



Digital Convergence: Powering Siemens' Next Horizon

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SIEMENS

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Industrial AI is moving from
experimentation to real-world
deployment at scale.

Roland Busch



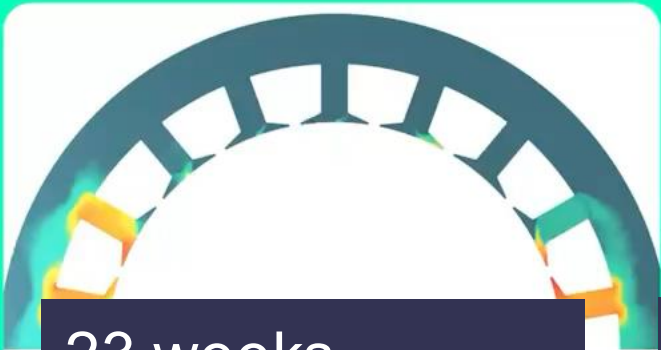
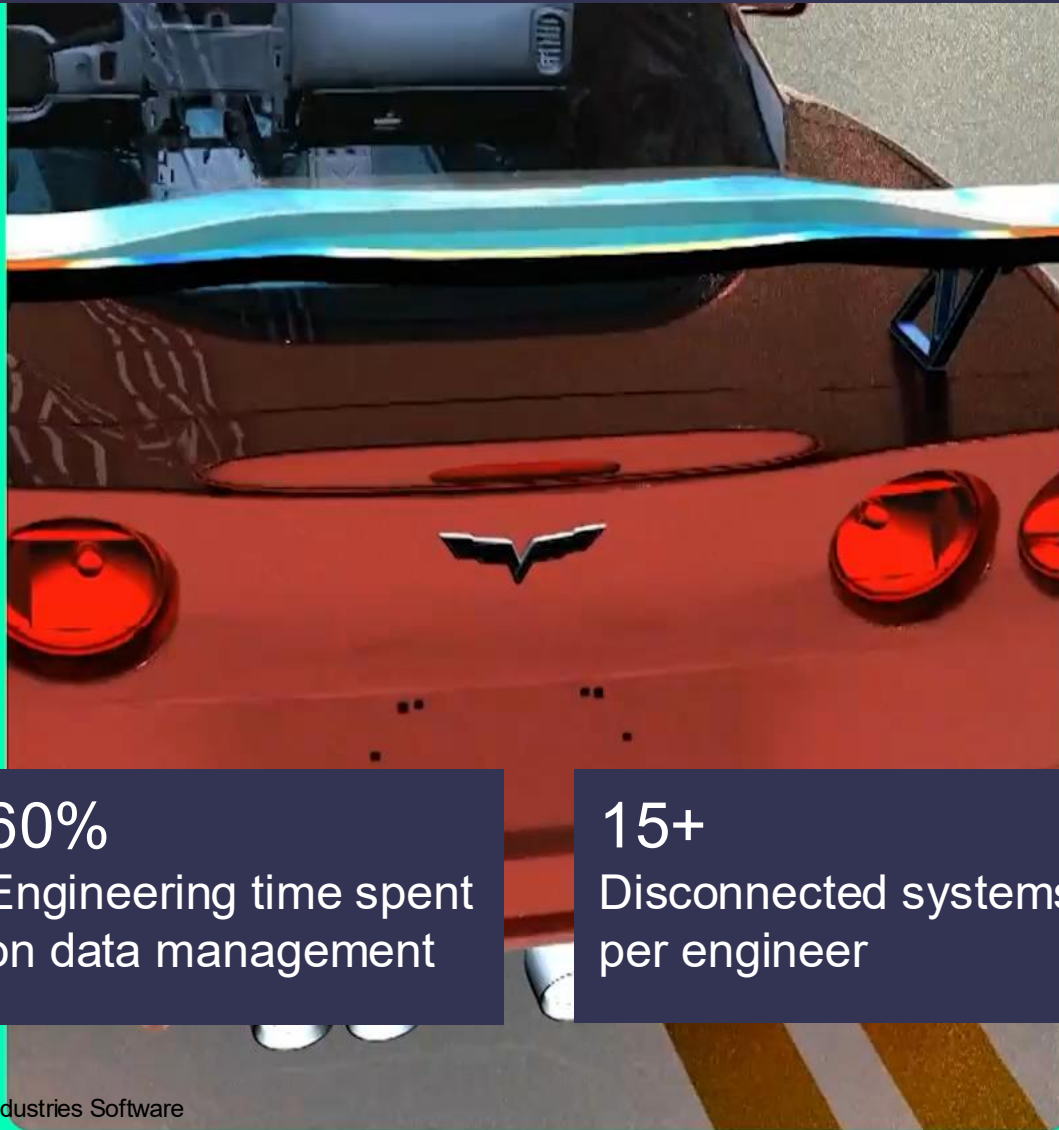
Challenges for the industry grow at an extreme rate



