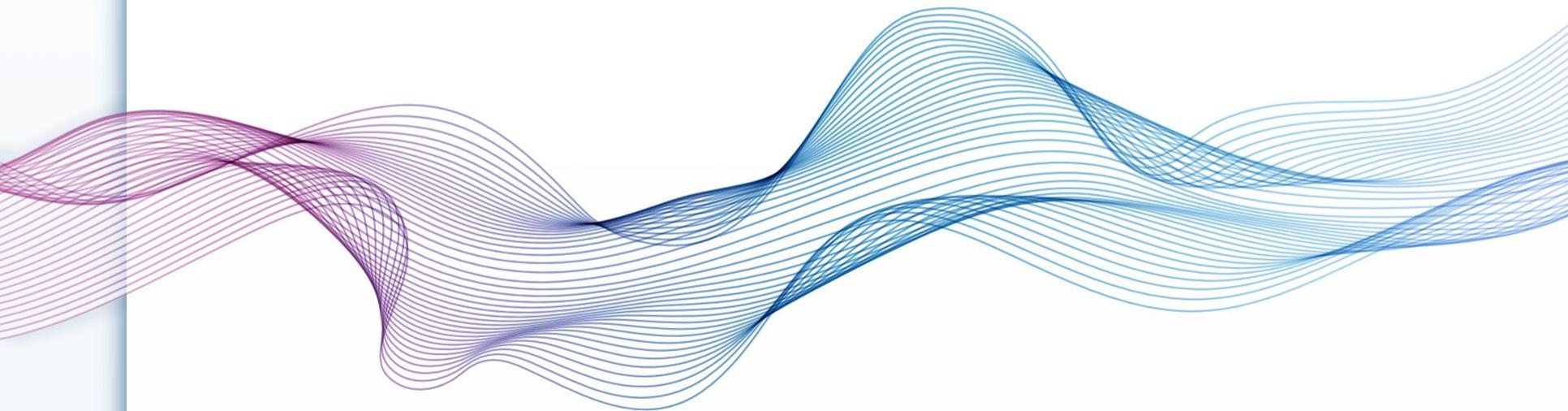




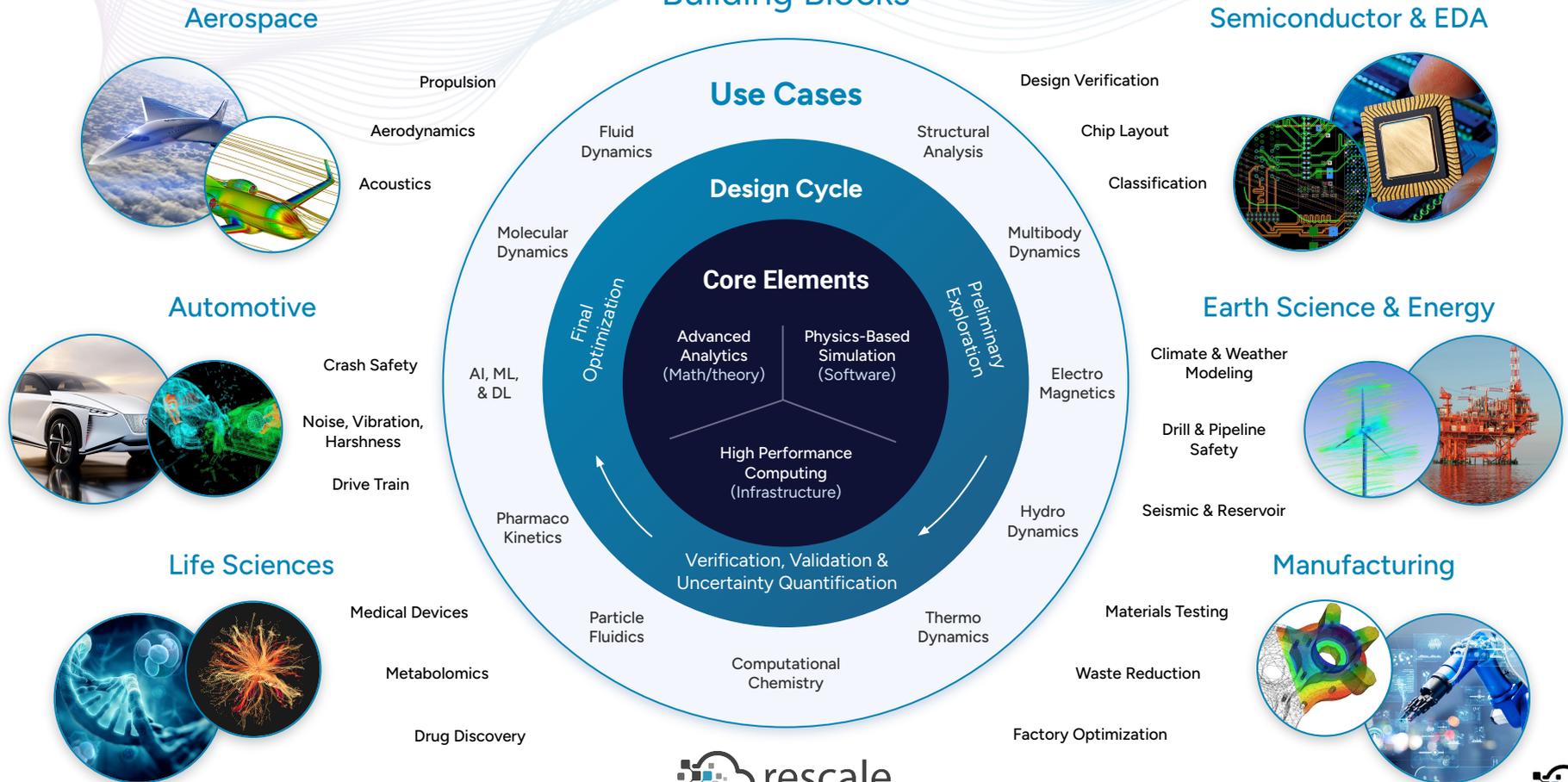
Rescale on Microsoft Azure:

The Modern Foundation for Engineering and Scientific Computing



COMPUTATIONAL SCIENCE & ENGINEERING

Building Blocks



Rescale Powers Innovation Across Industries



Global Automakers

Watch General Motors Motorsports Present on AI Physics for CFD Acceleration



Global Semiconductor Companies

Read About How ARM Accelerated Chip Design with High-Throughput Computing



Global Manufacturing Companies

Read How Denso Manufacturing Streamlined Industrial Manufacturing



R&D Innovation Has Been Underserved by Cloud

A photograph of two people, a man and a woman, looking at a large screen displaying a mobile application interface. The man is pointing at the screen. The image has a blue tint.

Application Developers

Business Process Innovation
E.g. Ecommerce, CRM, Social, Mobile

A photograph of a woman and a man looking at a computer monitor. The woman is pointing at the screen. The image has a teal tint.

Engineers, Scientists, & Researchers

Science & Engineering Innovation
E.g. Simulation, Modeling, AI/ML

Cloud transformation accelerates software development

- Application developer-friendly tools
- Easy-access platform services (e.g., databases, message queues)
- Simple access to low-cost commodity hyperscale infrastructure

Traditional HPC strategies in the cloud continue to constrain engineering innovation

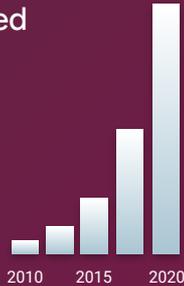
- Complex user experience and maintenance
- Disparate technology stacks and workflows
- Lacks flexible access to new, specialized hardware



Engineering and IT Orgs Increasingly Pursue Cloud HPC Strategies to Accelerate Digital Initiatives

