

CASE: CONNECTED, AUTONOMOUS, SHARED, ELECTRIFIED

MOBILITY SYNTHESIS



Philippe Clogenson is Senior Advisor at Choucas Consulting. He improves the performances of the companies by implementing strategies of Operational Excellence. By focusing on client experience and using Agile practices, he makes companies evolve so that they develop innovative products/services.

Philippe Clogenson

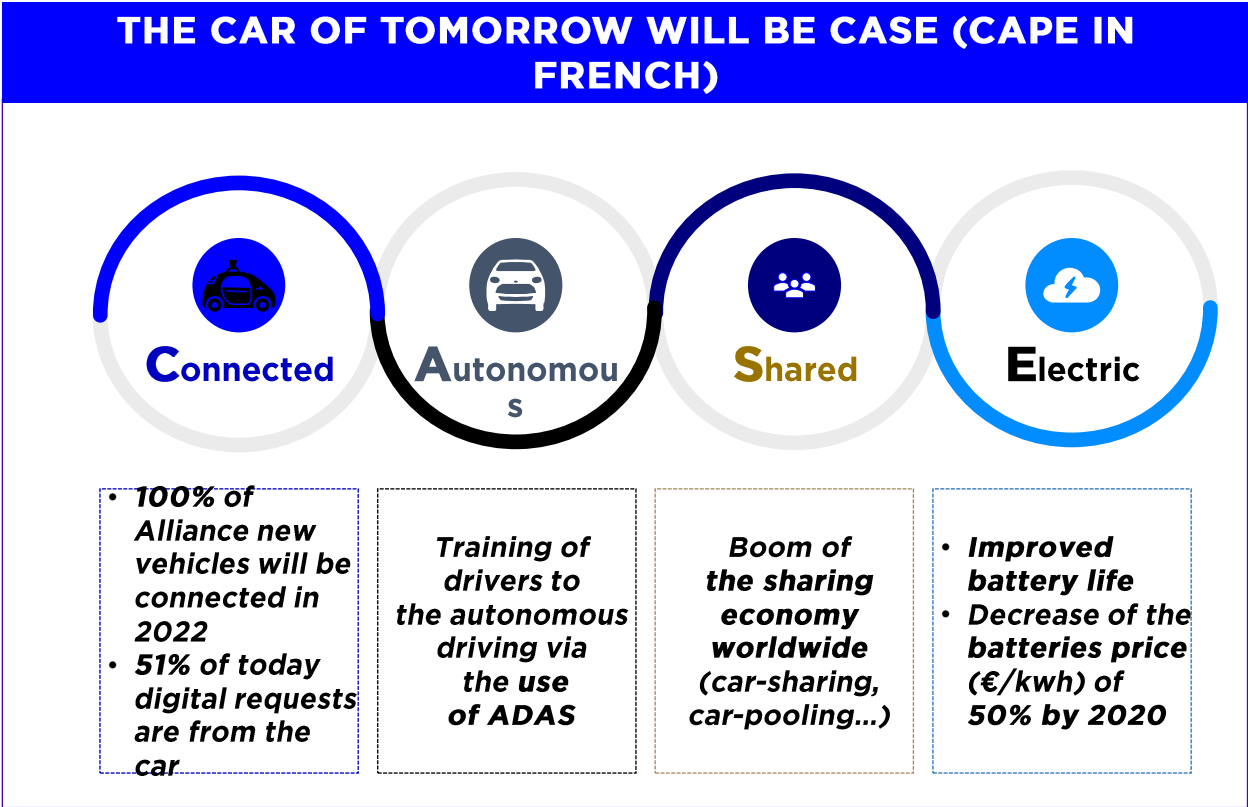
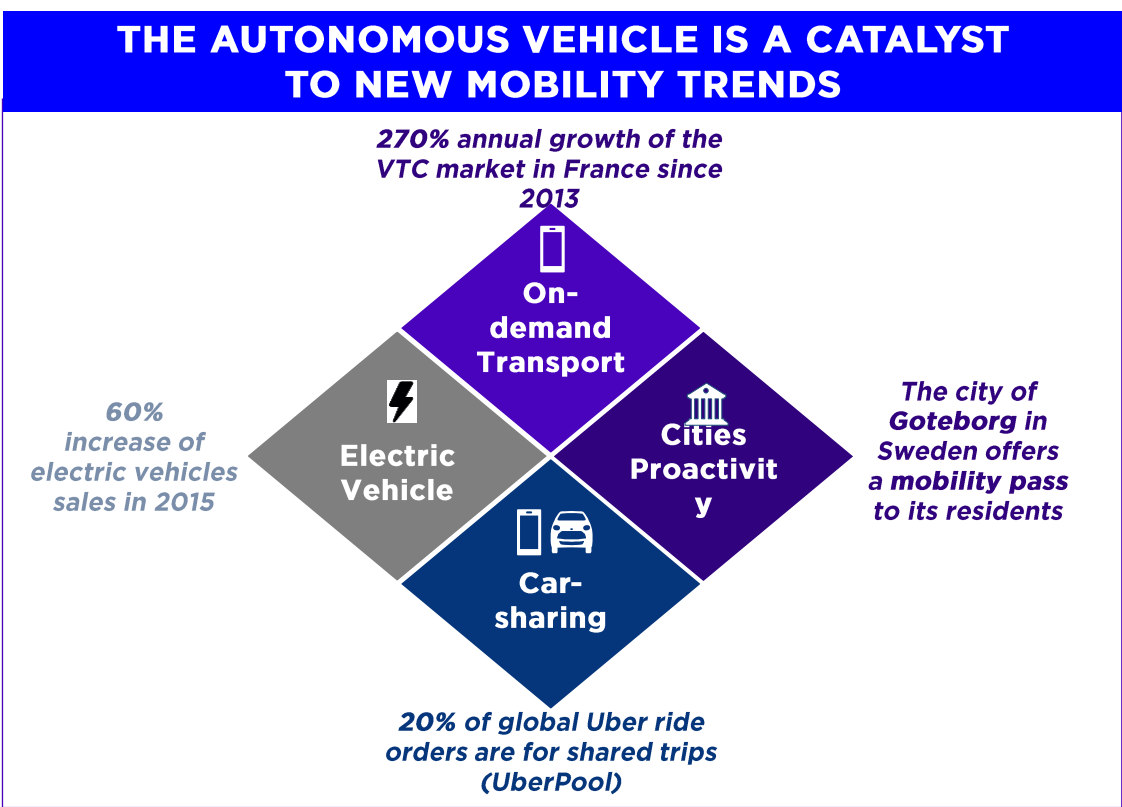
Senior Advisor, Choucas Consulting

