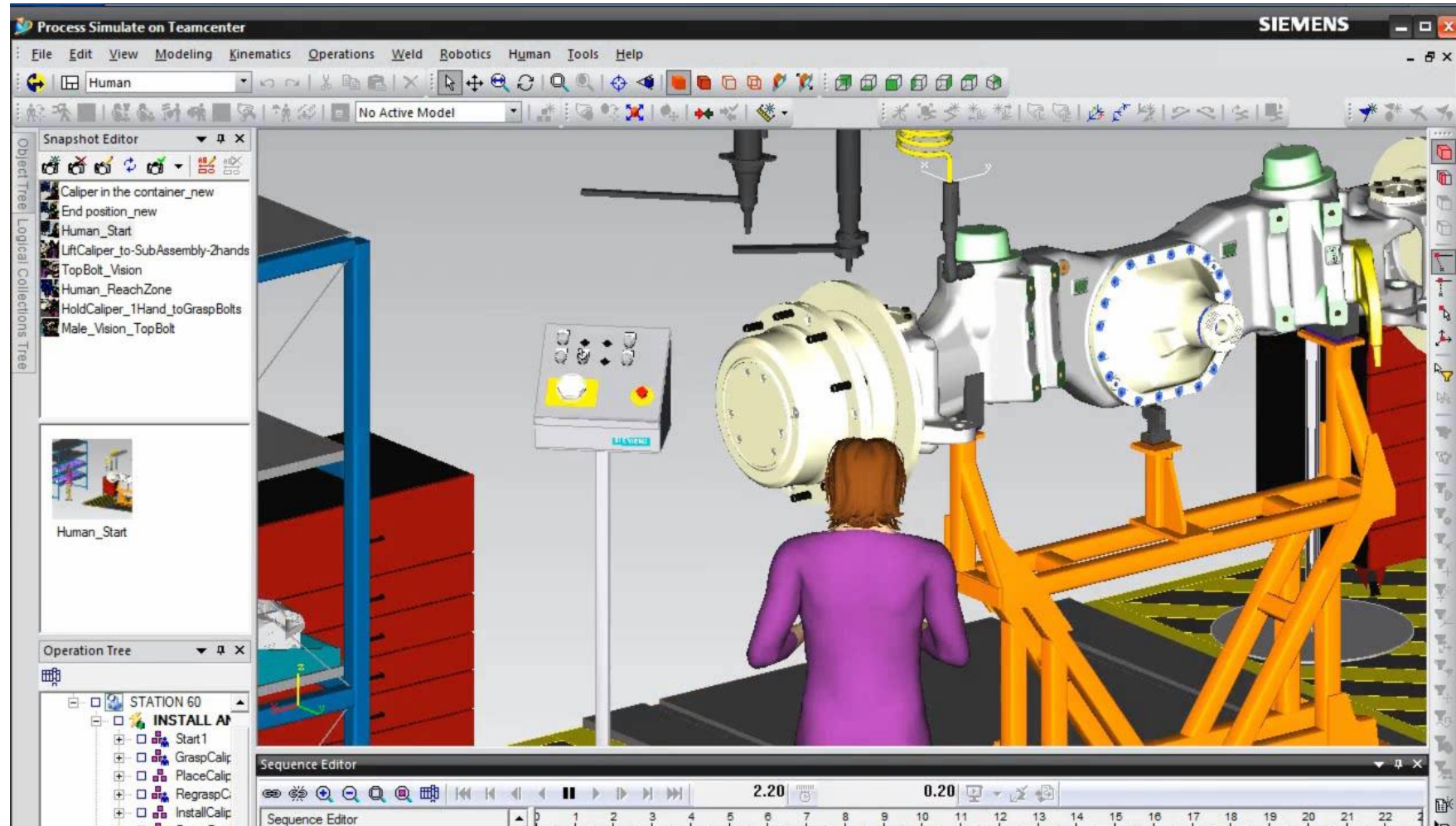


Production planning



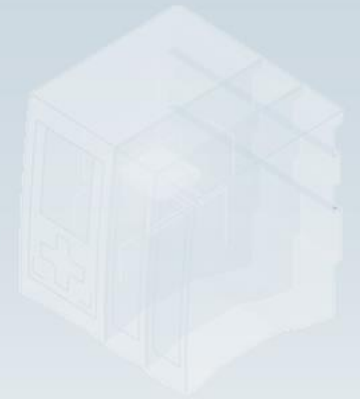