40%+ YoY

Growth in specialized HPC architectures released by cloud providers annually



Source:
2021 State of Cloud HPC Report

Cloud infrastructure choice and scale are rapidly expanding

30%

 Reduction in Cost YoY

Improvement in cloud cost-performance, reaching parity with on-premises



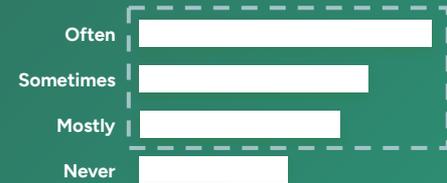
Source:
Benchmarking Cloud-HPC Hardware for R&D and Engineering Applications Report

Cloud cost-performance continues to increase

78%

 Use Cloud HPC

in some capacity for HPC, with 53% reporting consistent use



Source:
Benchmarking Cloud-HPC Hardware for R&D and Engineering Applications Report

Majority of IT and Engineering choose cloud HPC strategies



Delivering Measurable Business Outcomes with Compute



Increased Resource Efficiency

Months to Days **reduction of time to deploy HPC** across multiple clouds and software.
– National Oilwell Varco



Enhanced User Productivity

30 HPC Tools **unified into one single platform**, simplifying administration and end-user workflows. – Schaeffler



Enhanced Compliance and Control

60% **increased speed of simulation** with a policy-driven environment across global divisions. – Eaton



Unlocking New Efficiencies and Methods

50%

Accelerated R&D and Time-to-Market

faster R&D cycles by reducing manual simulation tasks to accelerate new products to market. –Daikin Industries

PBs

Unified Data for Faster Decisions

(petabytes) of simulation data and metadata managed automatically to aid collaboration and accelerate projects. –Kairos Power

10x

Simulation Efficiency

increase in simulation efficiency with 90% reduction in results wait time enabling 5x increase in new patents. –Sumitomo Corporation



Rescale Delivers Measurable Outcomes with AI-Driven R&D



Accelerate Time to Results

1000x

acceleration in time-to-answer
leveraging AI-enhanced simulation.
–GM Motorsports



Improve Efficiency

Hours
to ms

reduction in preprocessing data
for AI training from 8 hours to
milliseconds. –Intelligent Energy



Expand Design Exploration

72,000

times faster material exploration
with 99% accuracy using customer
neural networks. –CPG Leader



Rescale + Microsoft Partnership



Top Tier Global Partner
HPC & Simulation Cloud Platform



[Microsoft M12 Partner](#)

[Marketplace Listing](#)

Full stack integration with 1,200+ ISVs

Public Customer References on Azure

The DENSO logo in red, italicized, uppercase letters.



The Liberty University logo, with "LIBERTY" in a large, serif font above "UNIVERSITY" in a smaller, sans-serif font.



The Schaeffler logo in green, uppercase letters.



The Exponent logo in green, with "Exponent" in a serif font and a registered trademark symbol.

The kineticvision logo in blue, lowercase letters.



Complete Engineering Platform Backed by Expert Support

Rescale Platform

Rescale AI

AI Physics | AI Training & Deployment | AI Inference | App & Model Marketplace | Design Optimization

Rescale Data

Data Management | Collaboration | Workflows | Connectors | Analytics | Search | Digital Thread | Governance

Rescale Compute

Batch Modeling & Simulation | Visualization | Design of Experiments

Software Management

- Commercial & open-source application catalog
- Testing, versioning, & custom software self-publishing
- License hosting & proxies

SIEMENS Ansys 1200+

Workload Orchestration

- Hardware-software configurations
- Open-cloud & multi-architecture
- Multi-node clusters with MPI
- File organization and tagging

Cost-Performance Optimization

- Service levels & cost models
- Hardware configuration tuning
- License queueing
- Sustainable computing
- Storage devices

IT Business Management

- Budget controls & billing reporting
- Multi-team & projects organization
- Security & access controls
- Policies & templates

Infrastructure Automation

- Virtual workstations
- Storage & backup
- Multi-region load balancing
- Bring your own cloud



