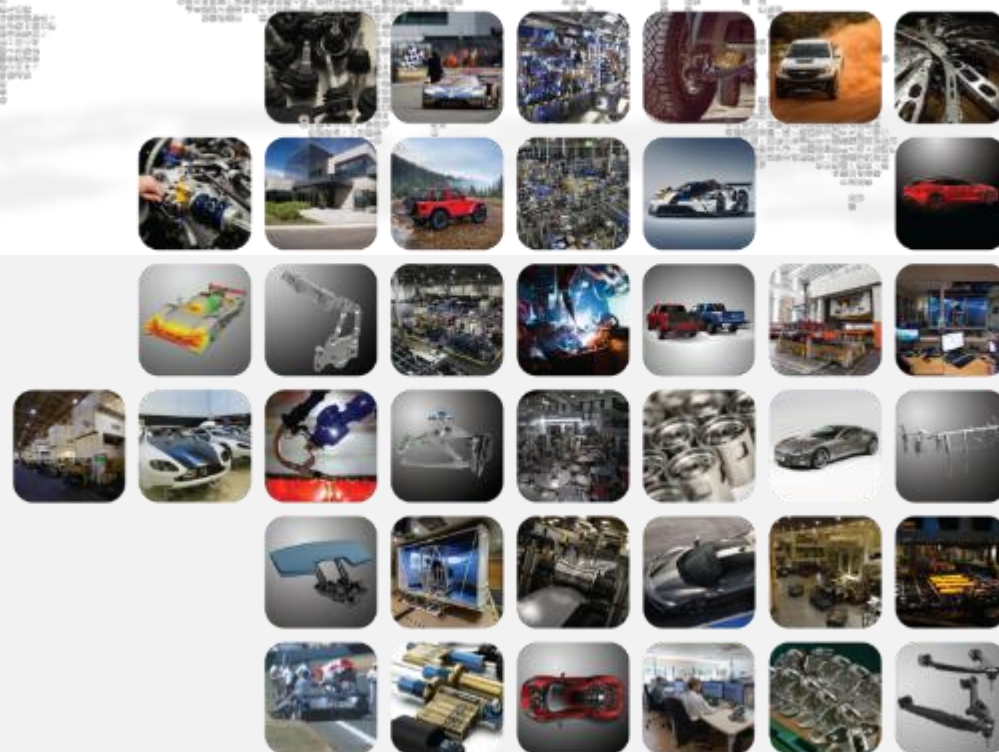




From Art to Part: Deploying Advanced Suspension Technologies Using Integrated Development and a VI-grade DiM 250

VI-grade Zero Prototypes Summit
May 13-15 2025, Udine - Italy

Jamie Leveille
Technical Director, Vehicle Dynamics

Production at Any Scale



Multimatic delivers manufactured products and engineering services to the global automotive industry... at any volume level.