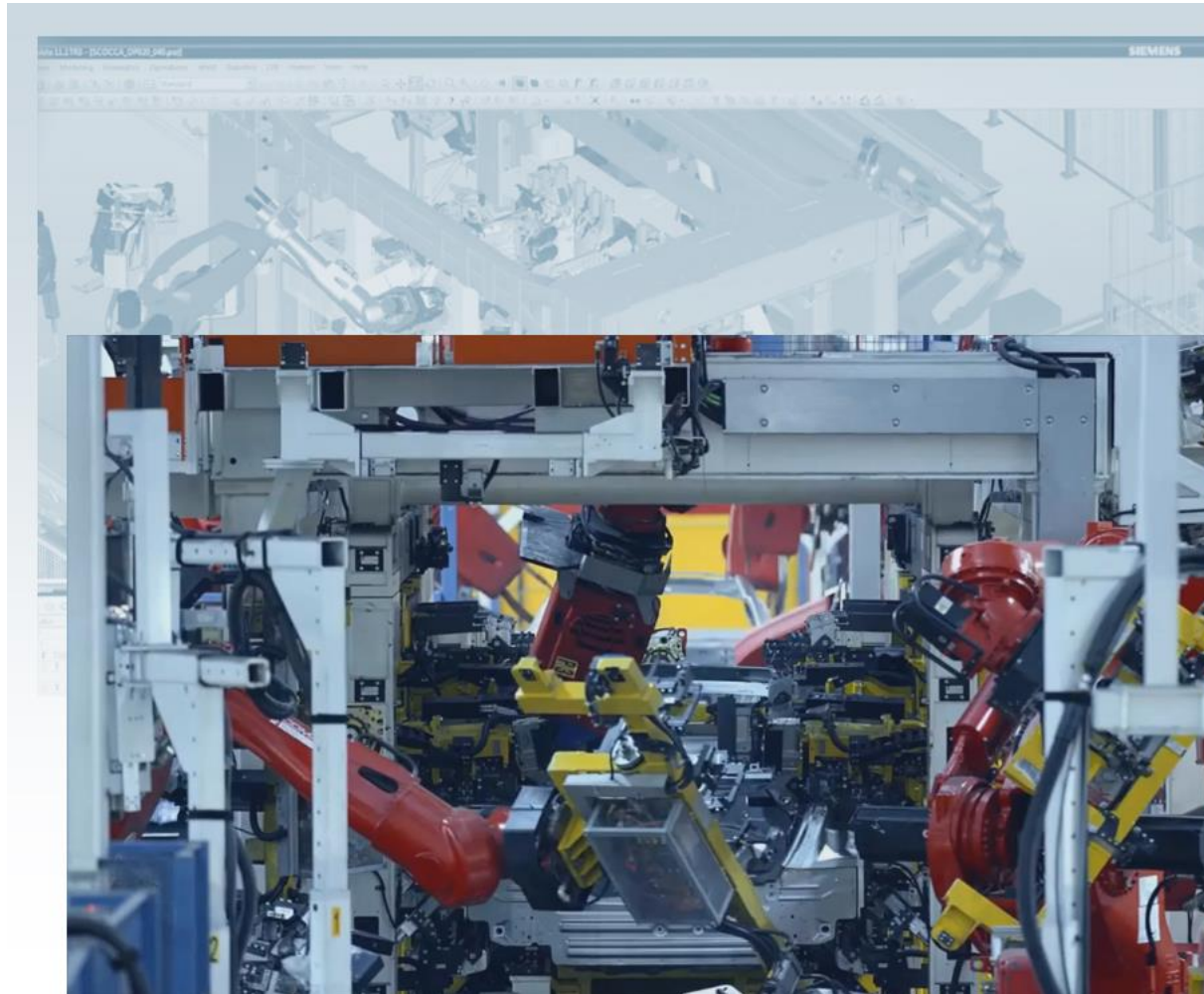
Simulate
working
conditions
for humans