clogenson@choucas-consulting.com

+33 6 33 04 28 97

www.choucas-consulting.com

Mobility trends catalyst, the car of tomorrow will be connected, autonomous, shared and electric...



We are currently making the transition from an ownership to a usage model

THE MAIN CHALLENGE OF MAJOR CITIES IS THE REDUCTION OF...



POLLUTION

- **37%** of GHG emissions are linked with road transport in major cities
- **500,000** early deaths due to air pollution in Europe



ACCIDENTS

- **90%** of accidents are linked to human causes
- **25%** of fatal accidents in Japan are linked to senior people



CONGESTION

- **30%** of the automotive traffic in major cities is dedicated to parking
- **41% daily extra travel time** for commuters in Chengdu (China) and Los Angeles (USA)



ELECTRICITY



AUTONOMOUS VEHICLE



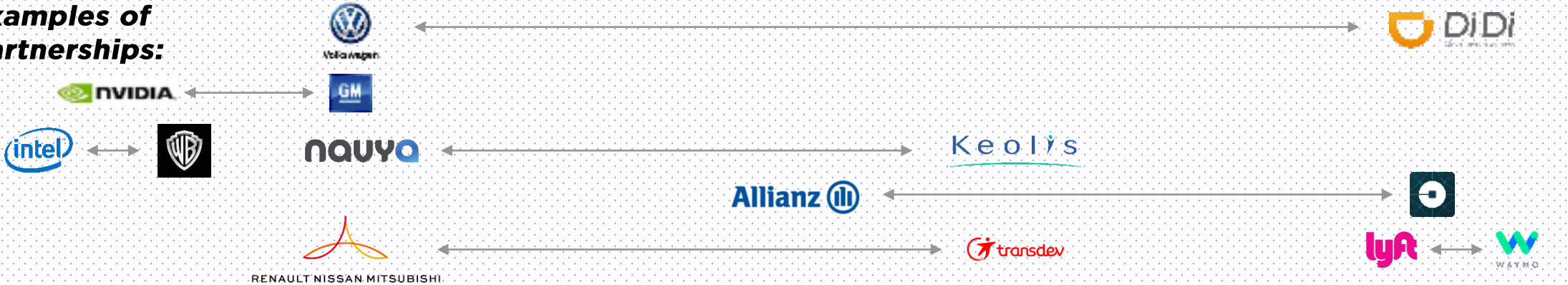
CONNECTIVITY

The actors along the value chain position themselves on this promising autonomous vehicle market