End-to-End Security & Compliance

Encryption | Audits | Leading Compliance Certifications (SOC-2, ISO-27001 +) | Public Sector Authorizations (FedRAMP, ITAR +)

INTEGRATIONS & CONNECTORS

Full-Stack Support & Professional Services

Implementation & Onboarding | Application & OS Support | Benchmarking & Optimization | Training & Certification | Integrations



Accelerate time to engineering engagement

Rescale Turnkey Platform



1-4 Weeks

Quick Start

Turnkey HPC capabilities, Right sized Support

Get Started

Begin running production workloads, minimal troubleshooting

Explore new R&D Use Cases

Multi-Disciplinary Design optimization, Physics-informed AI/ML

Optimize Resources

Hardware & Software Cost-Performance, Workflow automation

Discover Data Insights

Simulation process & data management

Accelerated time to Market

Commercialize New R&D Innovation faster

VS

Build / DIY cloud HPC



12-18 Months

Planning & Hiring

Capacity plan, requirements, hiring, etc. ~1 year

Setup Cloud Infrastructure

Select compute hardware, storage, networking

Build Utilities

Build Utilities, console, security & compliance

Setup Software

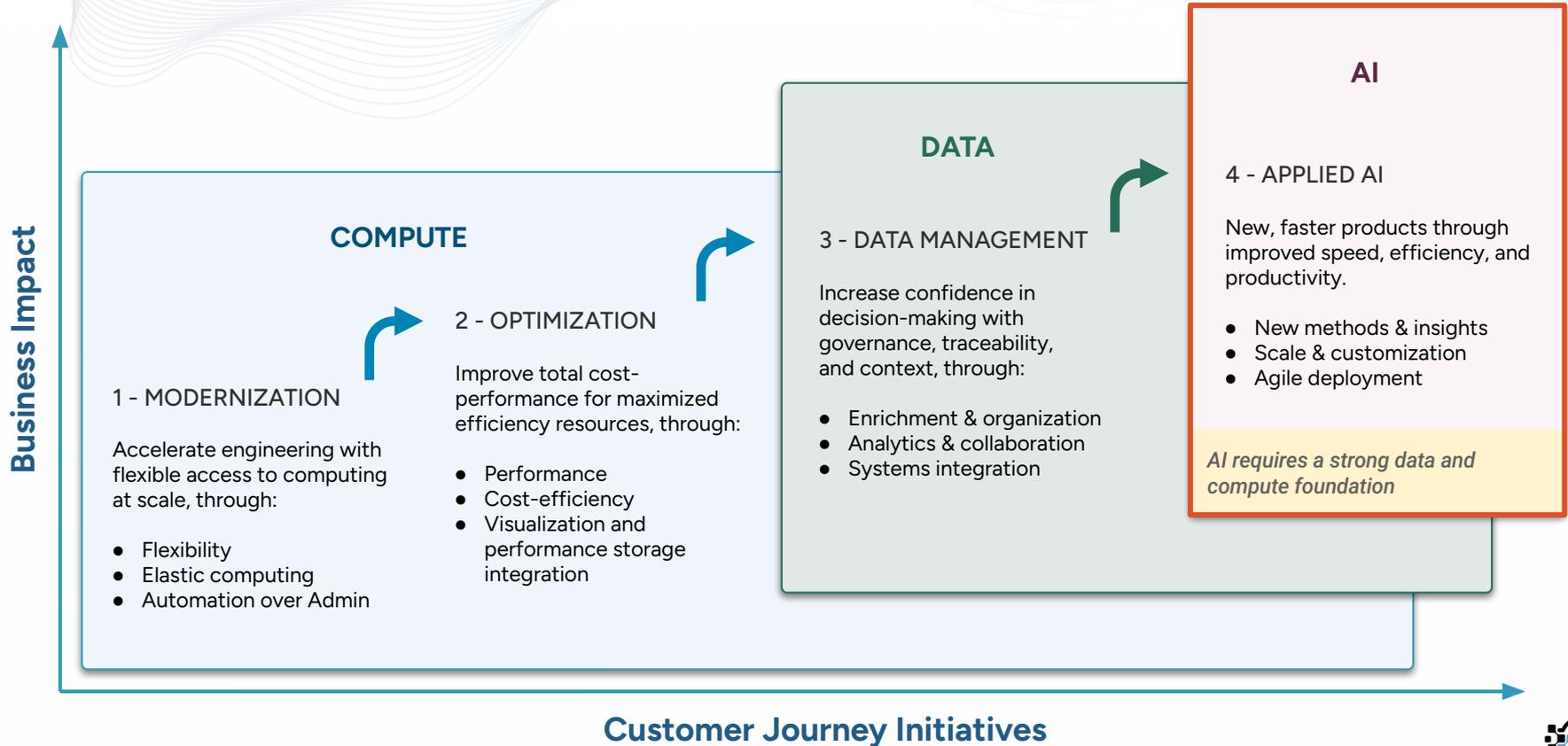
Determine commercial, open source, and/or build proprietary codes, Benchmark HW