Tecnomatix
Process Simulate



Fast and efficient engineering and commissioning

Totally Integrated Automation Portal

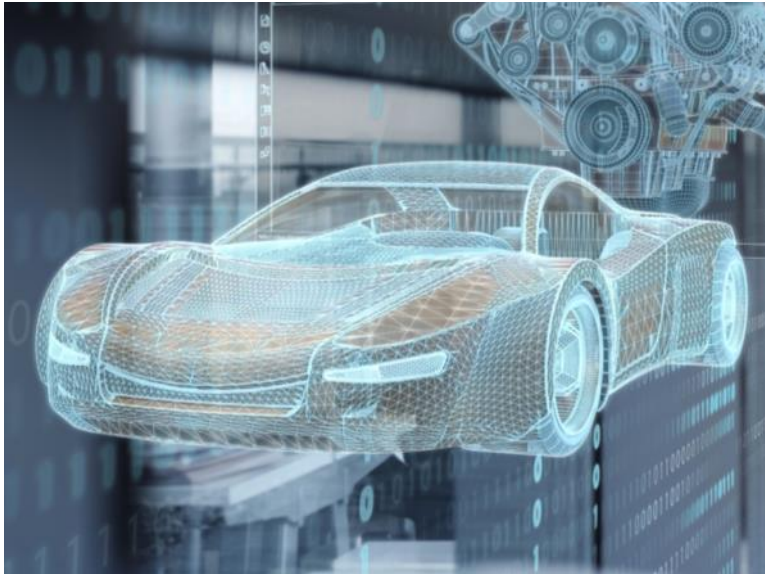


**SIMATIC
S7-1500**

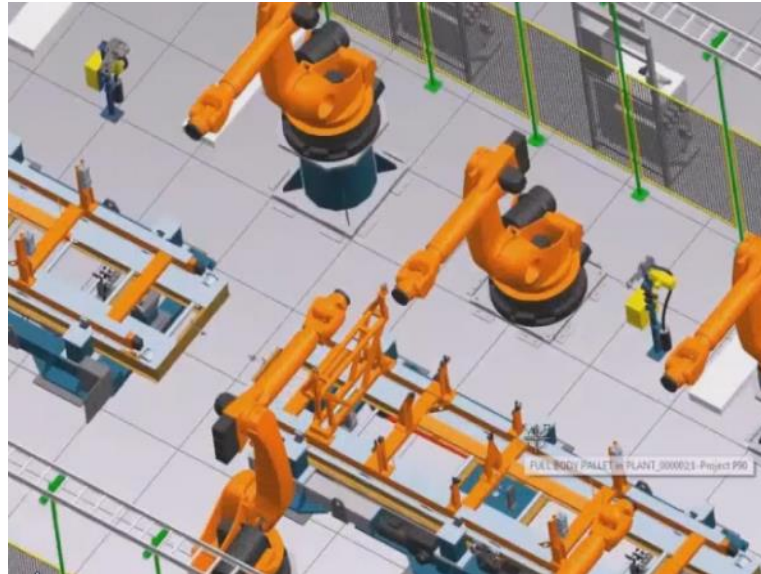


Creating the most holistic Digital Twin available on the market

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**Digital Twin of
the product**