Challenges for the industry grow at an extreme rate

Faster innovation cycles

Today's engineering reality



23 weeks
Average time from
concept to prototype

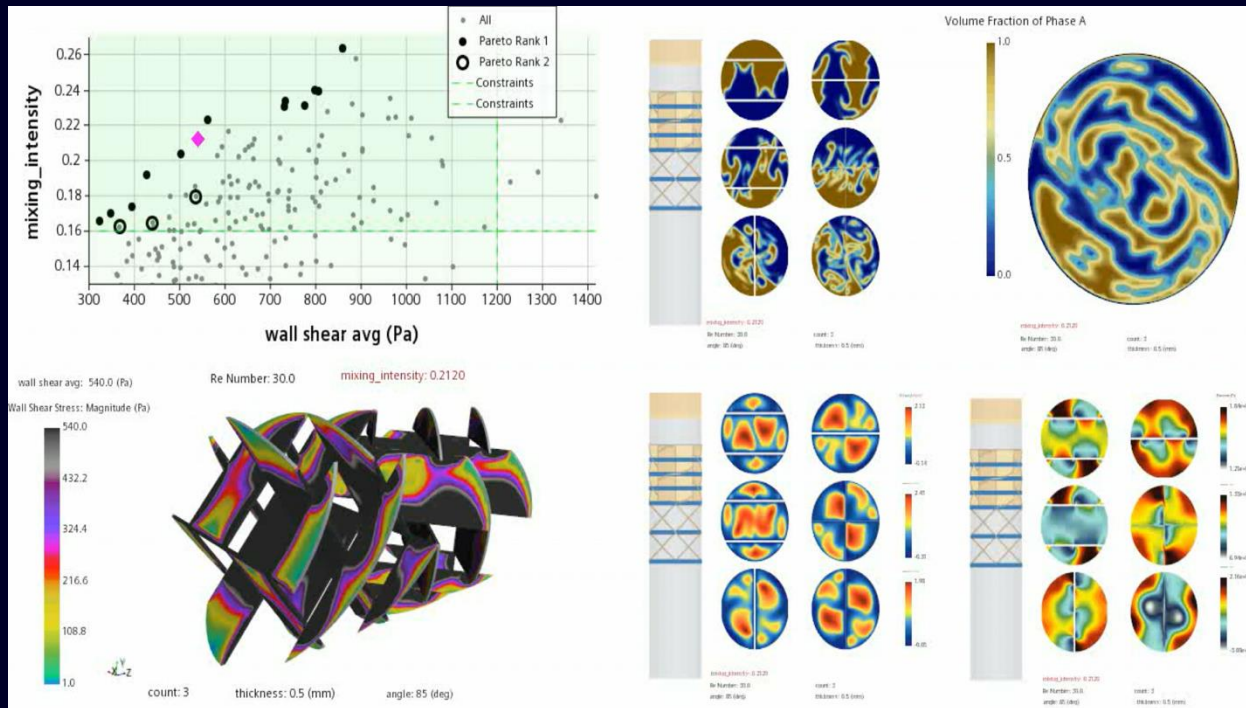
60%
Engineering time spent
on data management

15+
Disconnected systems
per engineer

40+
Tools used across the
product lifecycle



Engineering Workflows Today...



Pre-processing

10+ hours
for 300 parts

Numerical analysis

45 minutes
to 20 hours

Post-processing

4 hours

Design exploration
and optimization

2 weeks

The new Simcenter Portfolio for AI-accelerated Engineering

Explore innumerable
“what if” scenarios faster

Design and produce
products right the first time

Save materials and costs
with fewer physical prototypes

Make confident decisions
for continuous optimization

Temperature (C)

