

# SIMULIA Overview

V7 | Sept 2023

# Dassault Systèmes belief

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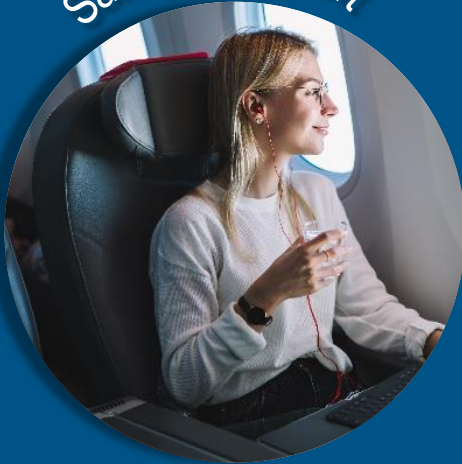
Virtual worlds **extend**  
and **improve** the  
Real world

# Disruptive & Transformational Trends

Electrification



Safety & Comfort



Simulation Democratization



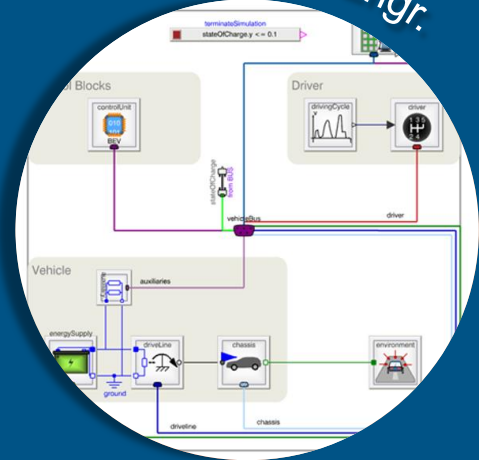
Virtual Human Twin



Renewable Energy



Model-Based Systems Engr.



Connected Products



Autonomous Vehicles



Manufacturing Simulation



Personalized Healthcare





# SIMULIA Promise



**DS** SIMULIA

Reveal the World We Live In



## Inspired to help solve our pressing challenges

Including Competitive Pressures, Cost & Resource Constraints, Sustainability, Workforce of the Future, Electrification, Product Complexity, Autonomous Operation, Personalized Healthcare & others

## A Technology-driven Brand

Delivering multi-disciplinary simulation technology for Structures, Fluids, Electromagnetics, Motion (Multibody), Vibro-acoustics, and Optimization & Automation

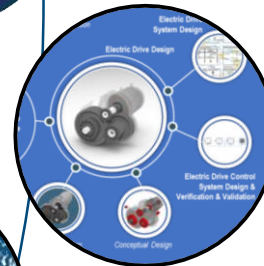


## With products serving multiple user audiences

Including 3DEXPERIENCE platform users, CATIA engineers, SOLIDWORKS designers, and traditional simulation experts

## Unified Modeling & Simulation on the 3DEXPERIENCE Platform

Modeling & Simulation (MODSIM) together with other Dassault Systèmes Brand technology in a unified environment with a common data model



## Delivering end-to-end industry workflows

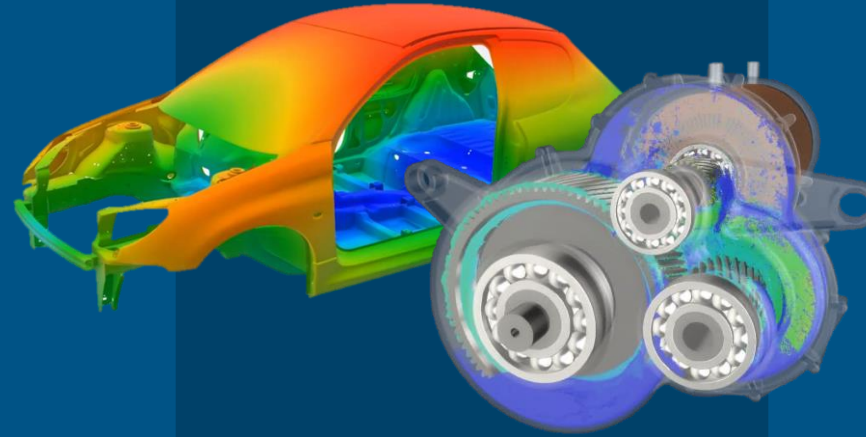
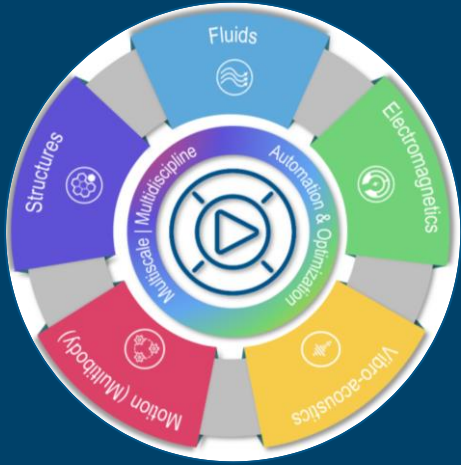
Covering all 12 Dassault Systèmes Industries and 62 Segments, including technical support, training, technology development, and consulting services

