Introduction FDTech @ CADA

Cooperation Workshop with Czech Republic

AUTOMATED DRIVING

Facts and Figures

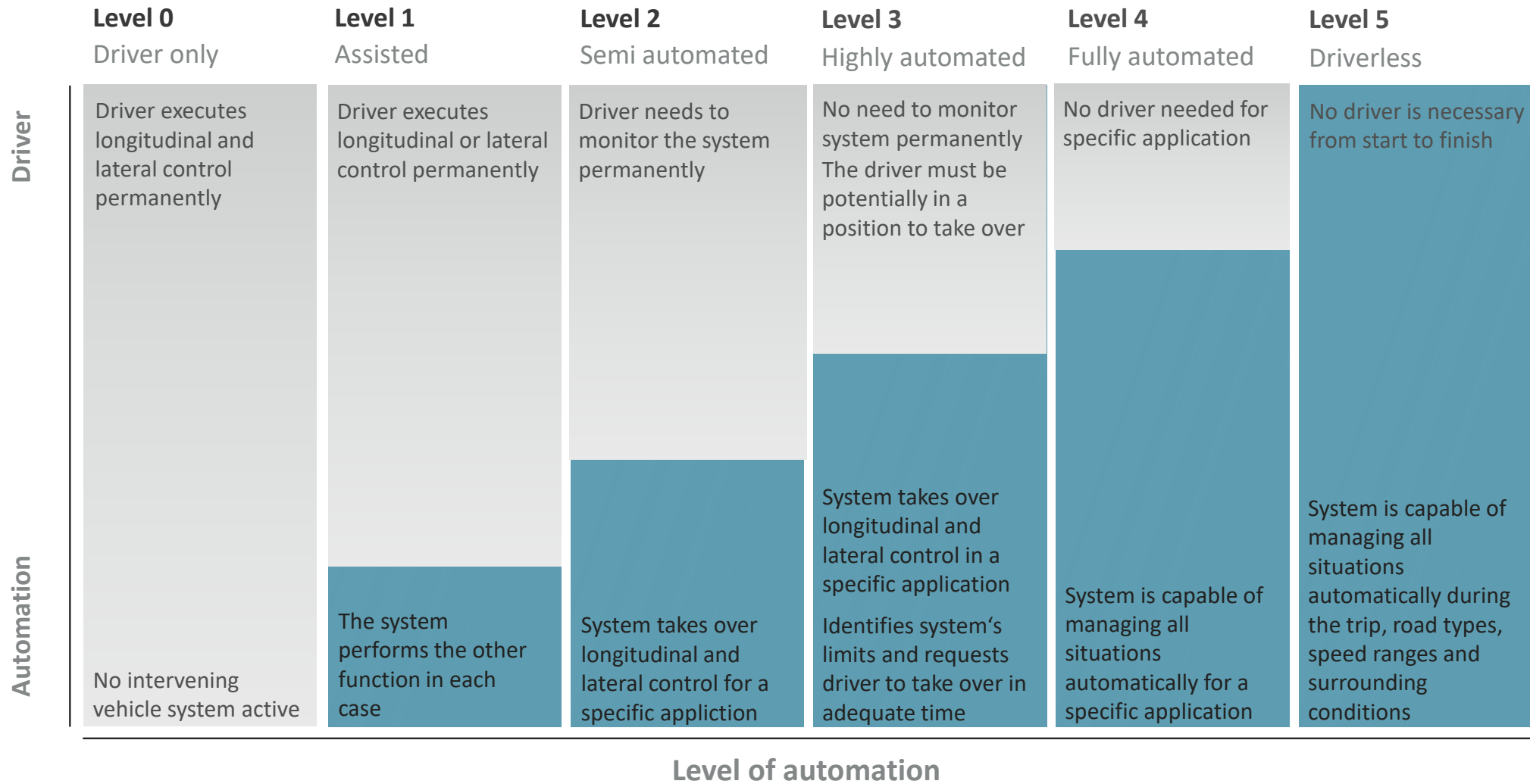|	
Founded by	5 experts in the field of ADAS and AD
Since August 2018	Majority stake: 5 FDTech founders
	Minority stake: Volkswagen AG
Strategic alignment	Special solutions in the field of AD pre development and it's transfer into series development at OEM's and Tier's
Operational independence	Fast pace in setup and at technology topics