15.00 16.25 > 17.50



Battery SOC

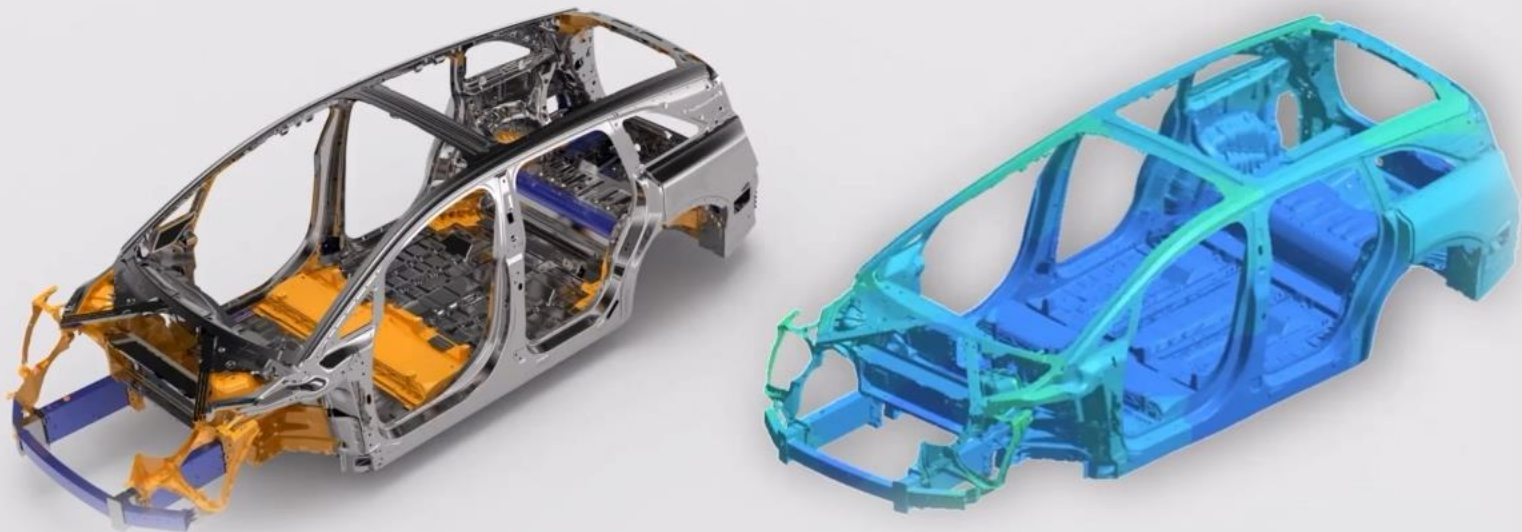
50 > 100



Battery Volumetric Heat (W/m^3)

< 0 12500 > 25000





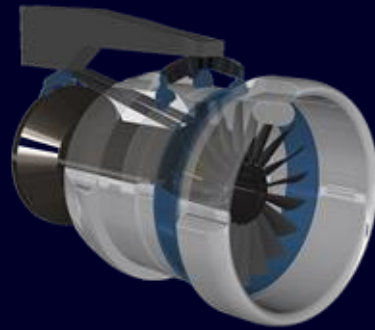
Traditional CAE		Time-consuming and requires deep expertise
Simcenter Simsolid	30X Faster	No Geometry simplification or meshing
Simcenter PhysicsAI	1000X Faster	Geometric Deep Learning Rapid design exploration Real-time multi-disciplinary simulation & optimization

Faster Engines



Fluids & thermal

250X speed up in
external aerodynamics



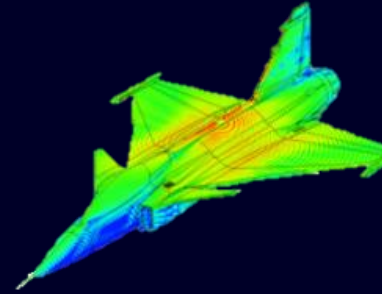
Mechanical & manufacturing

100X speed up
in structural
simulation at Airbus



Test & Smart Vehicle Tech

7X faster
modal analysis



Electromagnetics

Predict Antenna
Pattern at System
Level 60X faster



Systems

34X faster system
simulation using
ROM AI

Faster Engines:

1. Simcenter Simsolid
2. AI-Powered Engineering: Physics AI, ROM AI, Expert AI, Copilots
3. Physics embedded neural networks in numerical solvers



Leonardo

Eliminate physical testing

Simulate the entire multiphysics process
(mechanical + electronics)

