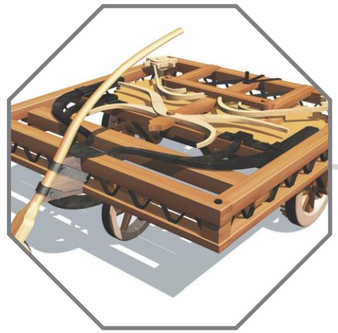
davteq

DATA-DRIVEN SOLUTIONS IN CONNECTED AND AUTOMATED DRIVING

ALI MORTAZAVI, Ph.D.
CEO & FOUNDER

APRIL 16, 2024

History of Autonomous Vehicles

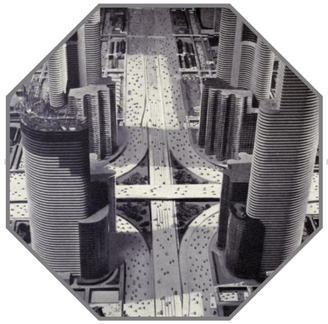


16th Century

Leonardo da Vinci self propelled cart

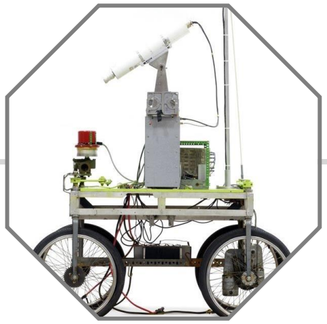
1925

Houdina radio-controlled car



1939

NY Futurama Exhibit



1961

Stanford Moon Cart

1995

Navlab 5

2004

DARPA Grand Challenge

2010's

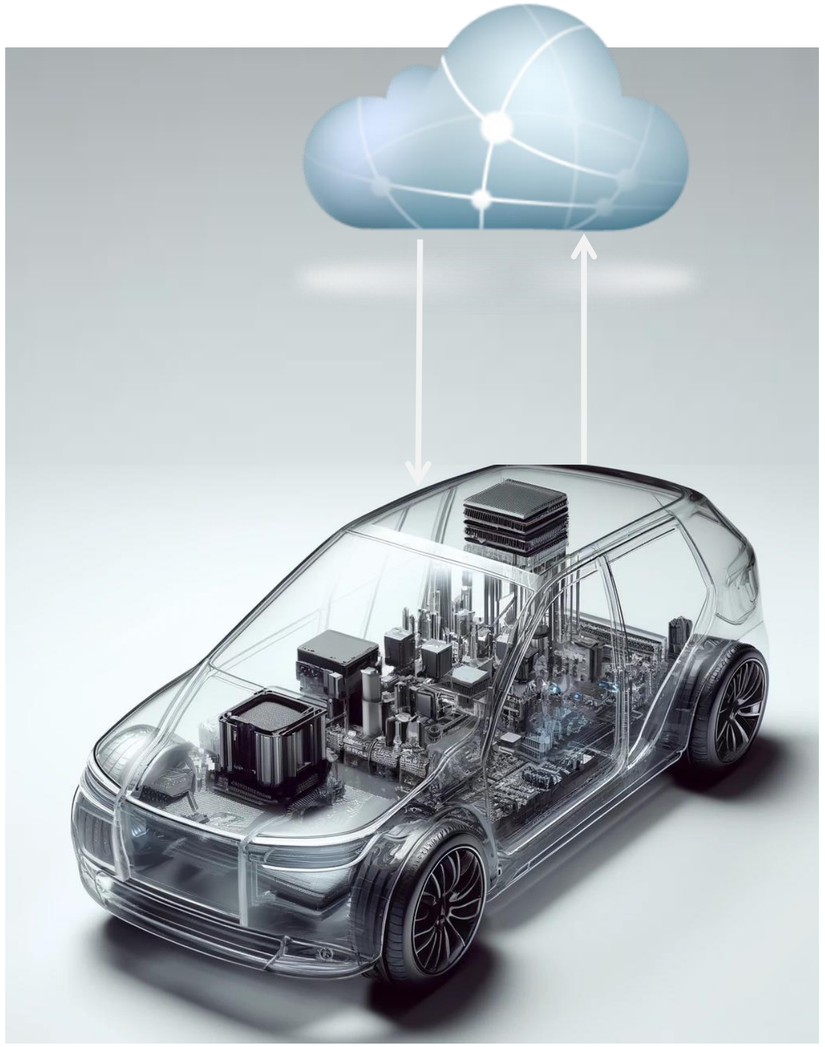
Majority of OEMs started AV testing.
Google self-driving car tested.