Get Started

Begin running production workloads, troubleshooting



Supporting R&D and IT Teams at Each Stage of Their Journey



Challenges and Opportunities HPC IT and Engineering Face

R&D Objectives



Adopting Cloud
Operating Model &
New Technologies



Enabling the
Latest Applications &
Use Cases



Growing Teams,
Projects, & Resource
Portfolios



Sharing Files and
Collaborating Across
Teams and Projects



Accelerated
Commercialization
of New Products

Digital transformation maturity

Business Outcomes



Ensuring
Full-Stack Security
& Compliance



Controlling Costs &
Increasing Workload
Performance



Ensuring Operating
Efficiency &
Service Delivery



Managing
Storage and Data
Complexity



Automated
Operations with
Visibility & Control

IT Objectives





general motors

Rescale Customer Spotlight

Company: General Motors Motorsports

Industry: Automotive

Use Case: External Aerodynamics

GM Motorsports is pioneering new AI-accelerated aerodynamics optimization to dramatically **reduce R&D cycle time** and lap times on the track. In vehicle platform development for the Formula One racing series where milliseconds matter, Andretti Cadillac and GM Motorsports engineers leverage AI Physics on Rescale powered by NVIDIA to **optimize every aspect of chassis aerodynamics**.

This approach has led to more than **1000X acceleration** in design evaluation, achieving over **98% accuracy** compared to traditional CFD simulations, and an **85% improvement** in computing resource efficiency. These advancements allow GM Motorsports to iterate on designs faster, ensuring optimized performance on the track.





Eaton Enables Digital Transformation of Engineering Capabilities Through Cloud-First HPC on Rescale

Industry: Industrial Manufacturing, Power Management

Use Cases: Digital Transformation, Industry 4.0, Computational Fluid Dynamics, Finite Element Analysis

“Eaton is focused on optimizing digital solution development and delivery for our customers, and we invest in Rescale to accelerate these capabilities and accelerate the R&D of new industry 4.0 technologies. Rescale enables our cloud-first strategy to flexibly equip our engineering teams with intelligent computing solutions they need while IT can easily governing a secure, compliant, and policy-driven environment across all of our regions and divisions.”

— **Katrina R. Redmond, Senior Vice President & CIO, Eaton**

Strategic Business Outcomes:

- Turnkey HPC for R&D Acceleration
- Seamless Engineering Collaboration
- Intelligent Optimization for Best Cost-Performance
- Automated IT Management, Security, and Compliance

30-60%

Increased speed
of engineering
simulations



“Deploying cloud HPC across multiple software providers would have taken us 9 months, but with Rescale we were up and running in a matter of days. We also have assurance that Rescale optimizes our engineering efficiency and helps remove IT obstacles to get back to solving big problems.”