Faster Engineers

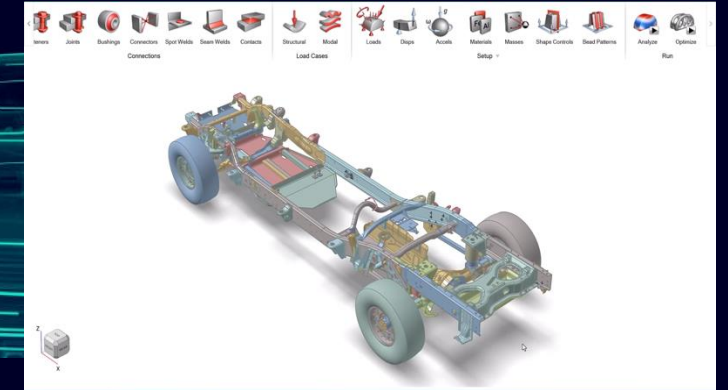
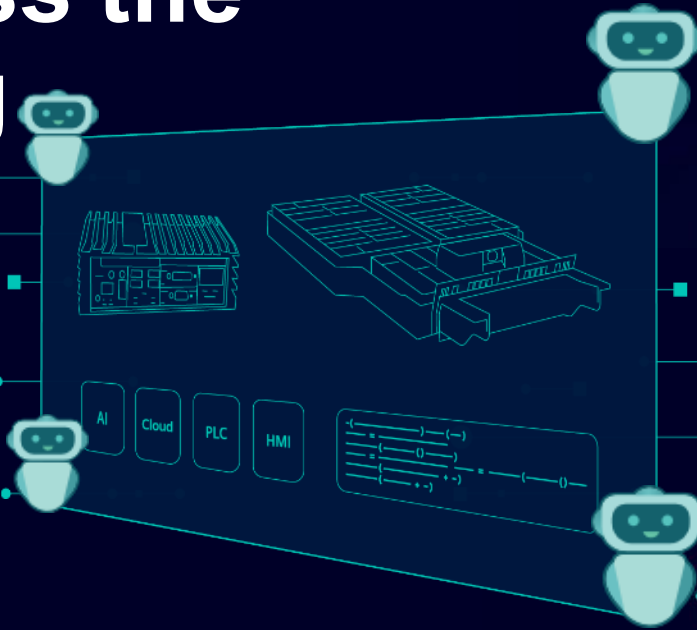
Embed AI across the full engineering workflow