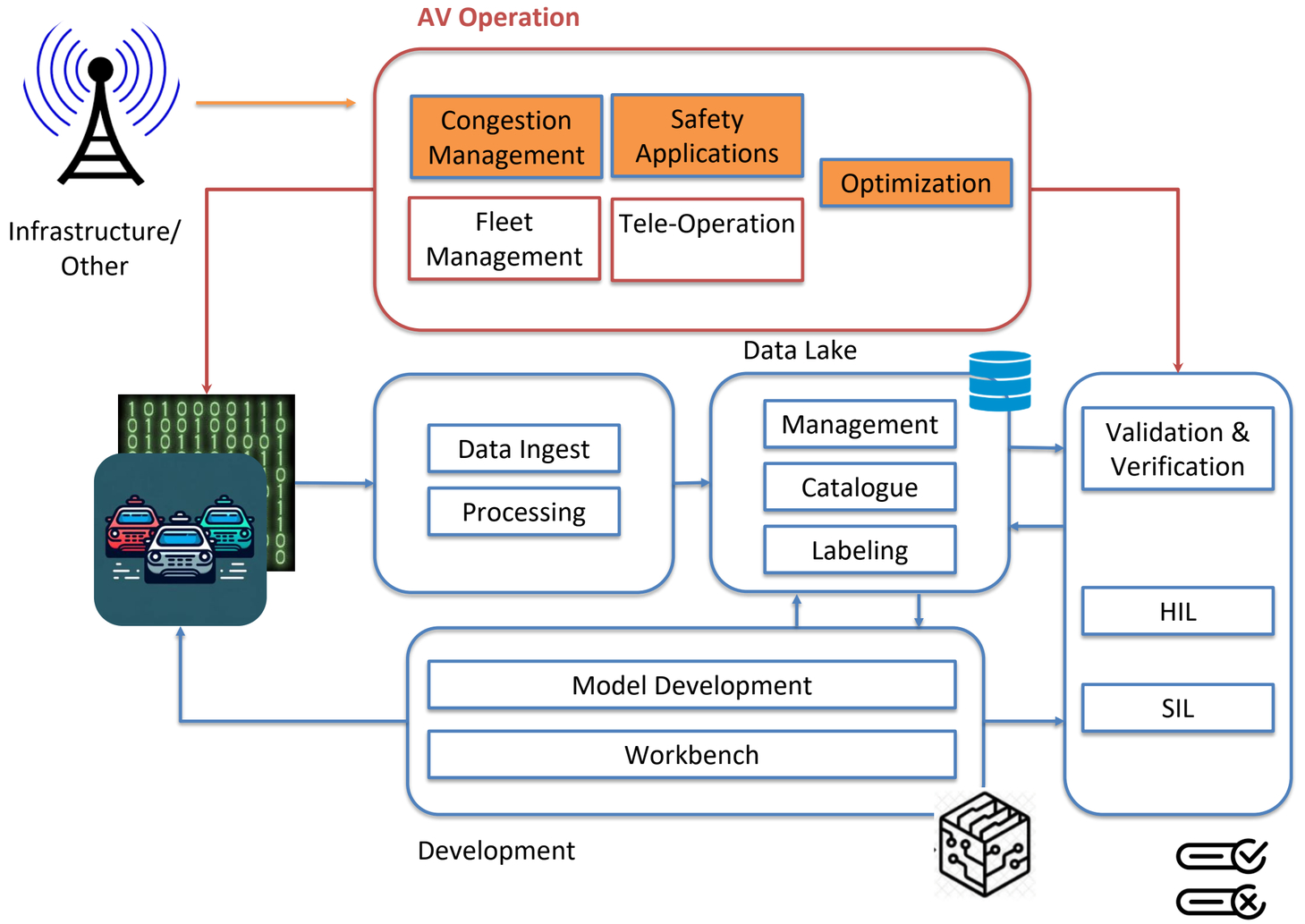
2020's

Tesla Propilot, Waymo and Cruise robo-taxi

NOW

Data & Autonomous Vehicle





Data Journey

davteq INC

Optimization

Sustainability

Digitization → Digitalization → Digital Transform

Data Awareness & Culture	Data Collection & Integration	Data Storage & Management	Data Analytics, Insight & Apps	Data Visualization & Communication	Data Governance	Continuous Improvement

