

Boris Kirchner | Zero Prototype Summit | Udine May 2025

INNOVATION THROUGH VIRTUAL PRODUCT DEVELOPMENT EUROPE'S WAY BACK TO THE TOP

\\IMAGINEERING::

The Automotive Industry



An economic success story for Europe. Still.



Prosperity and
Growth

A contribution of

1

trillion euros to
EU GDP in
2022

which accounts for around

7

percent of
EU GDP



Jobs

13.8

million
jobs in the
automotive industry

6.1

percent of all
employees in the
EU



Innovation

around

60

billion euros in annual
spending on research and
development

around

30

percent of
total EU
R&D spending

Germany's car in
Vorsprung - and
Trump and tariff
Konstantin Richt

industriAll Europe sounds the alarm

TUESDAY 03 DECEMBER 2024



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fail

AUTOMOTIVE CRISIS



In recent weeks, the automotive industry and its supply chain have been hit by a tsunami of job cut announcements and restructuring.

Car industry in crisis

Electromobility (e-mobility)

Company, business and industry news (other)

euro
news

VISION
mobility

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Volkswagen crisis doesn't stop: workers strike in Germany. Rising concerns for Italy's auto industry

Unions have called warning strikes to counter the wall put up by Volkswagen management regarding collective bargaining agreements. In Italy, disquiet is beginning to spread over a crisis that is increasingly looming as European

by Noemi Morucci — 2 December 2024 in Business



Employees of German car maker Volkswagen (VW) demonstrate in front of the VW plant in Zwickau, eastern Germany, on December 2, 2024, as thousands of Volkswagen workers go on strike all over Germany in an escalating industrial dispute at the crisis-hit German auto giant with thousands of jobs at stake. VW has been hit hard by high manufacturing costs at home, a stuttering shift to electric vehicles and tough competition in key market China. It has announced a plan to cut billions of dollars in costs. (Photo by Jens Schlueter / AFP)

Automotive Industry in Crisis: Stagnating where It Falter

in crisis, with politics exacerbating the
ew.



stations, just like other electric models in the ID

IS IT REALLY THAT BAD???

THE **FINANCIAL CRISIS** OF 2008 LED TO A SIGNIFICANT DECLINE IN CONSUMER SPENDING AND CREDIT AVAILABILITY, CAUSING 'A **SHARP DROP** IN **VEHICLE SALES** AND PRODUCTION, WHICH SEVERELY IMPACTED THE AUTOMOTIVE INDUSTRY IN 2009.



TAGES



Live TV



The Guardian

This article is more than 16 years old

NBC NEWS

BUSINESS NEWS

Car sales hit by sharpest monthly fall for decades



No Corvette sales were recorded in the UK in November. Photograph: Corbis

Business

Economy

WATCH

attached

turn for a \$17.4

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SS

THROWBACK INTO 2008/2009



Winter 2009: Mercedes-Benz stopped all winter tests in Schweden, due to a massive cost-down program

LOOK BACK AT 2008/2009

|TRE|



THROWBACK INTO 2008/2009

| TRE |



A courageous chief engineer said: "We will not stop the SOP and we will stick to all the innovations we have planned. But we're going to do it differently than we did before...."