— *Matthew Robinson, Engineering Systems Administrator*



100% license utilization

In HPC softwares and optimized licensing costs



95% deployment time reduction

In cloud HPC applications



80%+ cost reduction

In NOV's upfront HPC costs and reduced overall operational costs

Spotlight on innovation



Customer: National Oilwell Varco (NOV)
Industry: Energy, Oil & Gas, Renewables

Leading the Future of Energy by Reimagining Computing

NOV uses advanced computer-aided engineering (CAE) simulation to design and test new technologies pumps, regulators, and drill heads. NOV relies on high performance computing (HPC) resources to get accurate predictions on safety, durability, and economic viability of new products before they reach production operations. This led Engineering and IT teams to pursue a global cloud HPC strategy managed on Rescale that alleviated resource constraints and unlocked new capabilities in oil and gas and renewables R&D to bring new products to market faster.

“Being cloud-native gives NOV the advantage of improved agility and efficiency across our many areas of R&D from offshore to renewables. Rescale streamlined our cloud transformation and continues to help us find new ways to improve our engineers’ productivity and develop new products faster.”

— *Matthew Robinson, Engineering Systems Administrator, NOV*

Company: Schaeffler

Industry: Automotive, Energy, Manufacturing

Use Case: CAE Simulation, IT management

Value Drivers: Accelerate Innovation

Products: Rescale Compute

12,000 simulations for a large-scale project in a matter of days

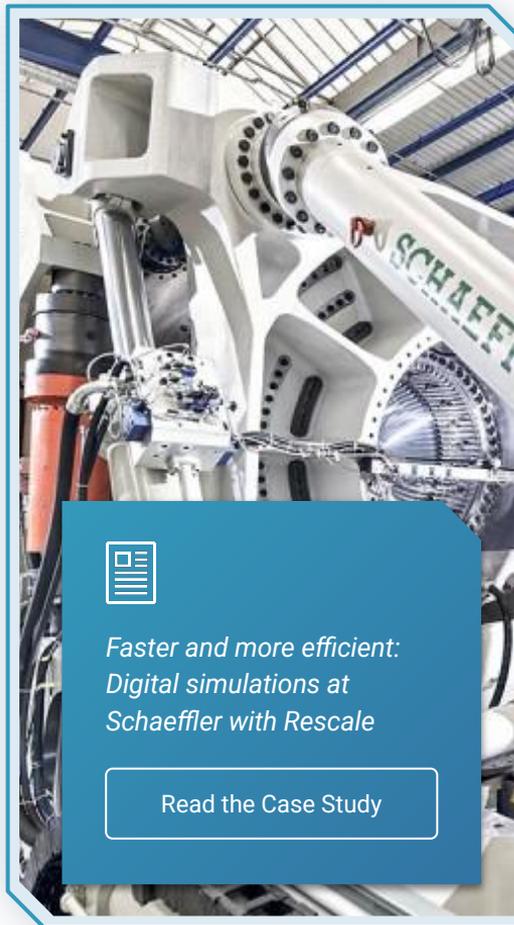
Rescale delivers Schaeffler a unified HPC solution, bringing together 20 to 30 previously separate solutions into one standardized platform where engineers can select the appropriate simulation application.

"It takes just a few clicks to configure the system for a given simulation. This is hugely advantageous in terms of administration, user-friendliness, and operability—something our colleagues really appreciate. Through this project, we've gained a better understanding of their needs and can now work with them to develop more custom solutions."

– **Tobias Frömel**, Product Owner, Hybrid Cloud Platforms

"Thanks to our new HPC solution based on Azure and the SaaS solution from our partner Rescale, we can complete our simulations a good deal faster. This means we can begin the next round of calculations sooner, detect errors earlier, and develop products far more quickly. That's a massive boost to our competitiveness and innovative strength."

– **Markus Kießling**, Product Owner, Systems Engineering Solutions



*Faster and more efficient:
Digital simulations at
Schaeffler with Rescale*

[Read the Case Study](#)