Founded	10/2017:	5 employees
Today	01/2021:	100 employees
Plan	01/2023:	160 employees
Locations	Chemnitz (Headquarter)	
	München	
	Wolfsburg	

Level of Automated Driving

Level 0	Level 1	Level 2	Level 3	Level 4	Level 5
Driver only	Assisted	Semi automated	Highly automated	Fully automated	Driverless

Driver

Driver executes longitudinal and lateral control permanently	Driver executes longitudinal or lateral control permanently	Driver needs to monitor the system permanently	No need to monitor system permanently The driver must be potentially in a position to take over	No driver needed for specific application	No driver is necessary from start to finish

Automation

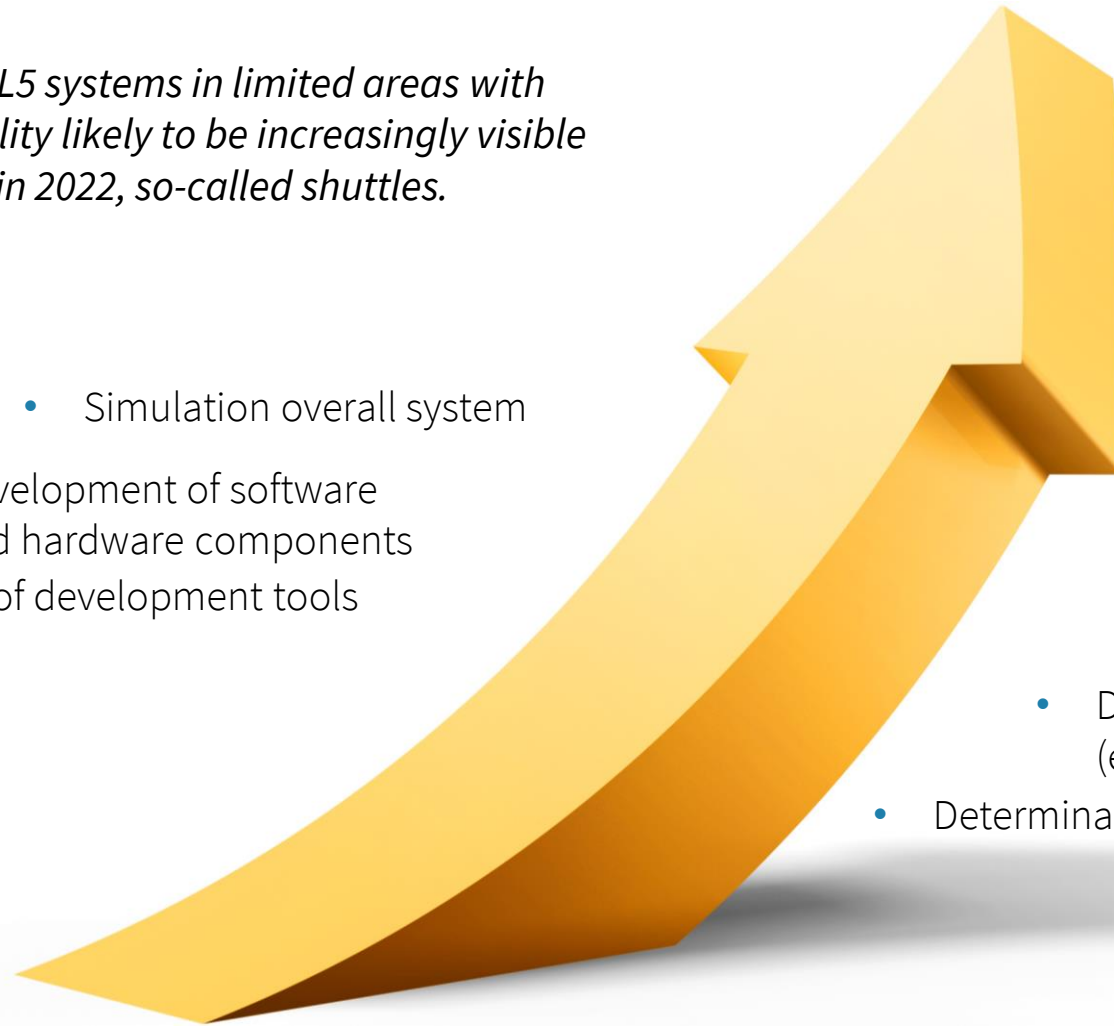|					
No intervening vehicle system active	The system performs the other function in each case	System takes over longitudinal and lateral control for a specific appliction	System takes over longitudinal and lateral control in a specific application\n\nIdentifies system's limits and requests driver to take over in adequate time	System is capable of managing all situations automatically for a specific application	System is capable of managing all situations automatically during the trip, road types, speed ranges and surrounding conditions