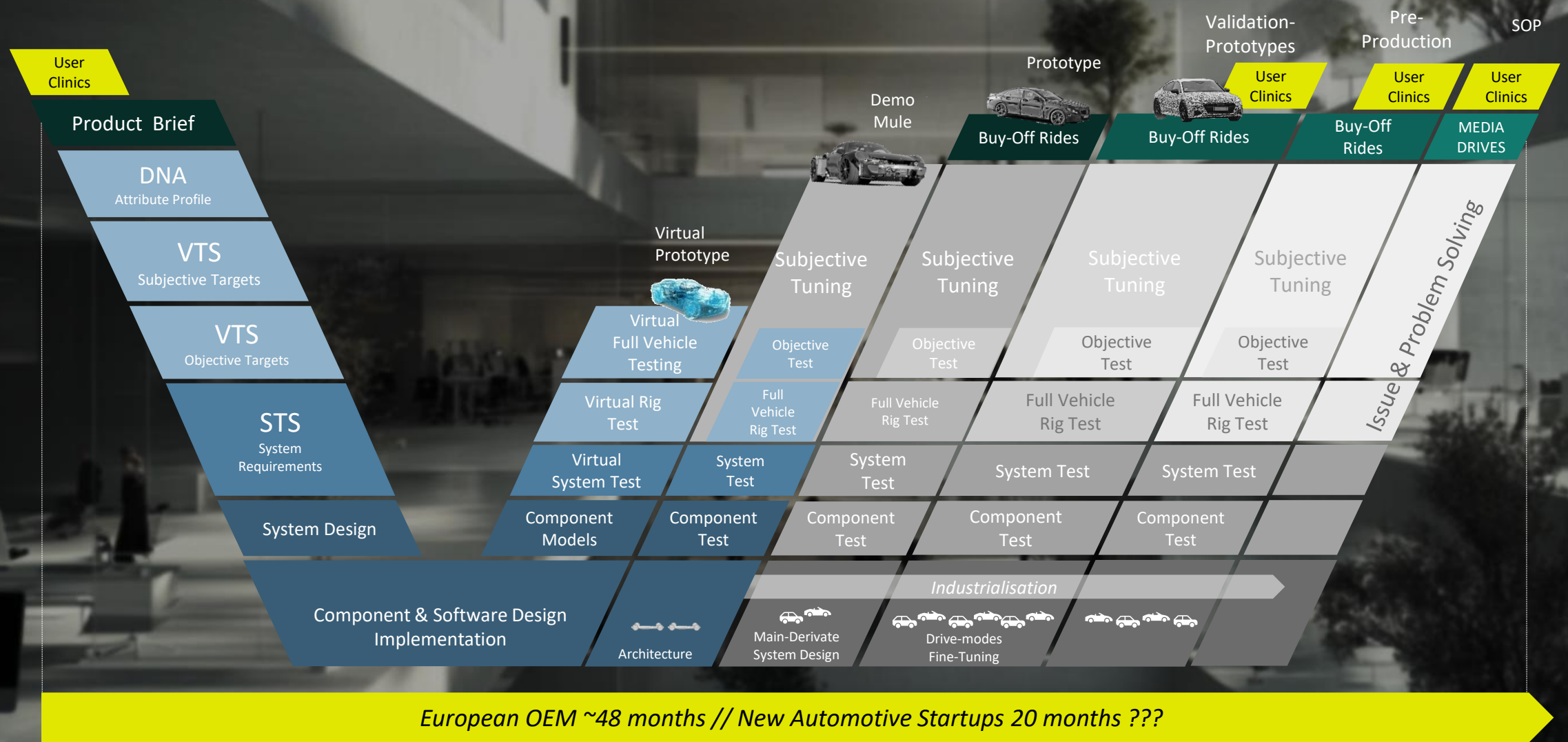
So a small circle of engineers set off for an abandoned ski resort in Austria.