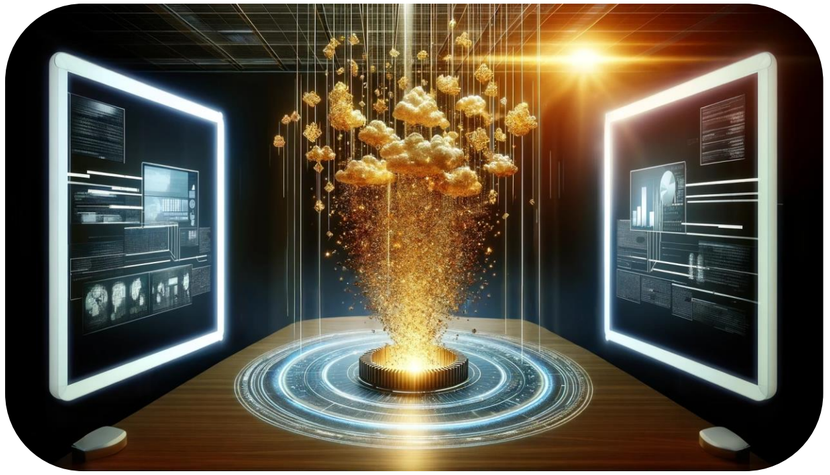
Maturity

Complexity

Digitization Offline Ingestion Data Fusion	Siloed Storage	Analytics	Web-based Dynamic Interactive	Security	
Real-time	Cloud Repository	Machine Learning		CCPA GDPRA	Gen-AI
	Large-Scale Data Lake	Predictive Analytics Data-driven Applications			

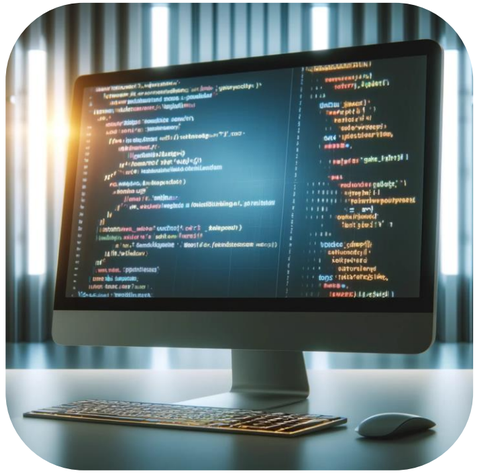
Services

Sustainable Autonomous Mobility



Data & Digital Transform

Analytics, Machine Learning and AI



Software Development

UX & UI

Technical Program Management

Harm Jan Mostert

Sr. Advisor, Automated Driving
RDW

"Data and Automated Vehicles"

Public agency perspective

Use Cases

Challenges and Path Forward

Dr. Liam Pedersen

Chief Scientist
Nissan Advanced Technical Center – Silicon Valley

"Infrastructure-Based Solutions for Connected and Automated Vehicles"