Copilots

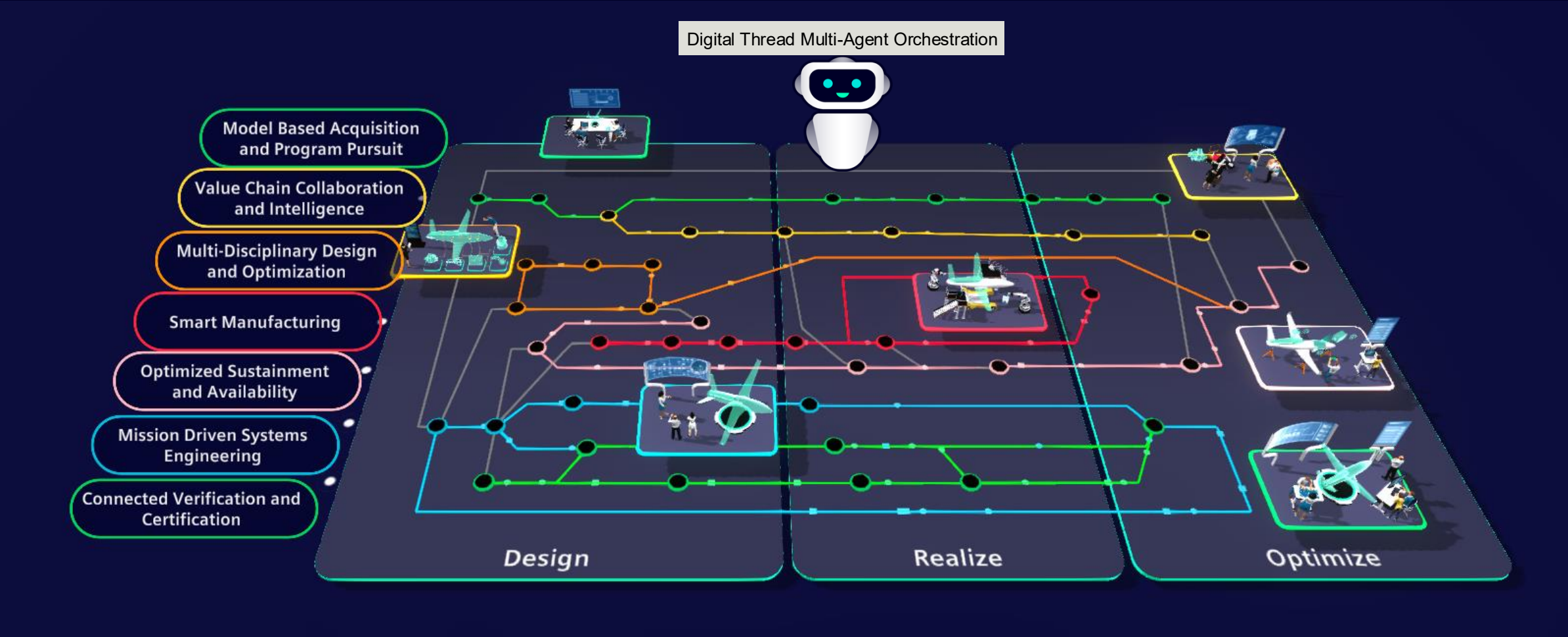
Automation

Physics-informed Intelligence

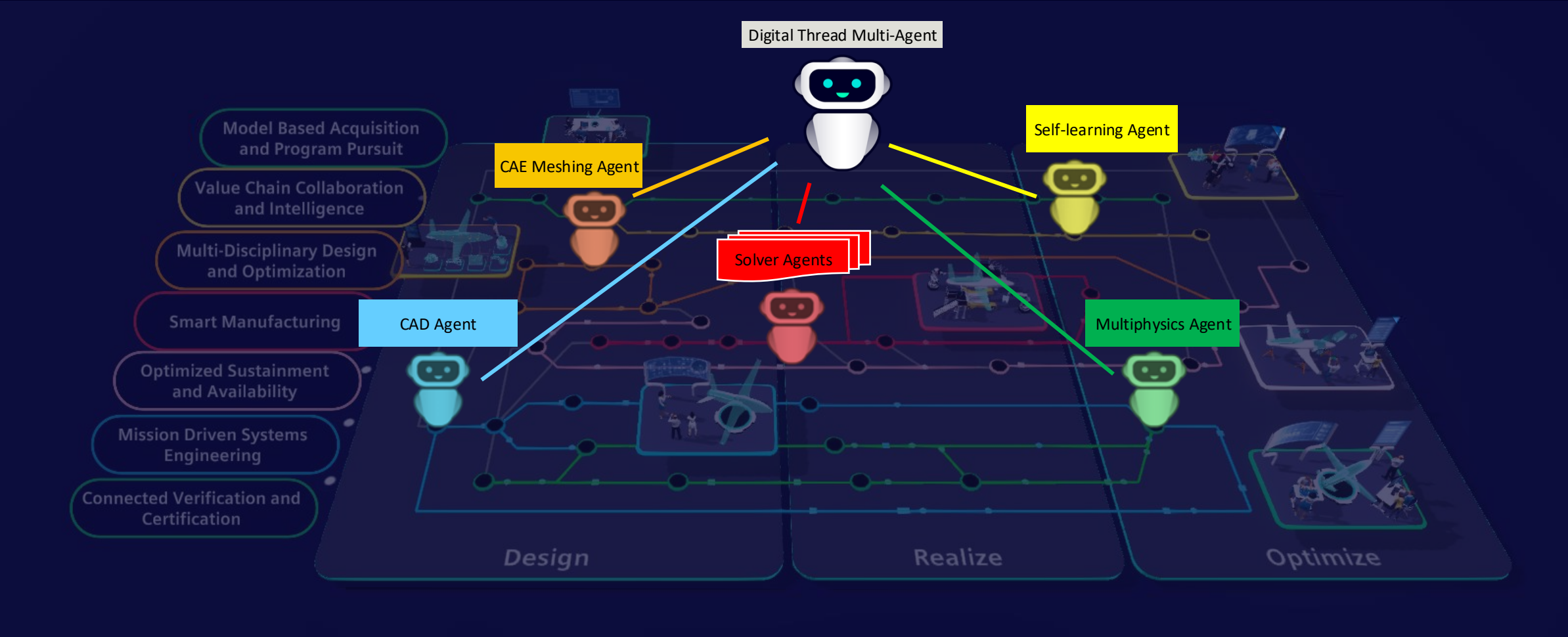
Agents



Engineering Intelligence



Engineering Intelligence



Faster engines

Faster engineers

Engineering intelligence



Contact

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