Level of automation

Forecast: First L5 systems in limited areas with limited functionality likely to be increasingly visible starting in 2022, so-called shuttles.
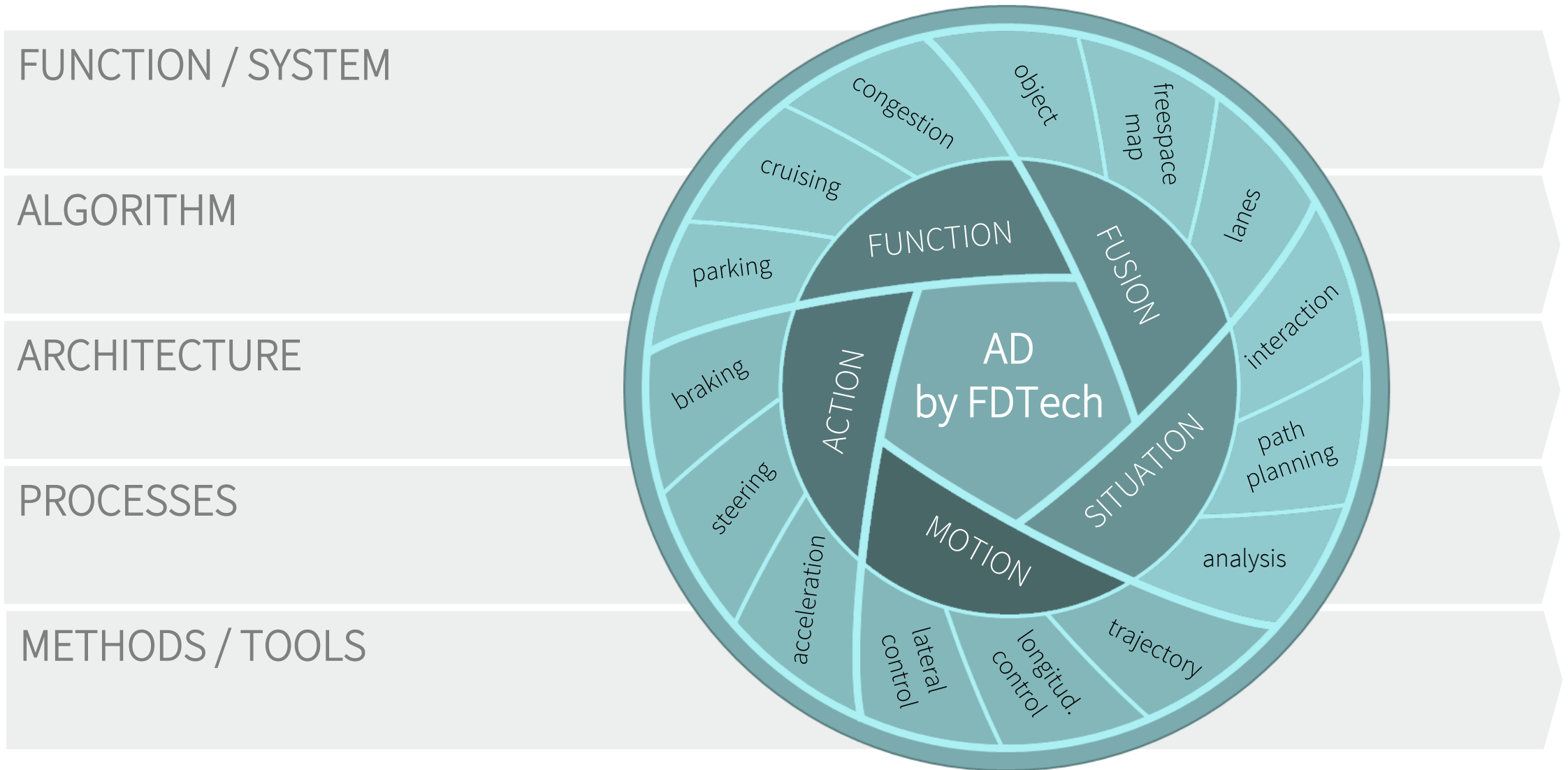
Appr. 2023/24:
L3 and L4 systems for selected use cases