OEM/Private Sector perspective

Use cases

Challenges and Path Forward

Randy Iwasaki

CEO
Iwasaki Consulting Services

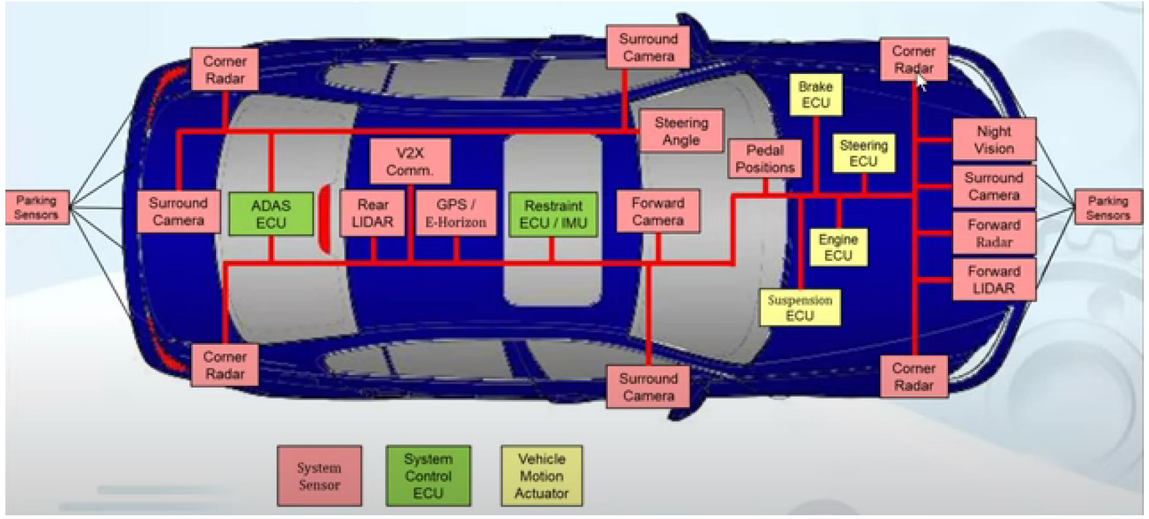
"***CAV Technology Update"***