**Digital Twin of
the production**

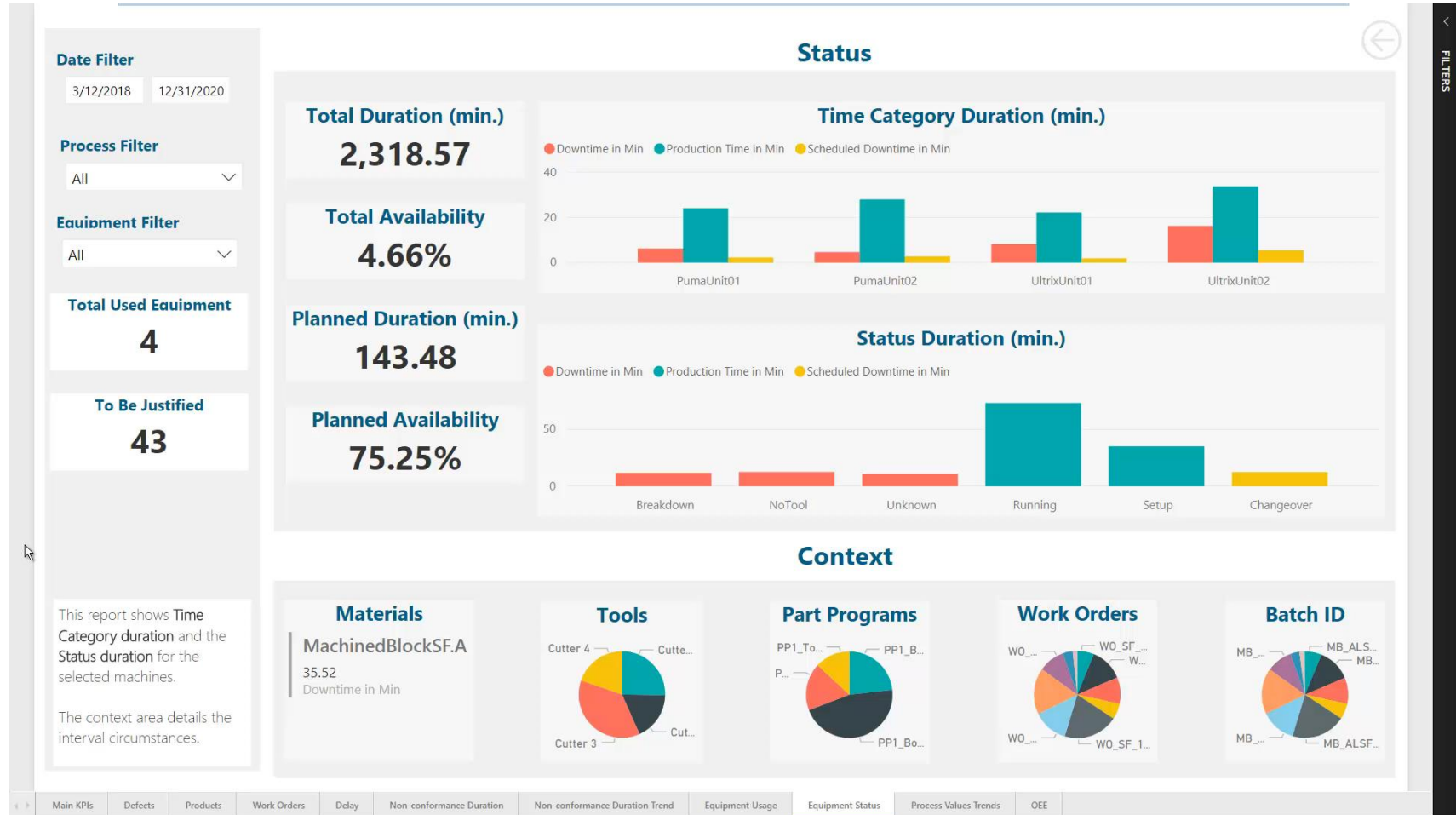


**Digital Twin of
the performance**

Production execution

Schedule and process work operations, run quality inspection operations

SIMATIC IT, Camstar,

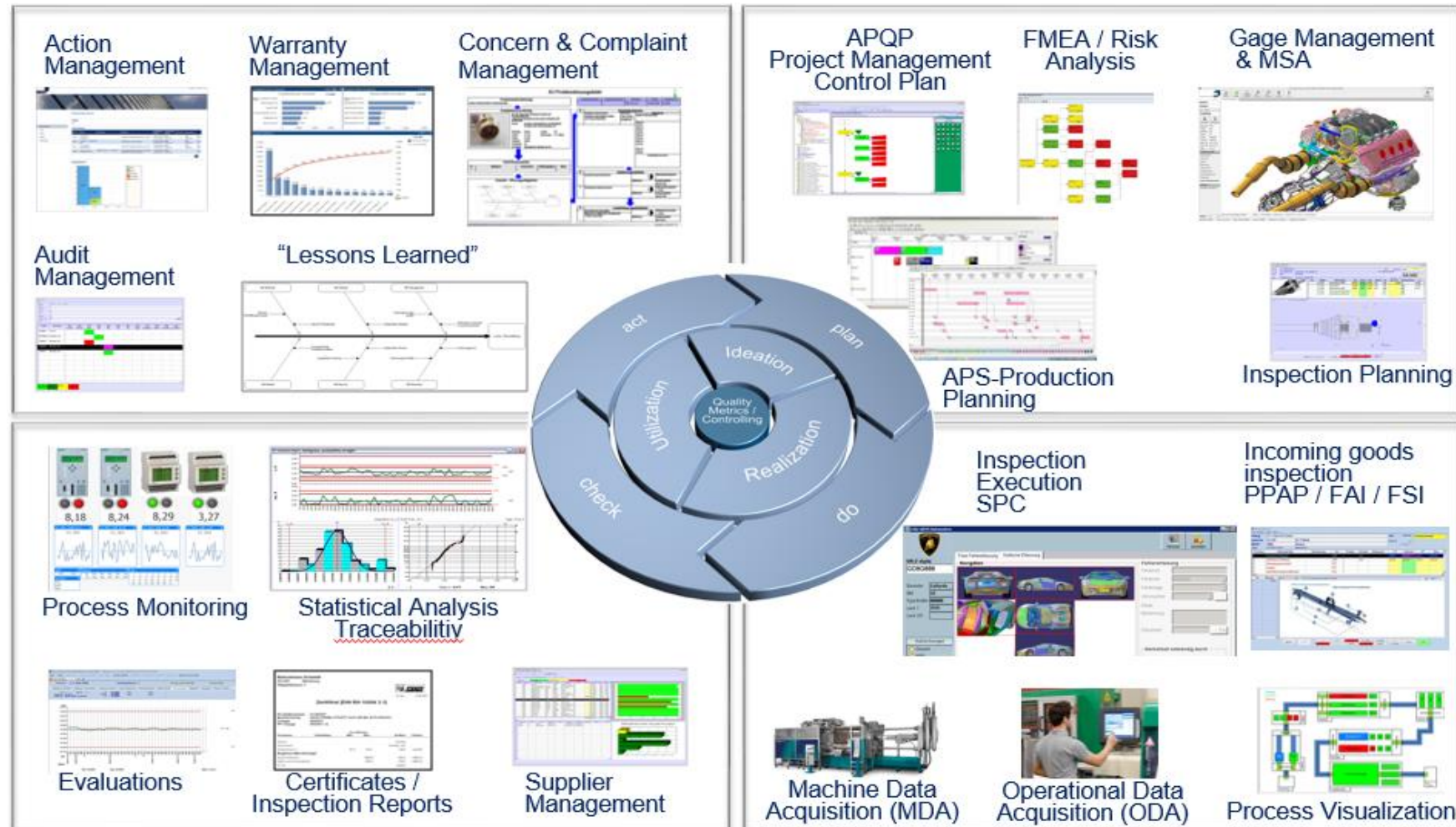


Quality Management System



Schedule and process work operations, run quality inspection operations

SIMATIC IT, Camstar,