- Simulation overall system
- Development of software and hardware components
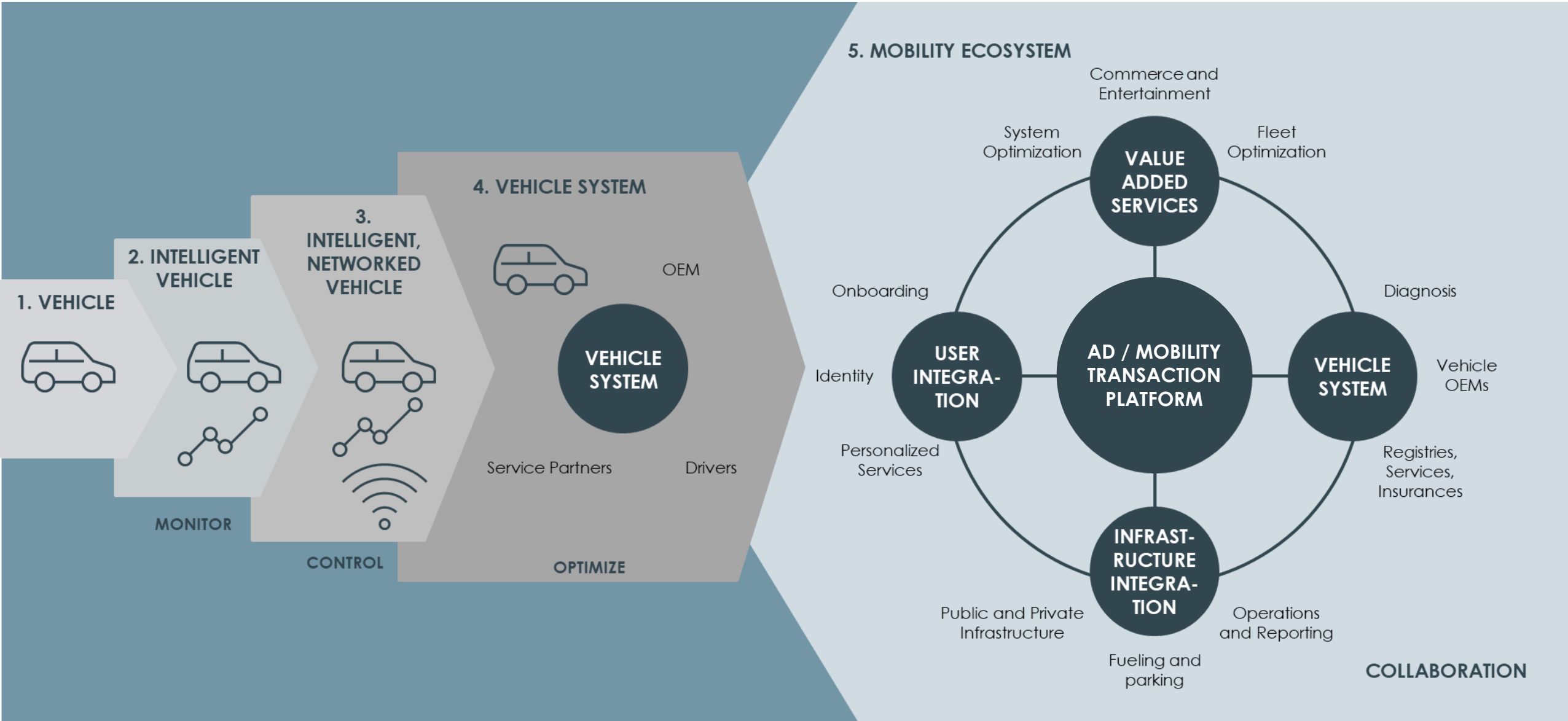- Provision of development tools