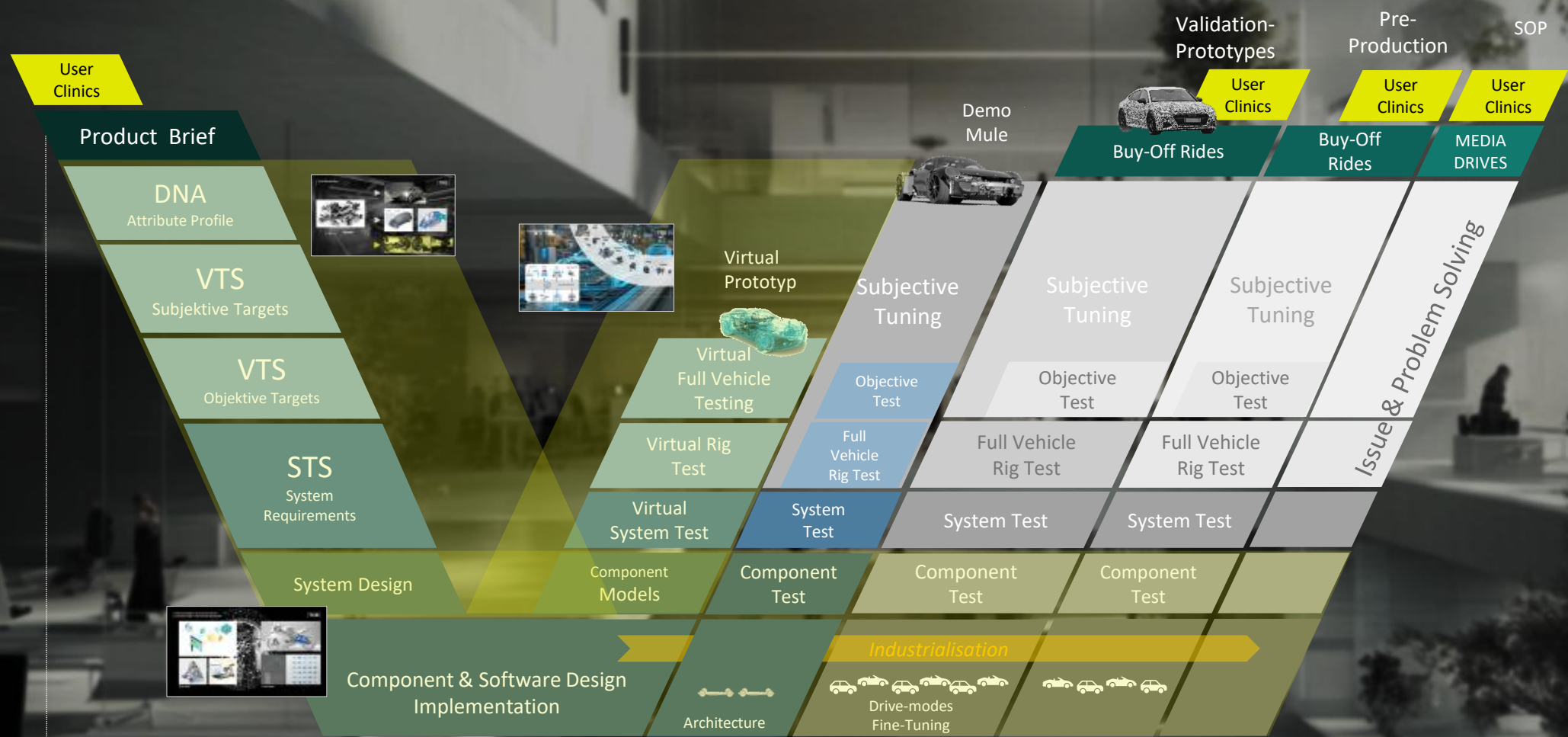


A futuristic car showroom with sleek white cars and people interacting with digital displays. The scene is set in a modern, high-tech environment with large glass windows and a polished floor. Several people are seen interacting with large digital displays and cars. The lighting is bright and modern, with a focus on the cars and the people. The overall atmosphere is one of innovation and technology.

// How does the way back to the top look like?

// How do we achieve Innovation Leadership???





European OEM ~48 months // New Automotive Startups 20 months ???



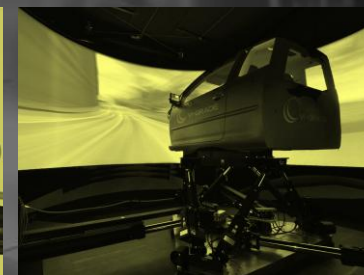
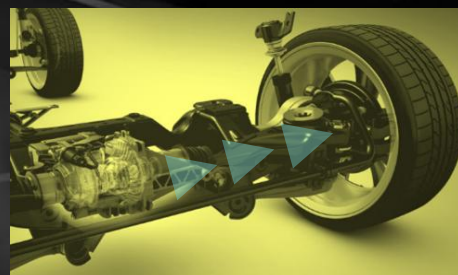
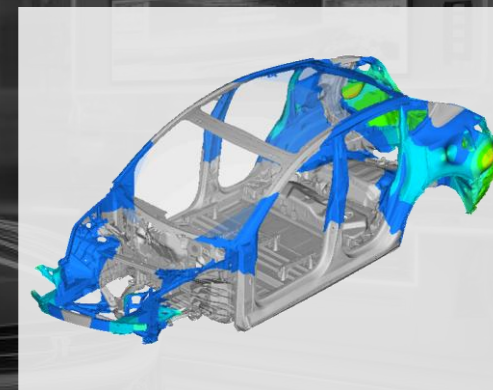
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Caresoft®