Low Volume Production

High Volume Production

Suspension Products



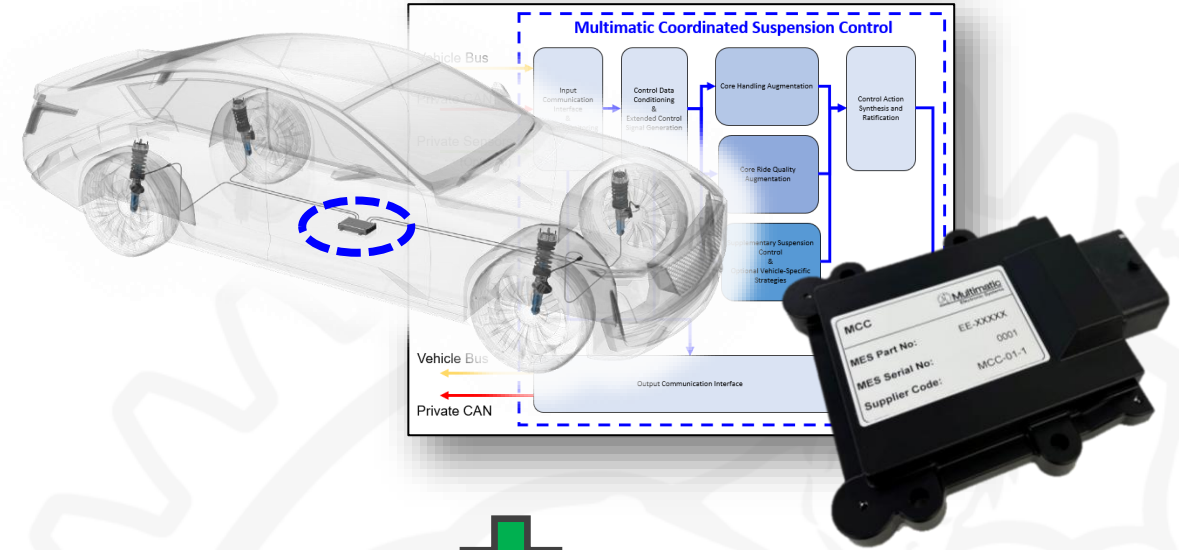
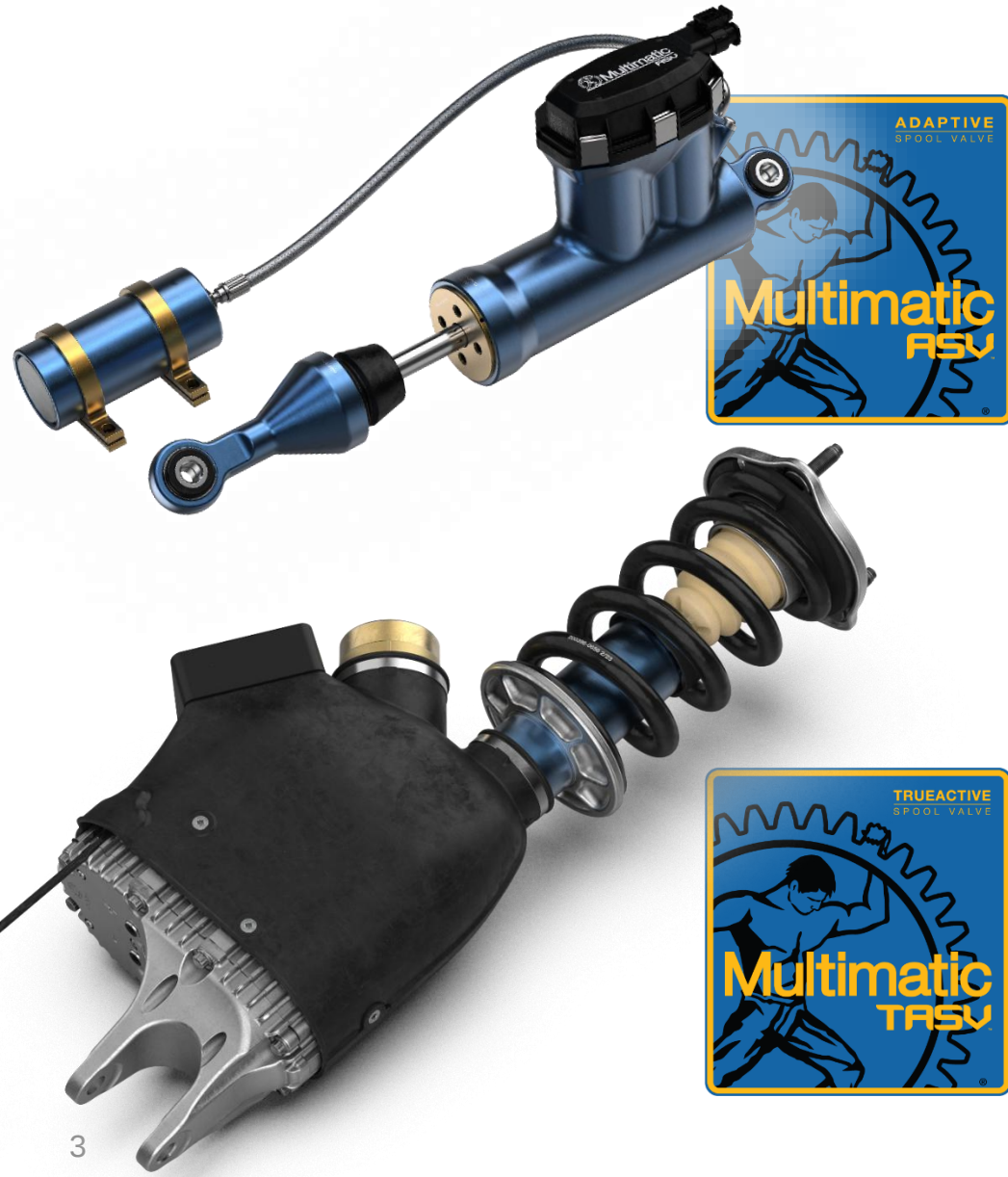
Structural Products