## With a global reach

Customer-specific value-based engagements from local support & training offices, R&D centers, and resellers worldwide



# SIMULIA: Powering Sustainable Innovation



Digitally  
Connected



AI/Data Driven



Model Based



Virtual+Real

*Predict Real World  
Performance*

*Virtual Validation &  
V+R Certification*

*End to End  
Accelerated Development*




**MODSIM – Unified Modeling & Simulation**



# A LONG TERM COMMITMENT

2005




**SOLIDWORKS**  
SolidWorks Simulation

CAD Design Simulation




**ABAQUS**

FEA Multiphysics Simulation



**MatrixOne**

SPDM



**Isight**

Process Integration & Design Optimization



**Dymola**

System Simulation



**Tosca**

Non-parametric Optimization




**SFE**

Conceptual Engineering




**fe-safe**

Fatigue




**Simpoe**

Plastic Molding



**CST**

Electromagnetic Simulation



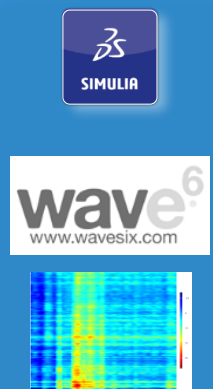
**SIMPACK**

Multi-body Dynamics



**XFlow**

Di-Phasic CFD, FSI



**wave<sup>6</sup>**  
www.wavesix.com

Vibro-acoustics



**Exa**

CFD, Aeroacoustics



**Opera**  
Simulation Software

Low-Freq EMAG



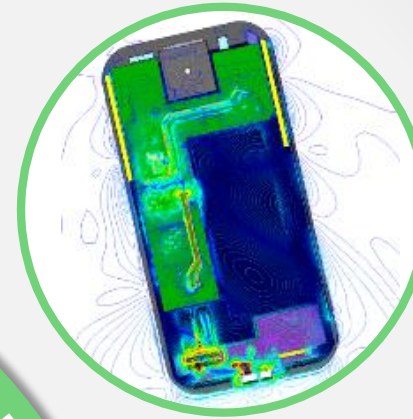
**WASP-NET**

Hybrid Multi-Solver Antenna Simulation

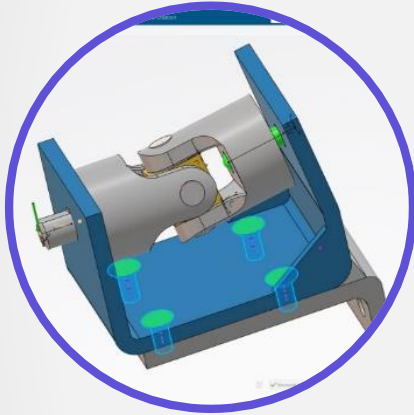
PowerFLOW, Xflow & 3DEXPERIENCE Flow technologies