Connecting both public and private perspectives

New use case

Challenges and Path Forward

RDW



Data and automated vehicles

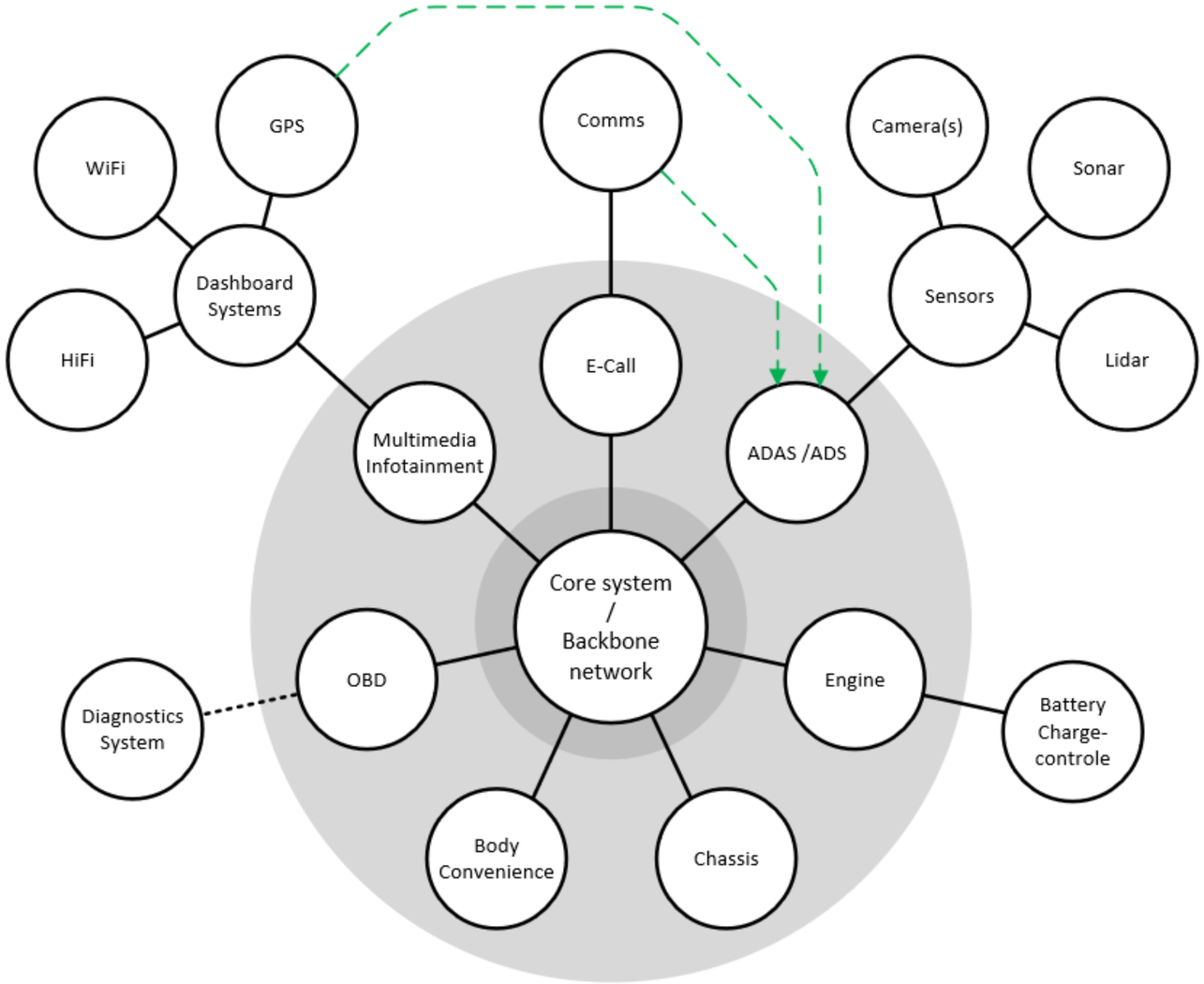
Vehicle authority perspective

April 16th 2024, Harm Jan Mostert