Mechanism Products



Technology Focus



Technology Incubators



Integrated Development



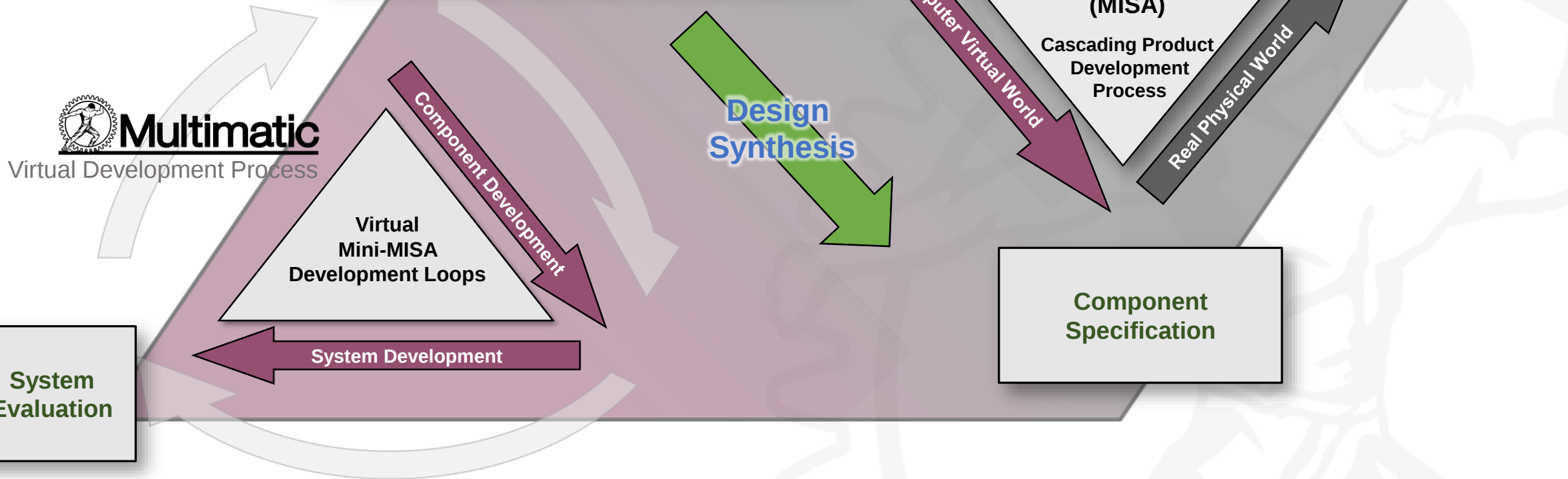
The Multimatic Integrated Systems Analysis (MISA) process is employed to turn Art to Part by cascading vehicle objectives to high-value component technologies.



Integrated Development



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Integrated Development



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Design Brief
Simultaneously maximize ride comfort, handling response, and limit handling performance of a super sports car.