- Homologation
- Fleet testing (Shadowing)
- Available computing power Automotive suitable
- Design vehicles for AD (e.g. redundancies)
- Determination of legal framework conditions

So far:
Prototypes
Technical feasibility

Complexity in Automated Driving

FUNCTION / SYSTEM

ALGORITHM

ARCHITECTURE

PROCESSES

METHODS / TOOLS

Participation at the ecosystem of the customer – brand is not everything

INCREASING SPEED AND DRIVING DEVELOPMENT THROUGH PARTNERSHIPS

We think in Partnerships

New development processes

Together instead of against each other

Establishment of new collaboration models

Fast, dynamic decision-making

Partnership thinking

- **CADA is a Germany-wide unique network in the field of automated driving. We think in partnerships.**

- The Chemnitz Automated Driving Alliance is an association of innovative technology companies in the regional automotive industry.

- We develop automated driving in Chemnitz. We want to make mobility sustainable and accessible to everyone.

- The participating companies generate special solution modules, which together provide an integrated software chain for automated driving.

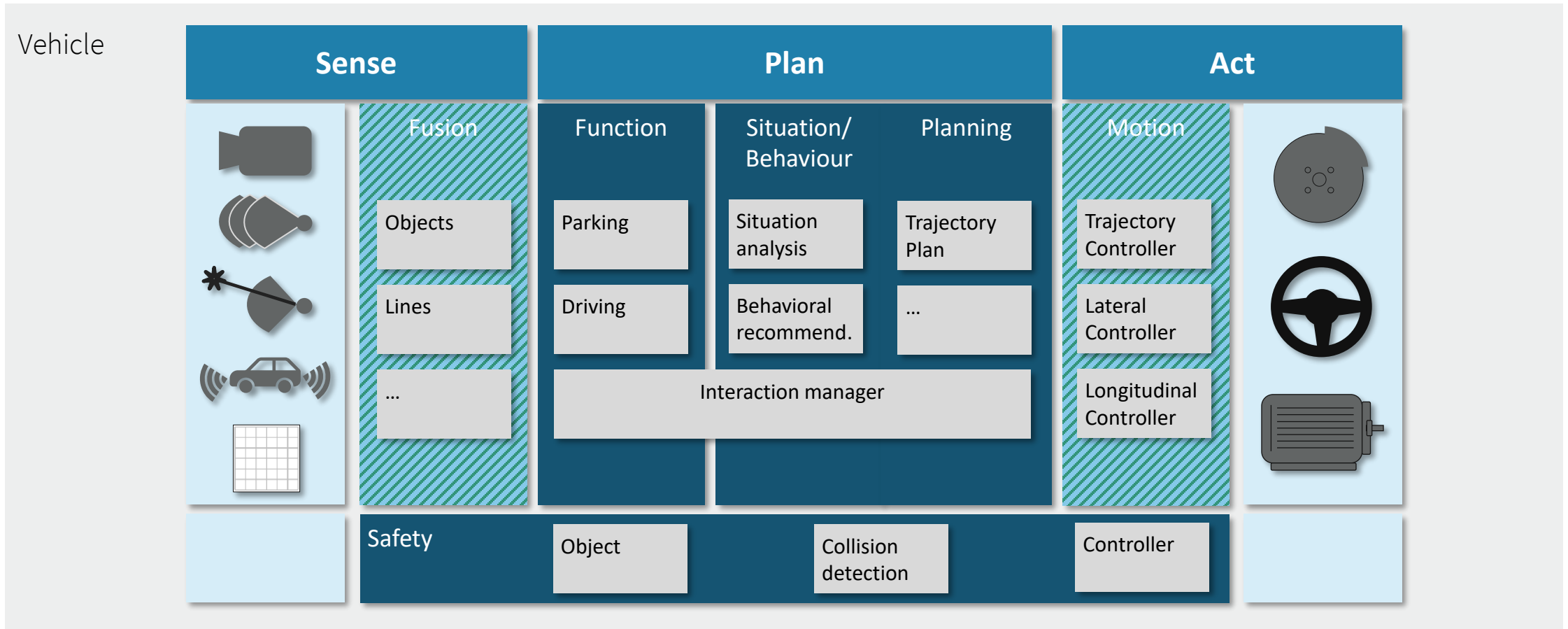- Through exchange we strengthen the potential of the other. Synergies are created through cooperation.
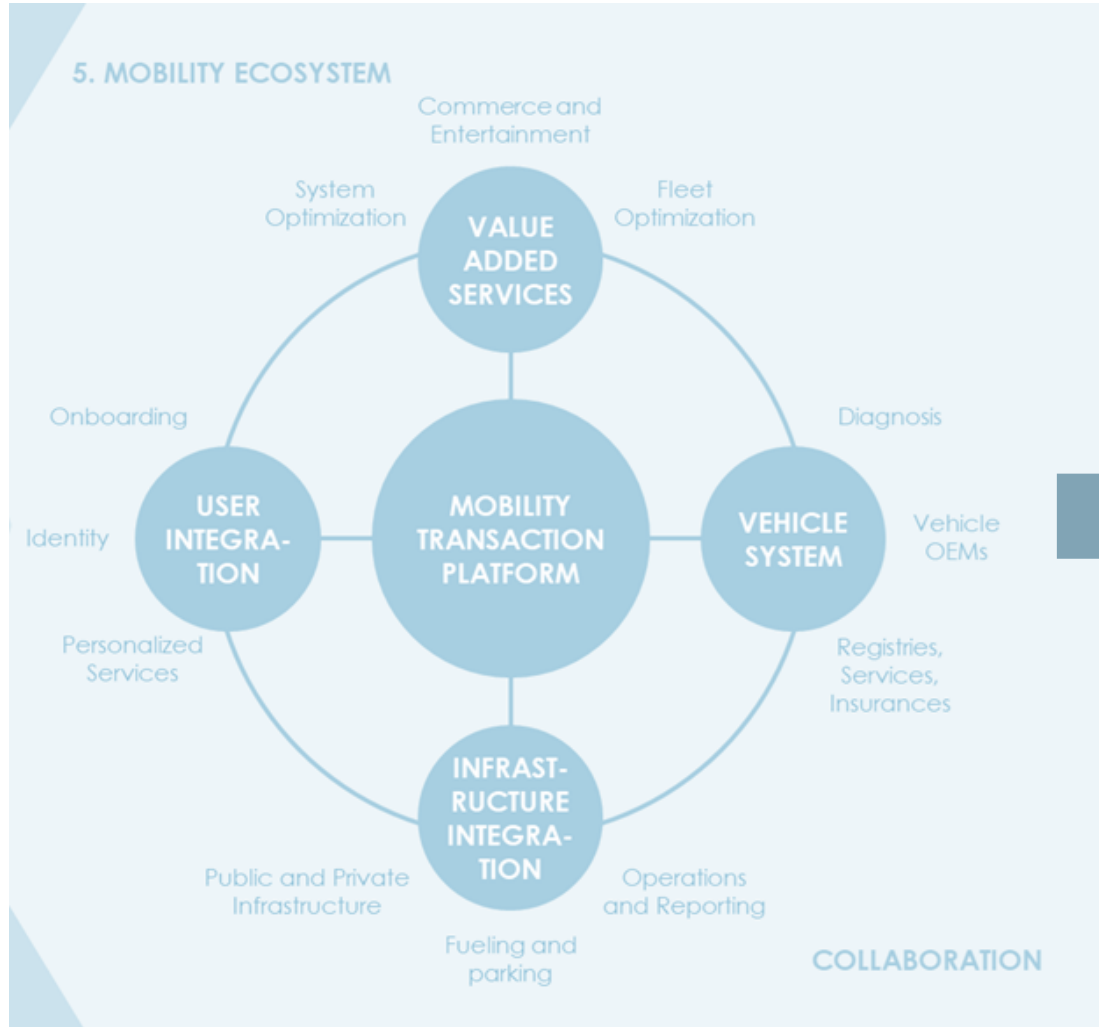
CADA founded in 2019