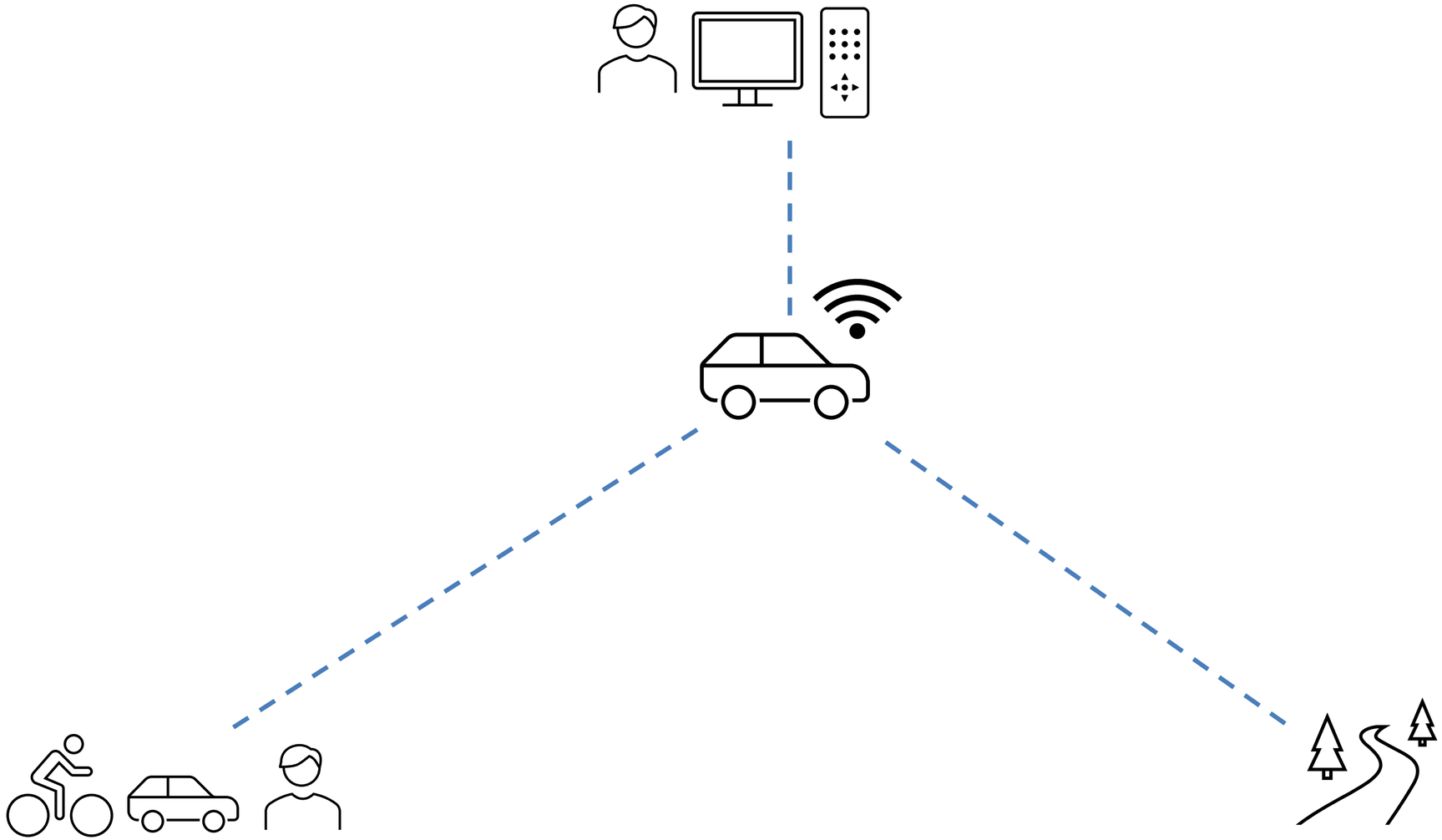
Netherlands Vehicle Authority

Safety, sustainability and liability in mobility

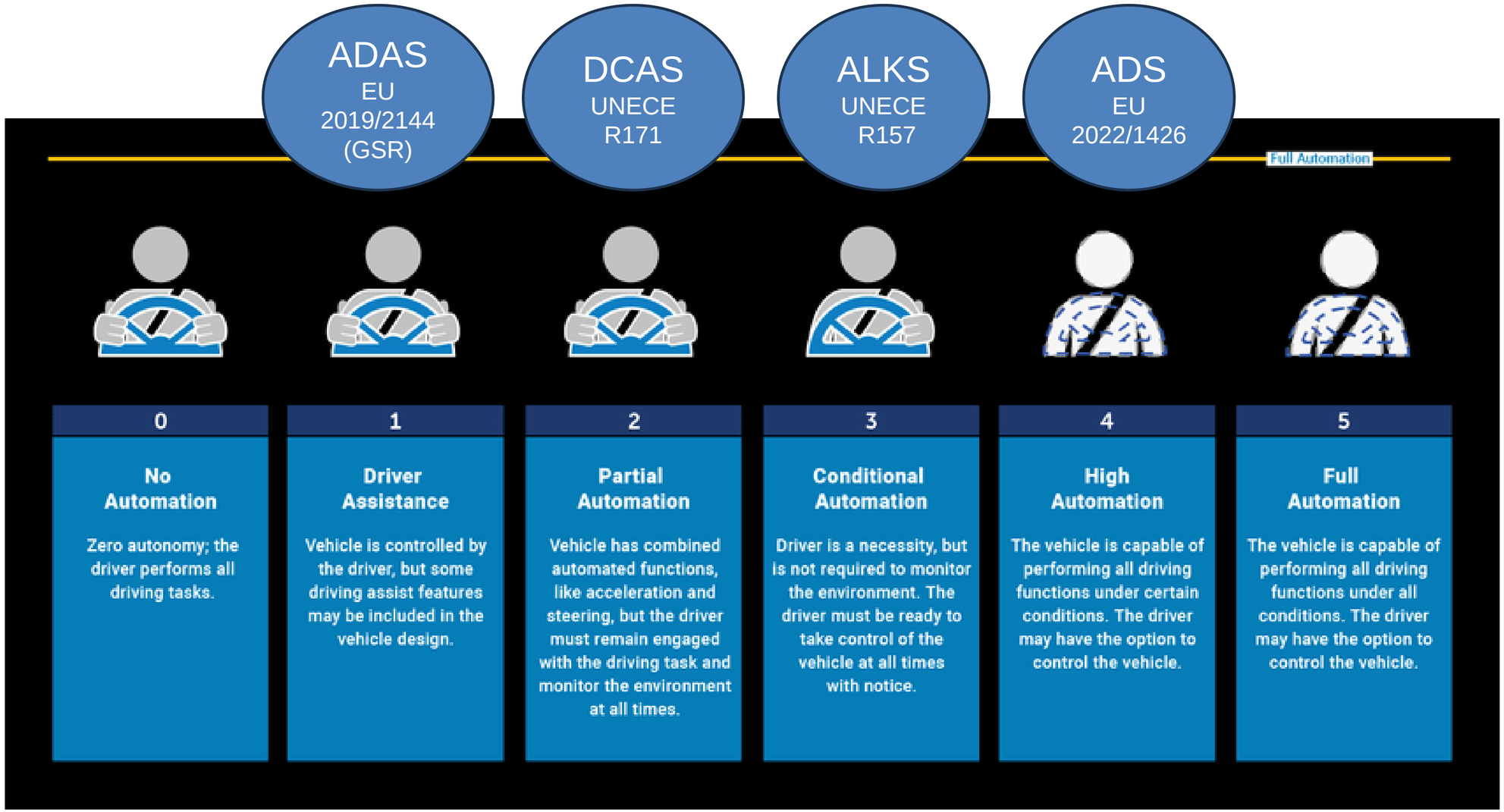
Automated vehicle = ‘data’