Correlation

Multimatic Integrated Systems Analysis (MISA)
Cascading Product Development Process

Computer Virtual World

Real Physical World

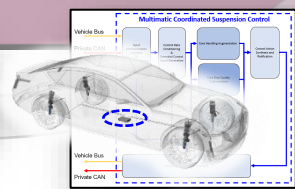
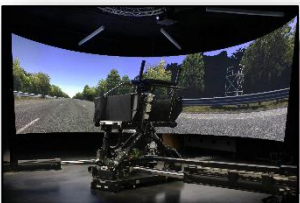
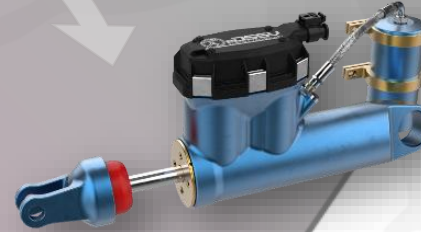
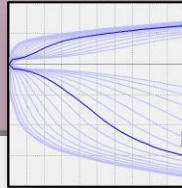
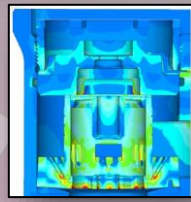
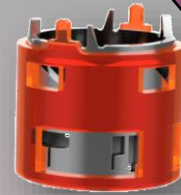
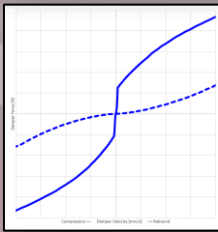


Virtual Development Process

Virtual Mini-MISA Development Loops

Component Development

System Development



Integrated Development



The Multimatic Integrated Systems Analysis (MISA) process is employed to turn Art to Part by cascading vehicle objectives to high-value component technologies.



Design Brief
Simultaneously maximize ride comfort, handling response, and off-road capability of a full-size truck platform.

Correlation

Multimatic Integrated Systems Analysis (MISA)
Cascading Product Development Process

Computer Virtual World

Real Physical World

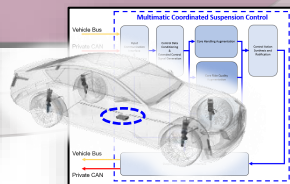
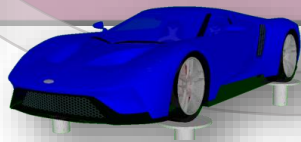
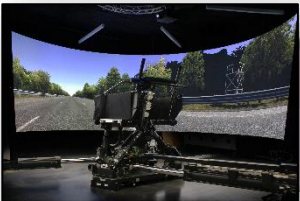
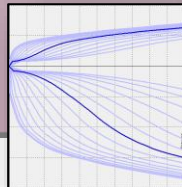
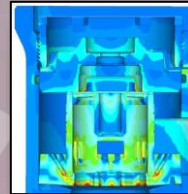
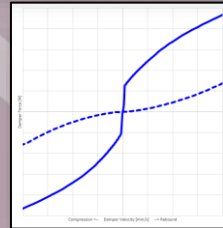