Production execution

Efficient and secure production with TIA

SIMATIC, SINUMERIK,
SIMOTION, SIMOTICS,
SINAMICS and SIRIUS



Holistic security offering

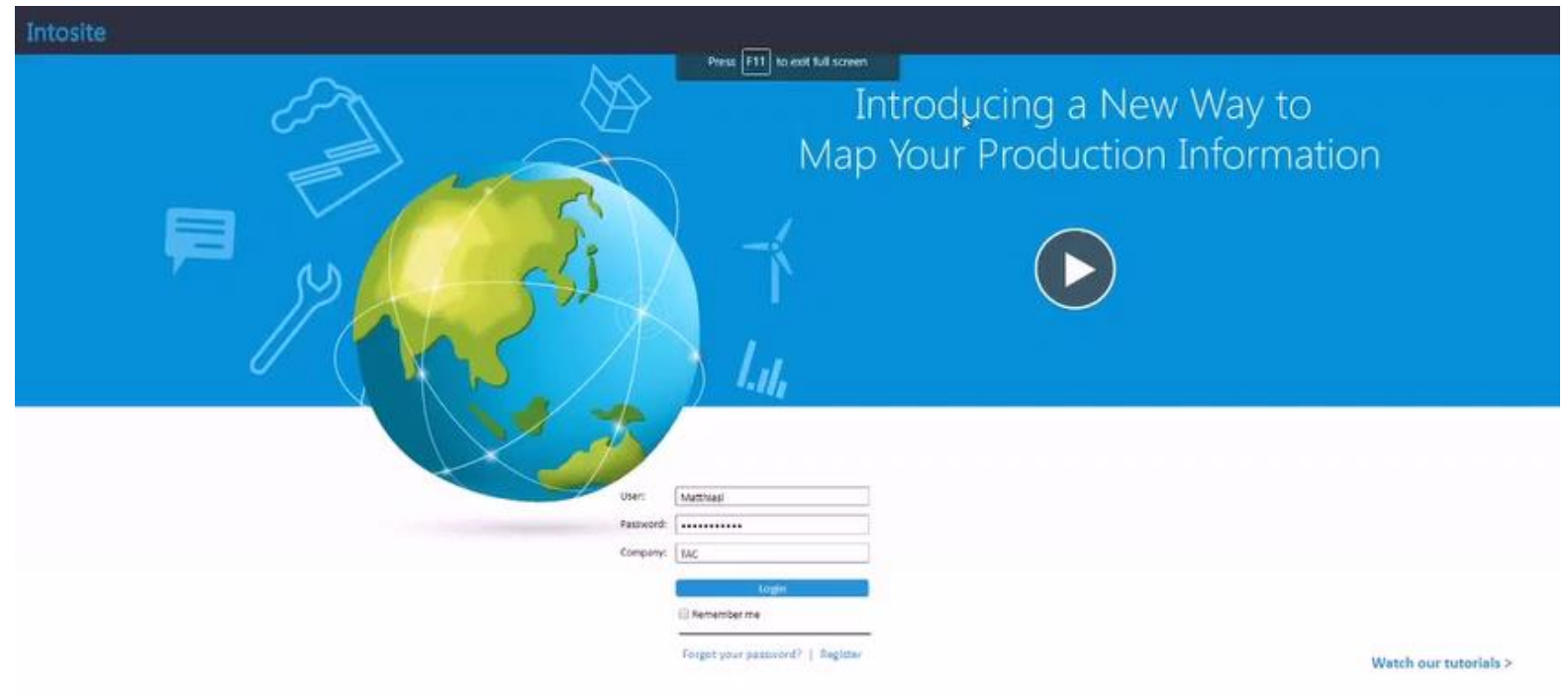
Defense-in-Depth concept

- Plant security
- Network security
- System integrity
- Plant security services



Let your
products and
your production
speak to you

MindSphere –
the cloud-based, open
IoT operating system