5 Technology companies

Sustainable mobility

500 employees

Create synergies
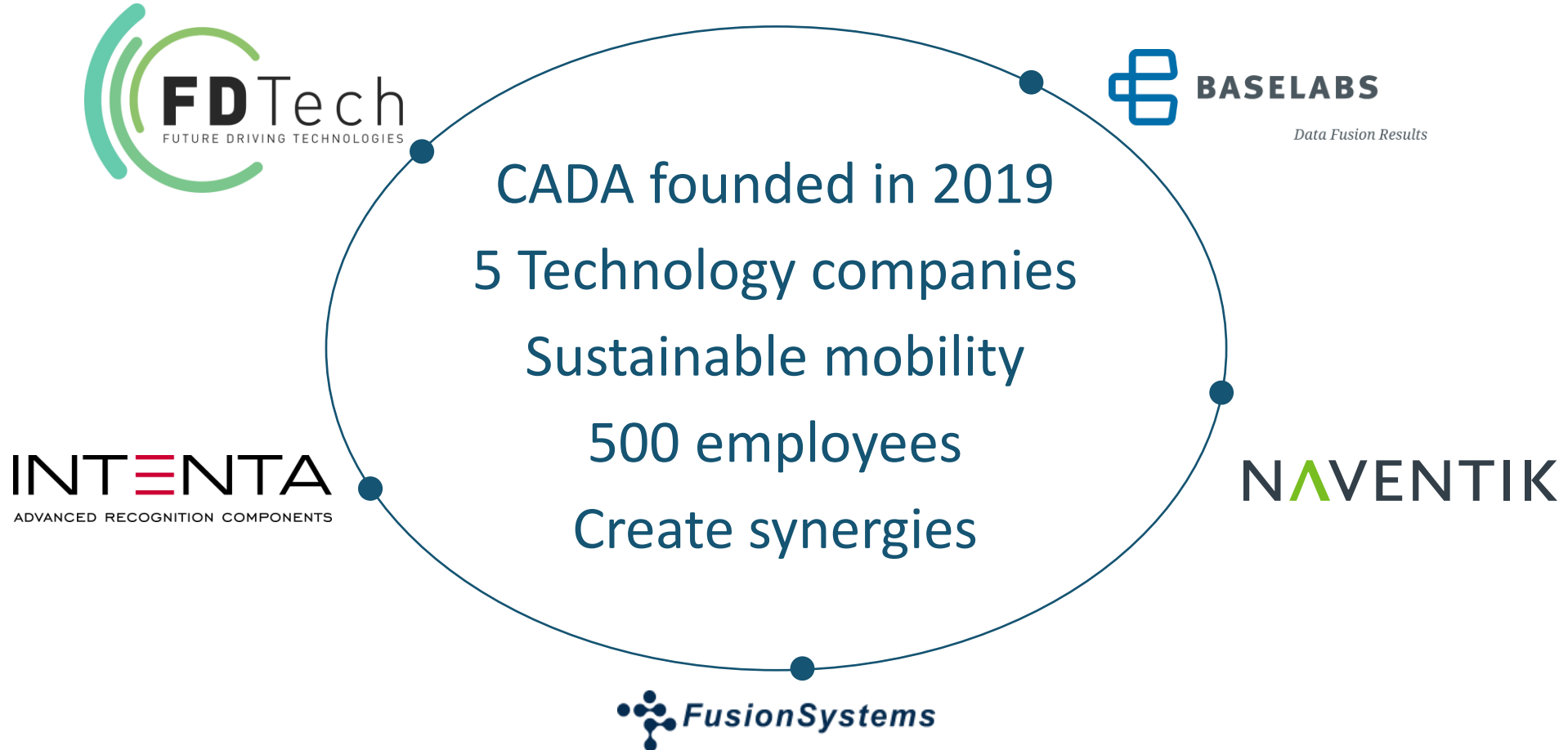
Illustration of the effect chain