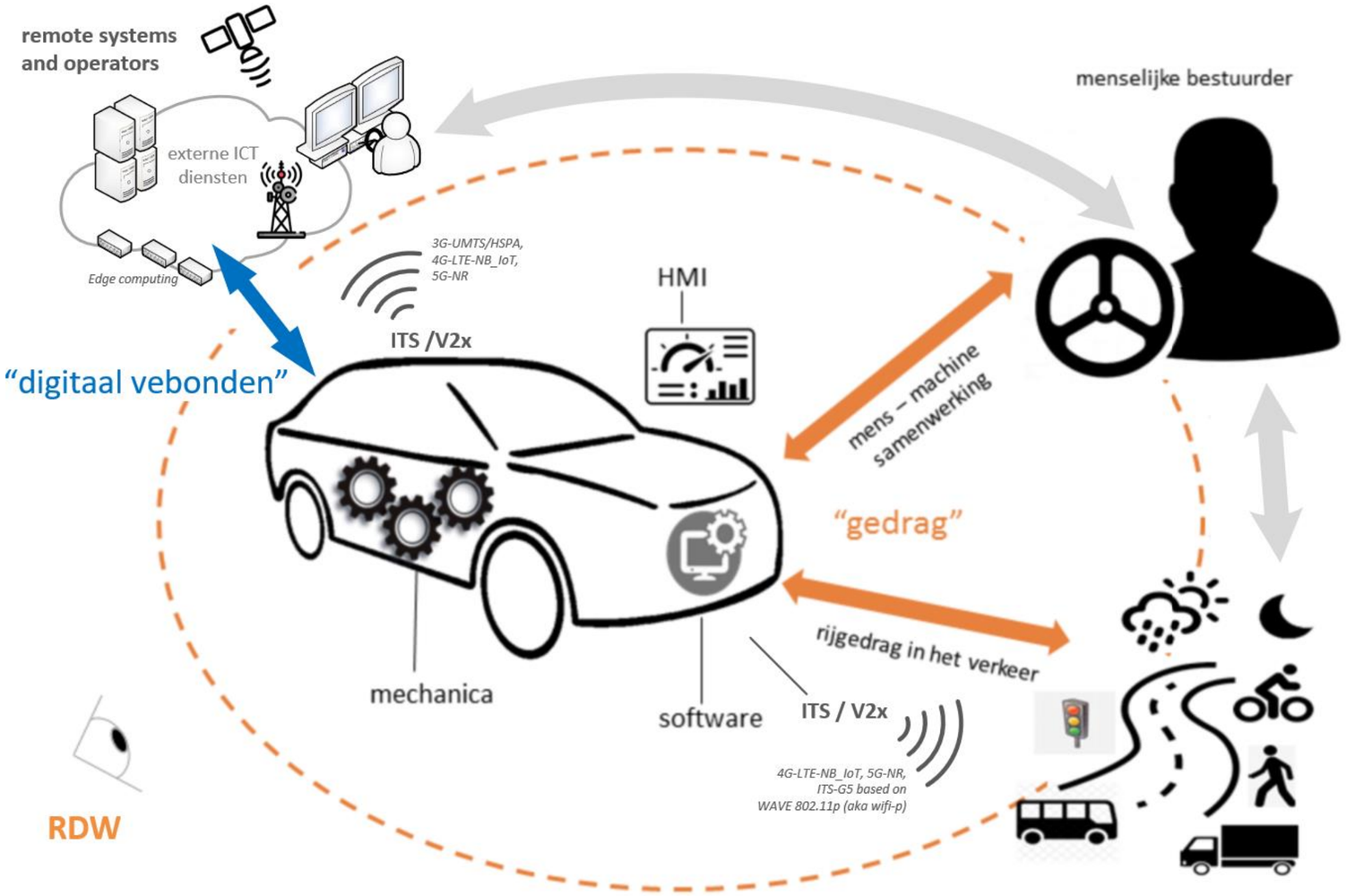
Communication of the ADS vehicle



Regulations for ADAS and ADS vehicles



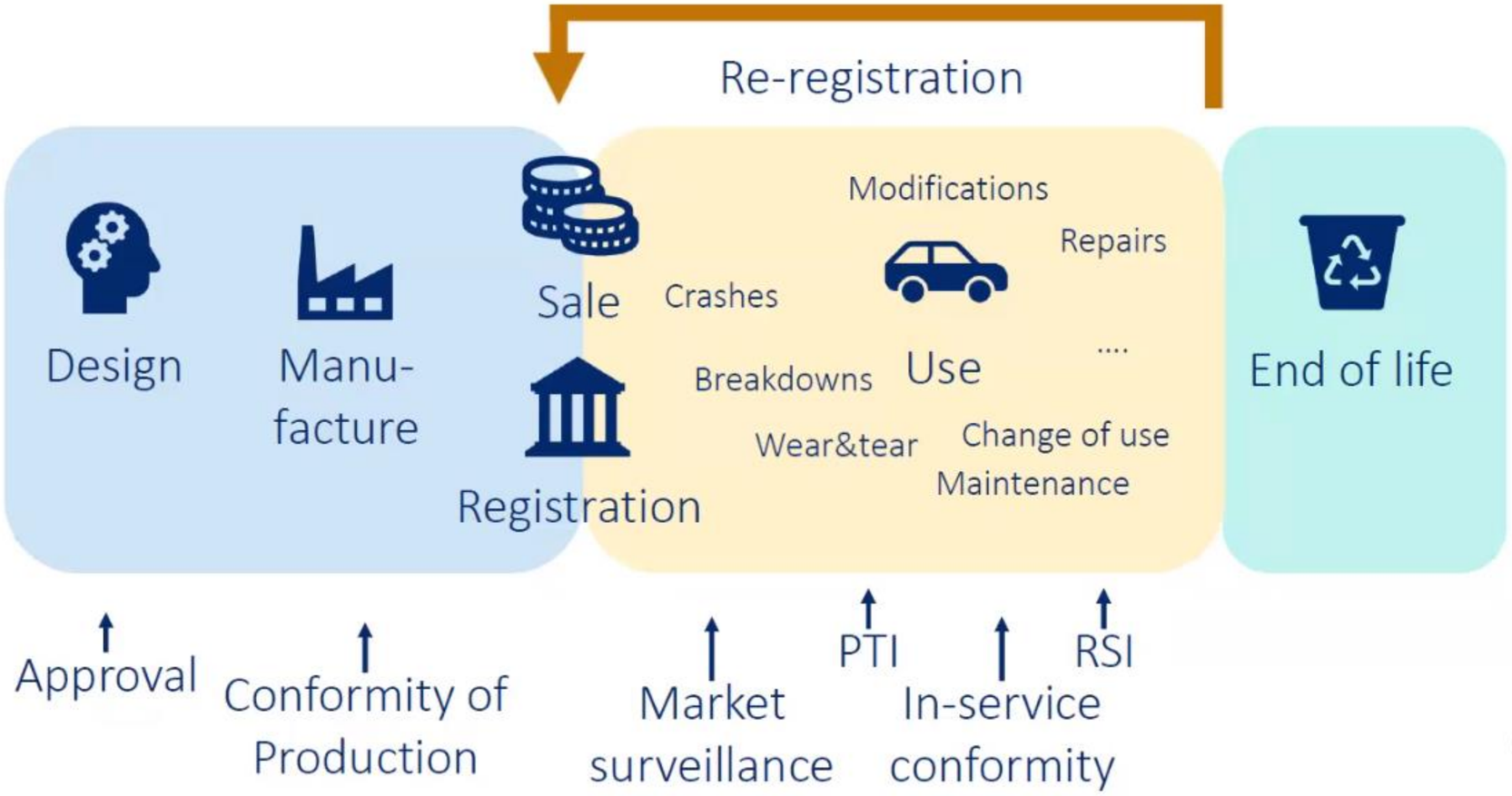
Digital and connected



Use cases for automated driving support

- Earlier and smoother automated actions
- Automated parking
- Merging
- Cooperative automated driving: platooning, coordinating intersection
- Collision warning and avoidance
- Remote driving

THE VEHICLE'S LIFE



Focus on the use cases that have most positive impact on society: safety, sustainability and liability

Data is the key, but also the lock

Regulation and standardisation is needed to make impact

Consumer should be in the lead and on the steering wheel

Level playing field

Thanks for your attention!