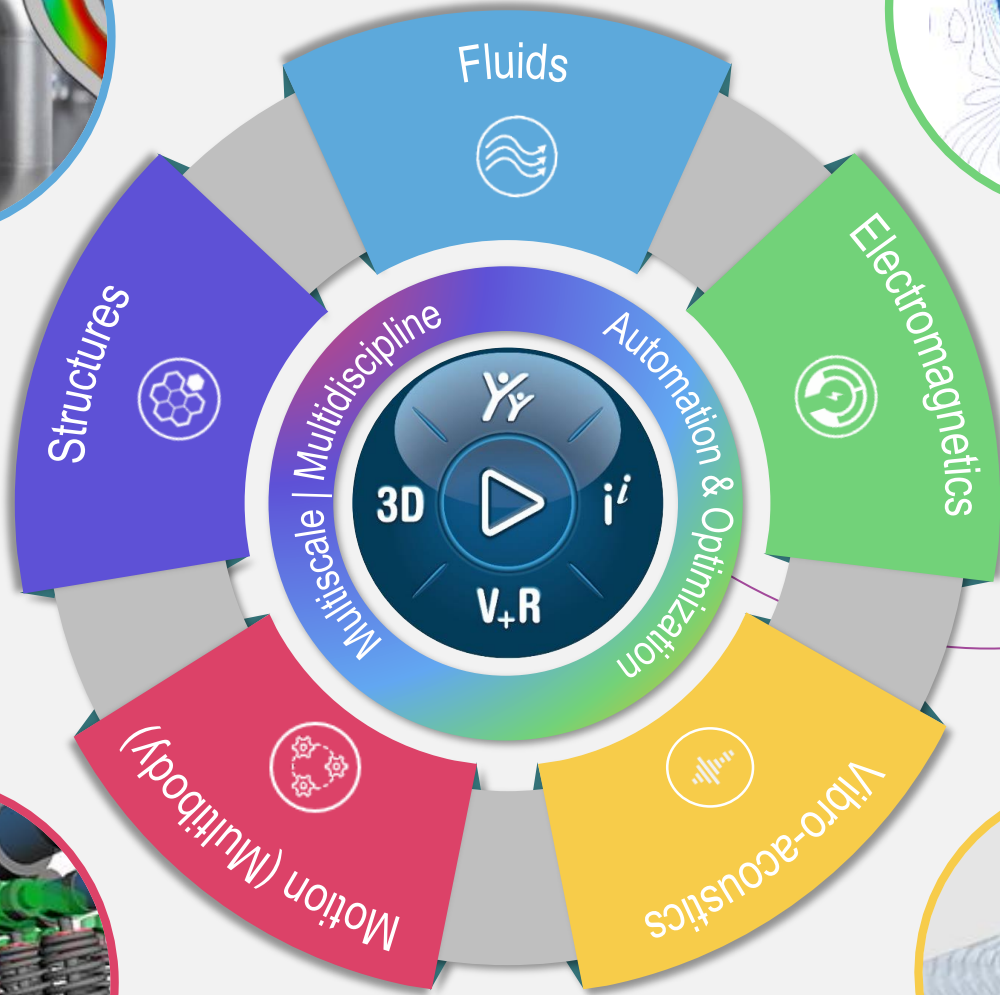
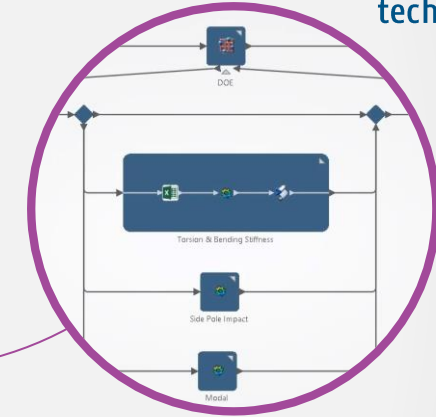
CST Studio Suite, Opera, Antenna Magus & WASP-NET technologies