Virtual Development Process

Virtual Mini-MISA Development Loops

Component Development

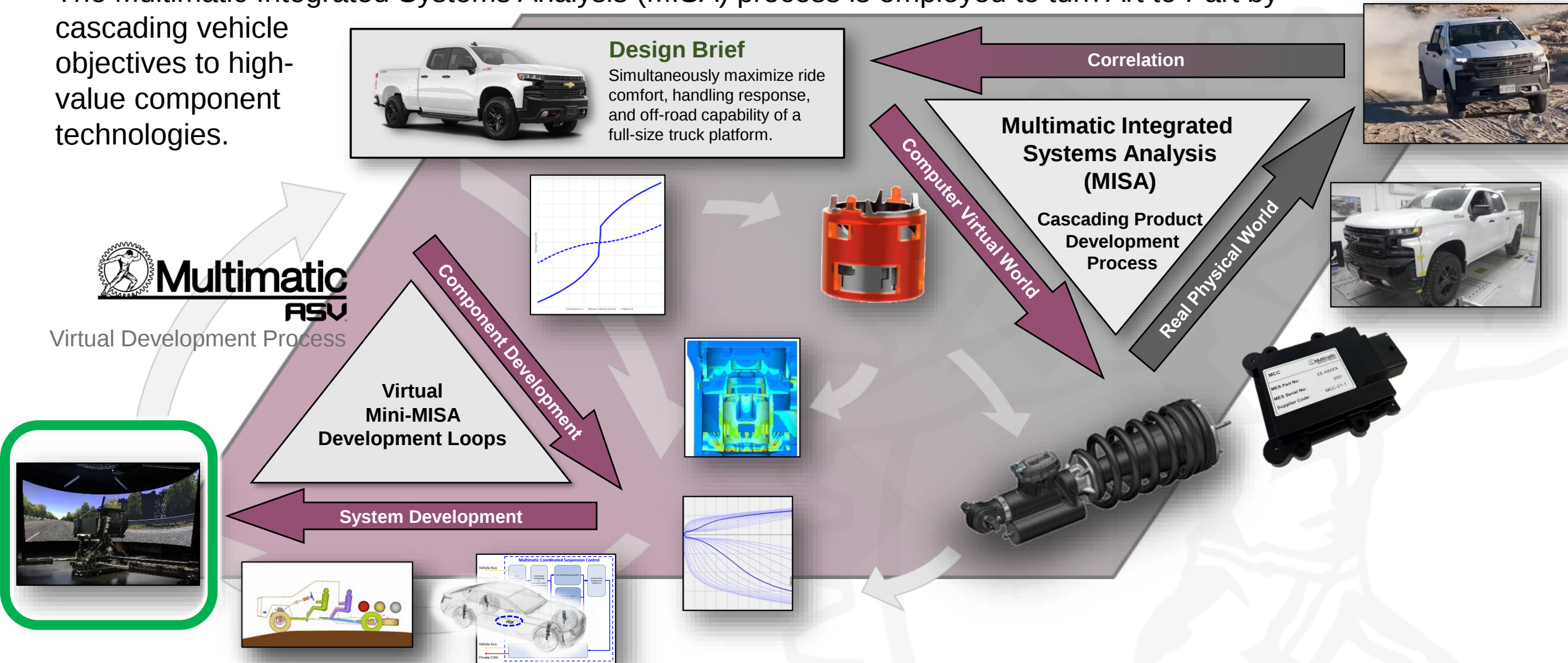
System Development



Integrated Development



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Enabling Simulator Development



A Question

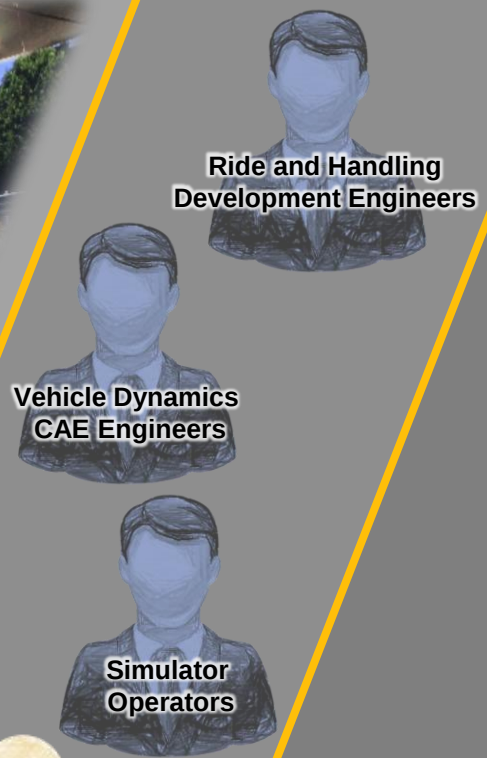
Dynamical Models

Control Systems

Environment

Hardware

People

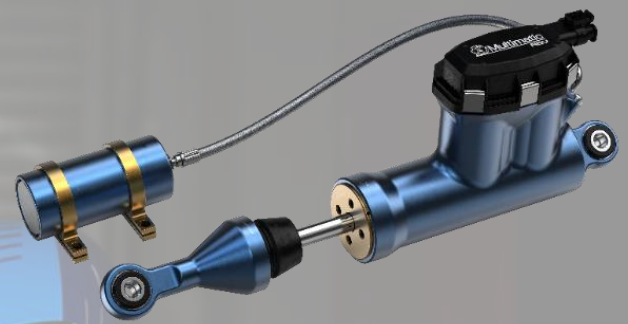


An Answer

Application Highlights



GT MK IV



Application Highlights



SILVERADO



Application Highlights



Multimatic TASV



Application Highlights





Thank You



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