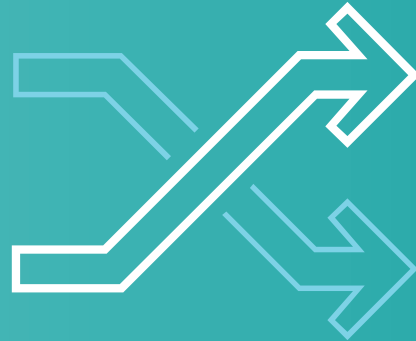
Our customers have essential requirements – throughout the manufacturing industry

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Speed



Flexibility



Quality



Efficiency



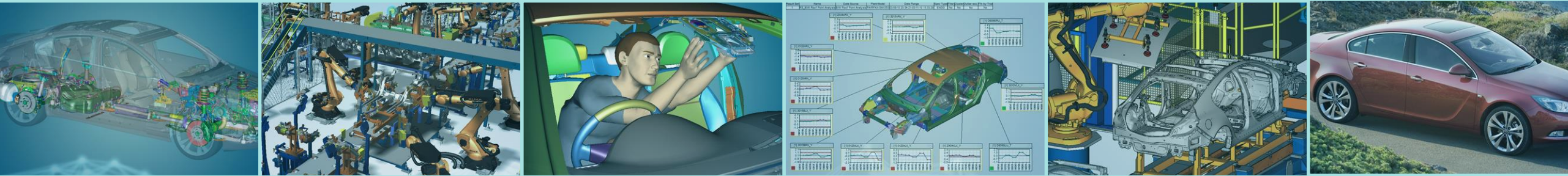
Security



Digital Twins at Every Step are Connected Through a Digital Thread

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Thank You