Abaqus & Fe-safe technologies



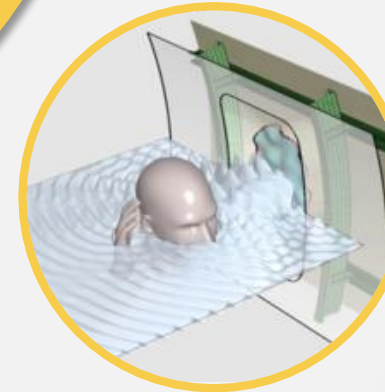
Isight, SEE & Tosca technologies



Simpack technology



Wave6 technology



3DEXPERIENCE platform & other 3DS Brand technologies





# A platform for knowledge and know-how

## All Physics

Functional

Logical

Physical  
Macroscale  
Continuum

Physical  
Microscale  
Discrete

Real

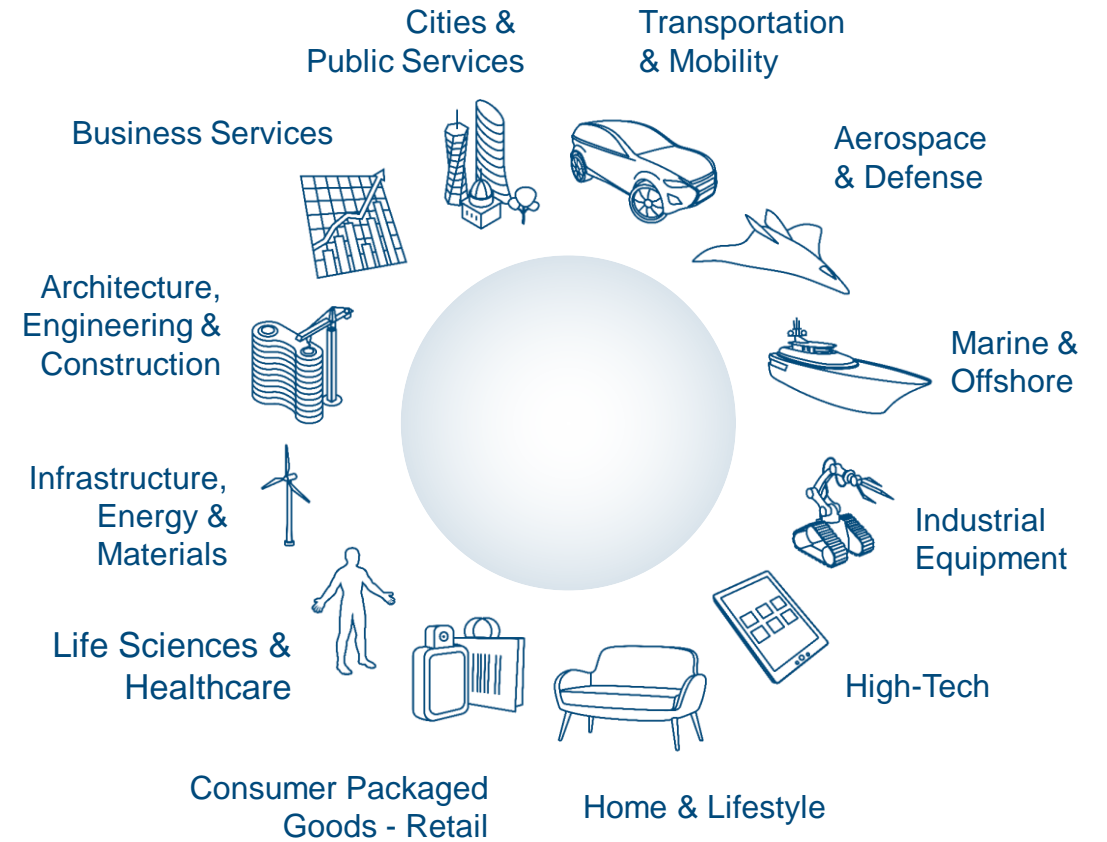
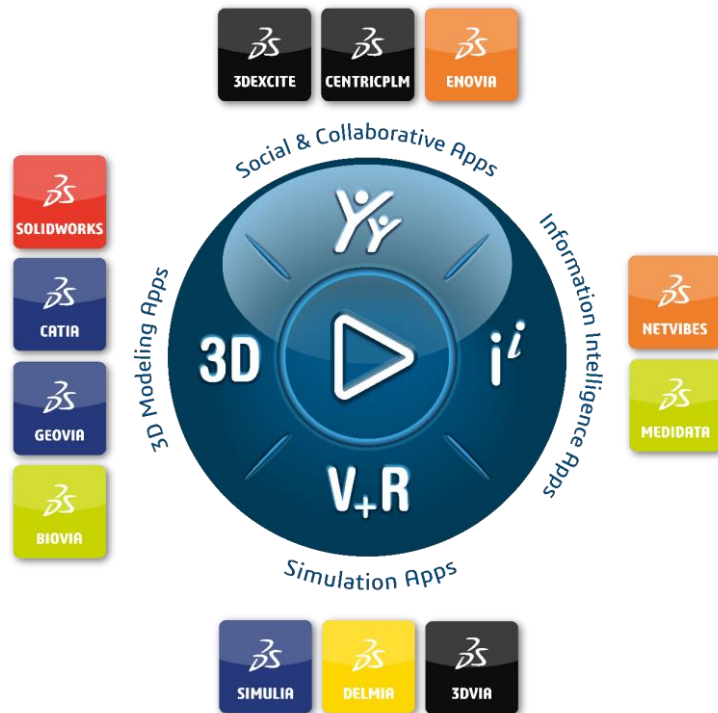
All Scales