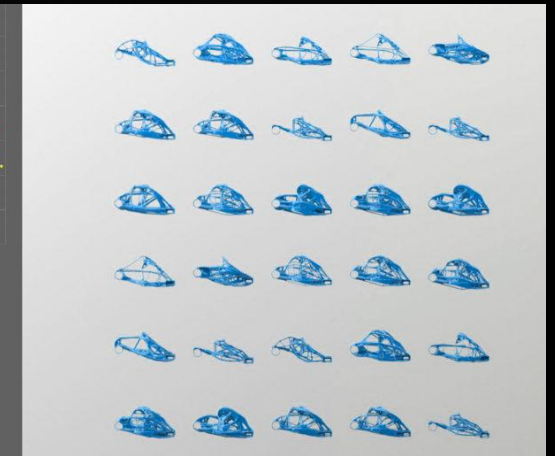
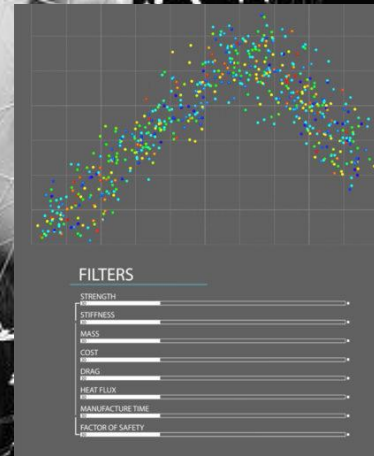
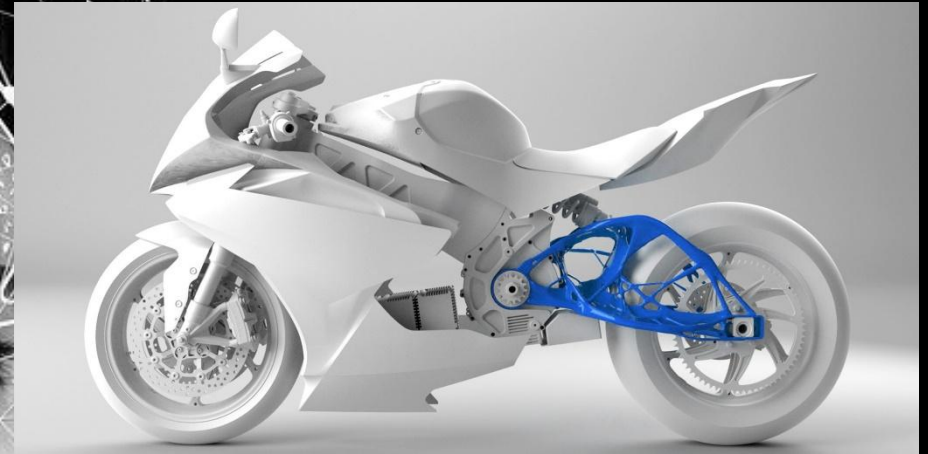
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TECOSIM



Artificial Intelligence in Automotive Industry Generative Design + Multi-Domain Optimization