WE SHOULD THINK IN PARTNERSHIPS NOT ONLY LOCALLY BUT ALSO REGIONALLY

▶ To connect expertise and economic factors of the smart region and thus strengthen them to consolidate the future of the technology region.
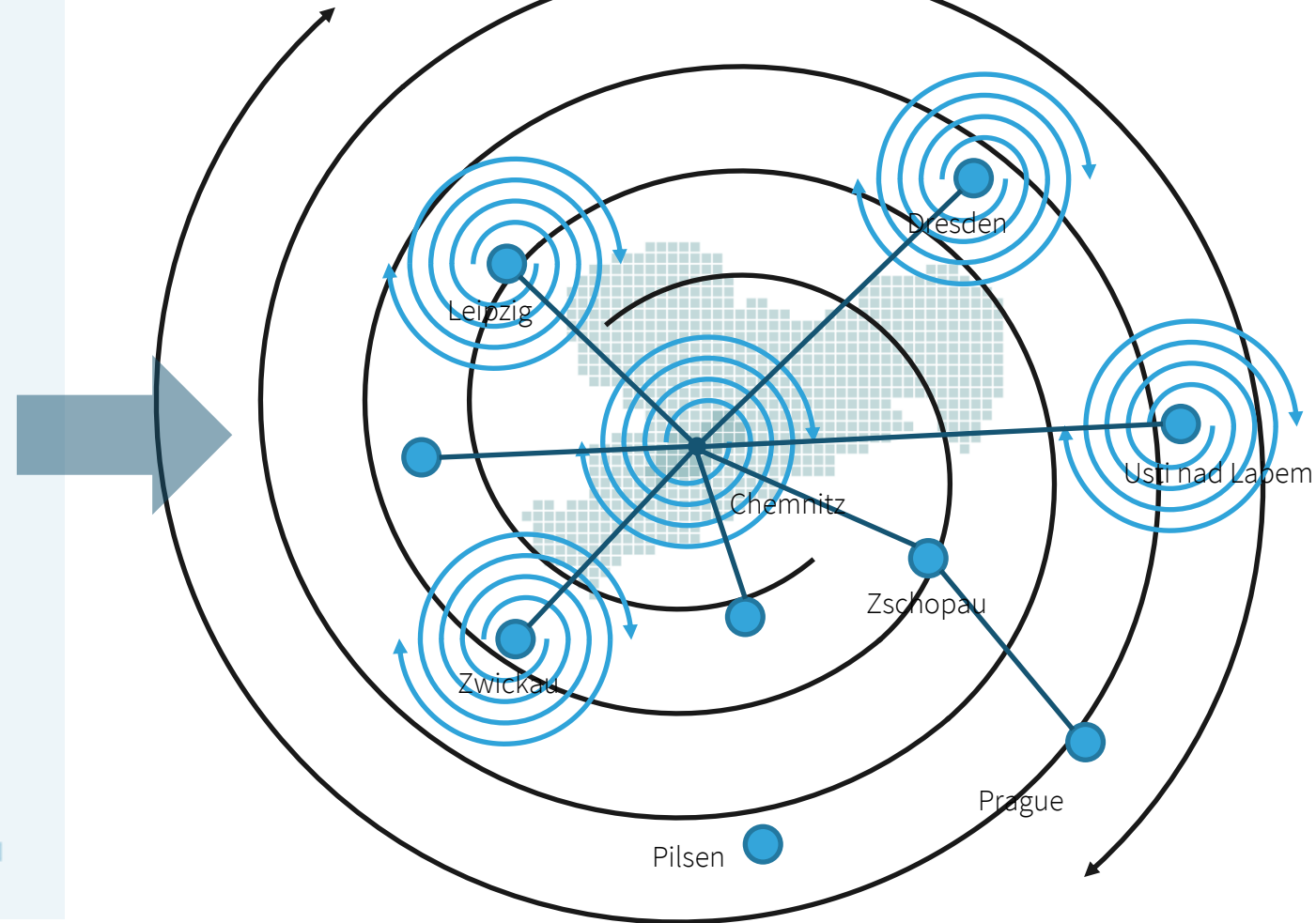
INDIVIDUALLY, WE ARE ONE DROP. TOGETHER, WE ARE AN OCEAN.

Ryunosuke Satoro