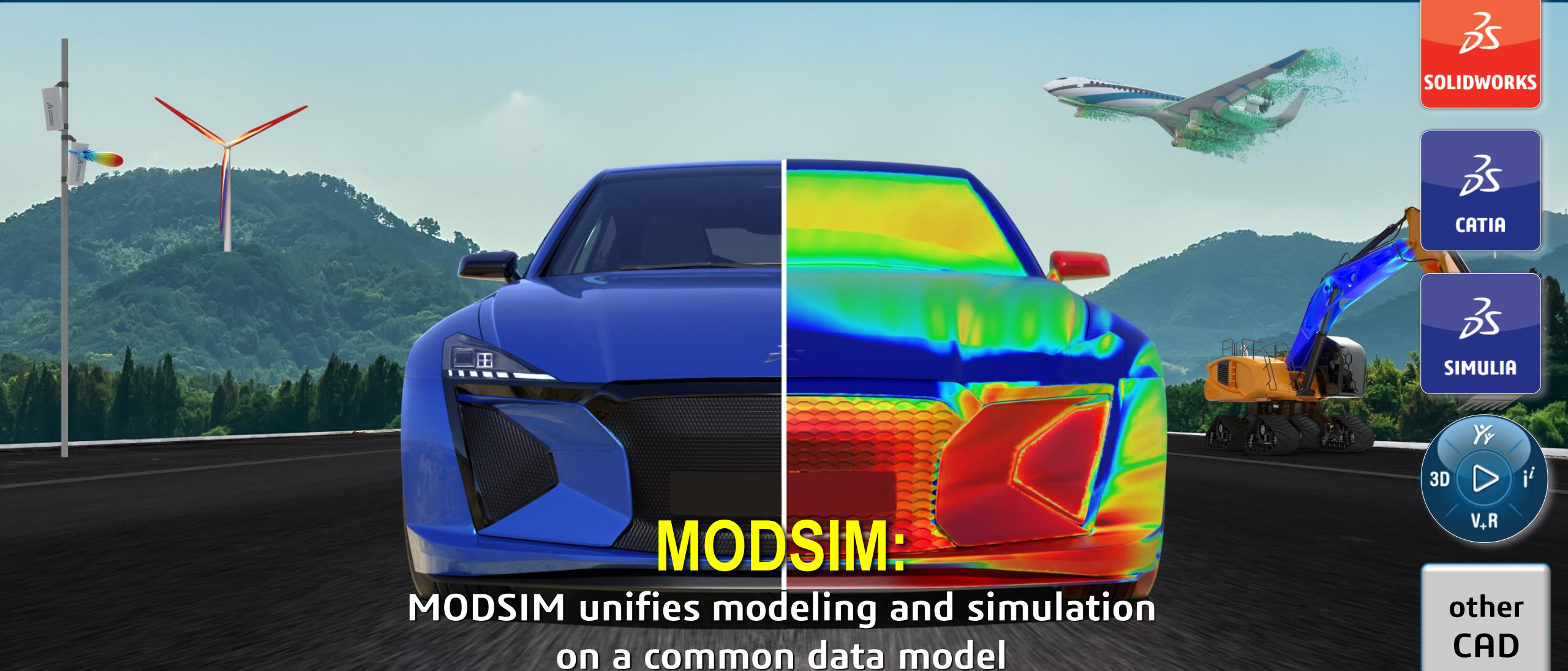
3DEXPERIENCE

# 3DEXPERIENCE® powers our brand applications...

...for 12 industries



# MODELING & SIMULATION



## MODSIM:

MODSIM unifies modeling and simulation  
on a common data model

within a single user experience on the 3DEXPERIENCE platform





Jose Garcia-Urruchi

Head of Digital Engineering Capability  
Jaguar Land Rover

“ The continuous pursuit of cleaner cars and much shorter development timescales demands a much closer integration between CAD and CAE and a greater confidence in the CAE predictions.

At Jaguar Land Rover, we have invested heavily in the deployment of **3DEXPERIENCE** as the backbone for engineering as we believe that this platform will give us the close integration and confidence in simulation that we need.

[Full presentation replay  
in the Modeling & Simulation Community](#)  
Join the community today; it's free and easy

# DISCOVER MODSIM | UNIFIED MODELING & SIMULATION



- Learn how MODSIM benefits engineers, teams, and leaders
- Discover customer success stories
- Watch webinars
- Read the FAQs
- Download the e-book
- Join the conversation in the MODSIM Community



[go.3ds.com/MODSIM](https://go.3ds.com/MODSIM)

**JOIN US!**



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