TRE

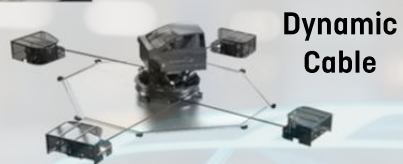


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AUTODESK



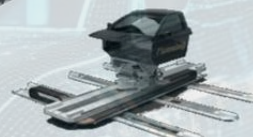
Full Scale



Dynamic Cable



Dynamic linear



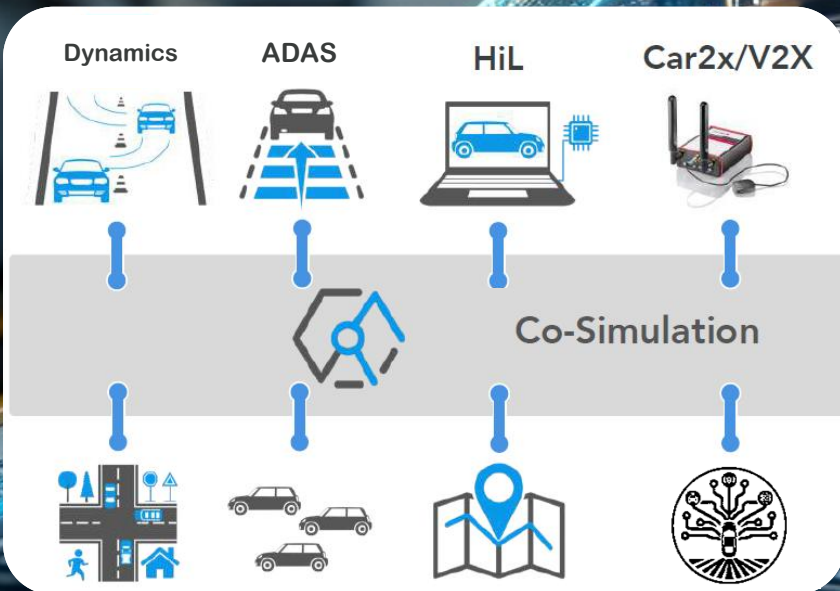
Dynamic Small

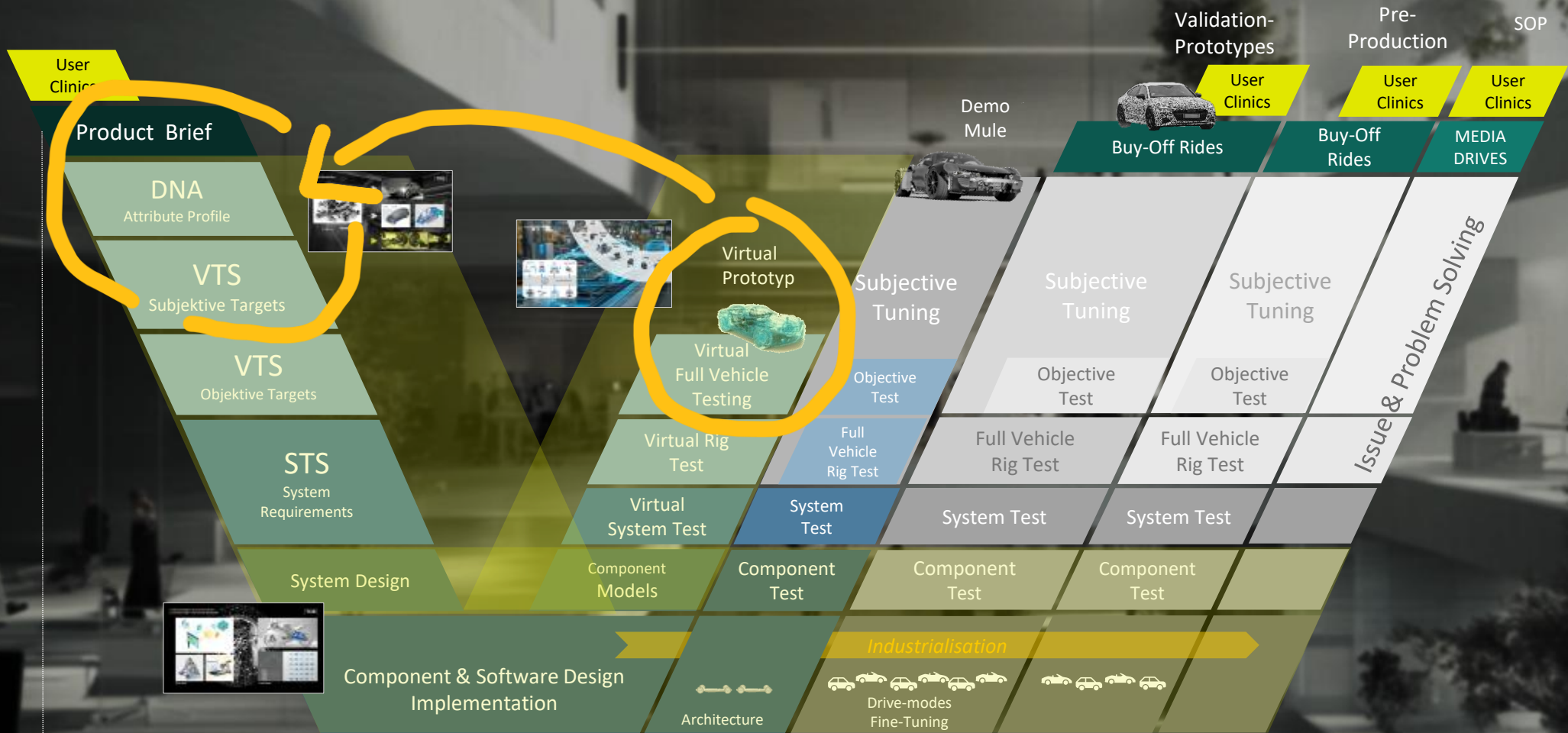


Static



Compact





European OEM ~48 months // New Automotive Startups 20 months ???

THE FUTURE LOOP



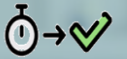


Key Enabler

|TRE|



Courage & Vision



Discipline in Execution



Focus on Customer Experience



Earliest possible use of virtual generation and validation



Partnership between OEMs, suppliers, service providers & universities



Sharing of best practises and agreement on common standards