THE AUTOMOTIVE VALUE CHAIN IS COMPLEXIFIED WITH THE ARRIVAL OF NEW ENTRANTS

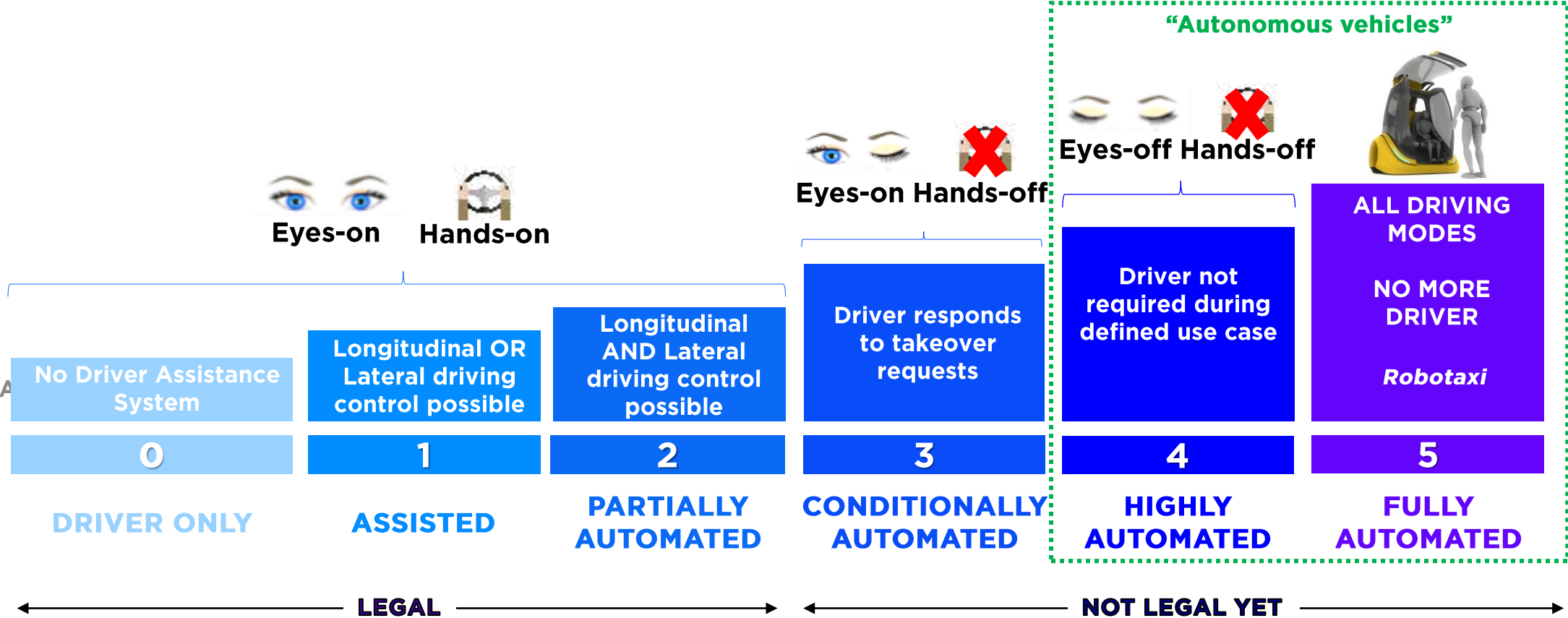


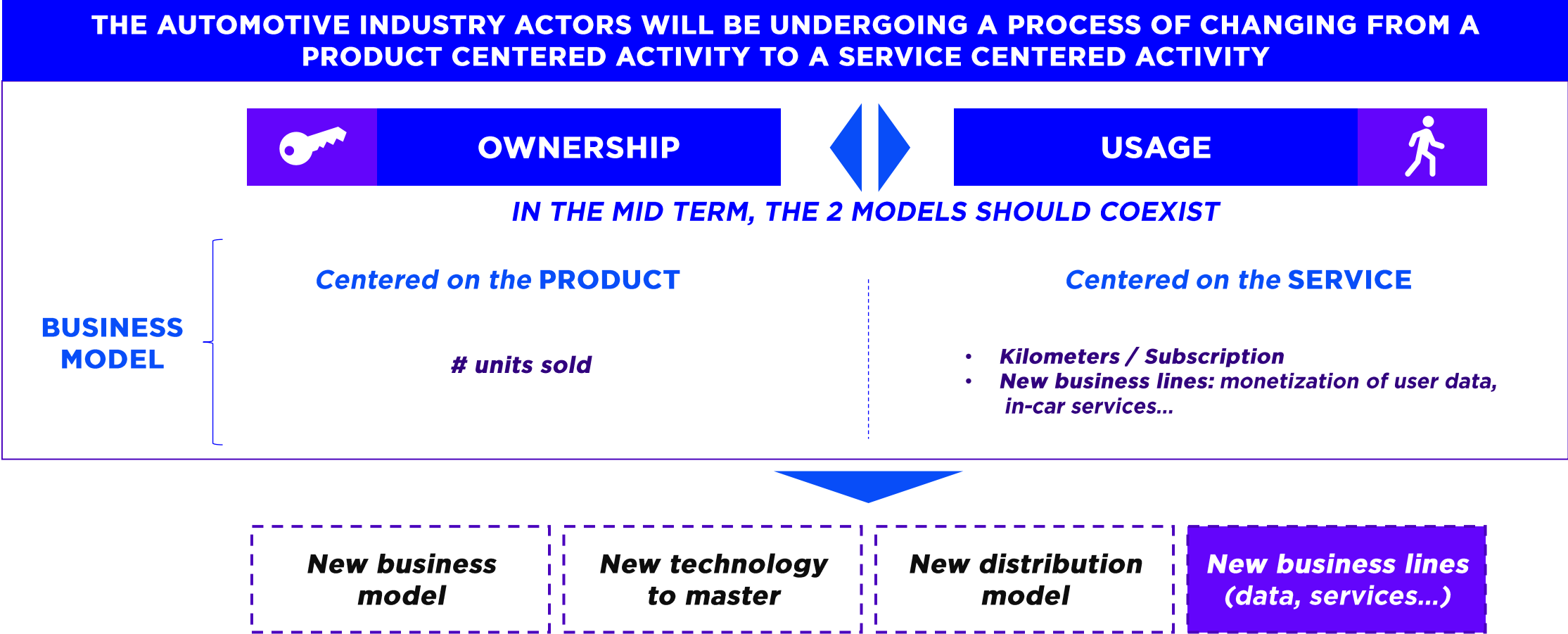
Examples of partnerships:



The business agility of new entrants and the value chain fragmentation foster partnerships

Based on SAE standards, The autonomous vehicle can be defined from level 4 thanks to the eyes-off benefit





The AV will involve NEW BUSINESS MODELS OPPORTUNITIES from data and services offers

THE AV WILL TRANSFORM THE CAR FROM A PRODUCT TO A SERVICE...

LEVELS 1, 2

ADAS



Adaptive
cruise
control

Parking
assistance



Infotainment



Ownership

LEVEL 3, 4

AD



Automate
d driving



Leisure
(music...)



Geoloc.
services



Working
tools



Usage

... INVOLVING NEW BUSINESS MODELS OPPORTUNITIES

1 Driver / vehicle data :

- Automated Driving mode
- Predictive Maintenance



2 Complexification & digitalization of the in-car offer

- Digital services (on-demand music...)
- "Car real estate"



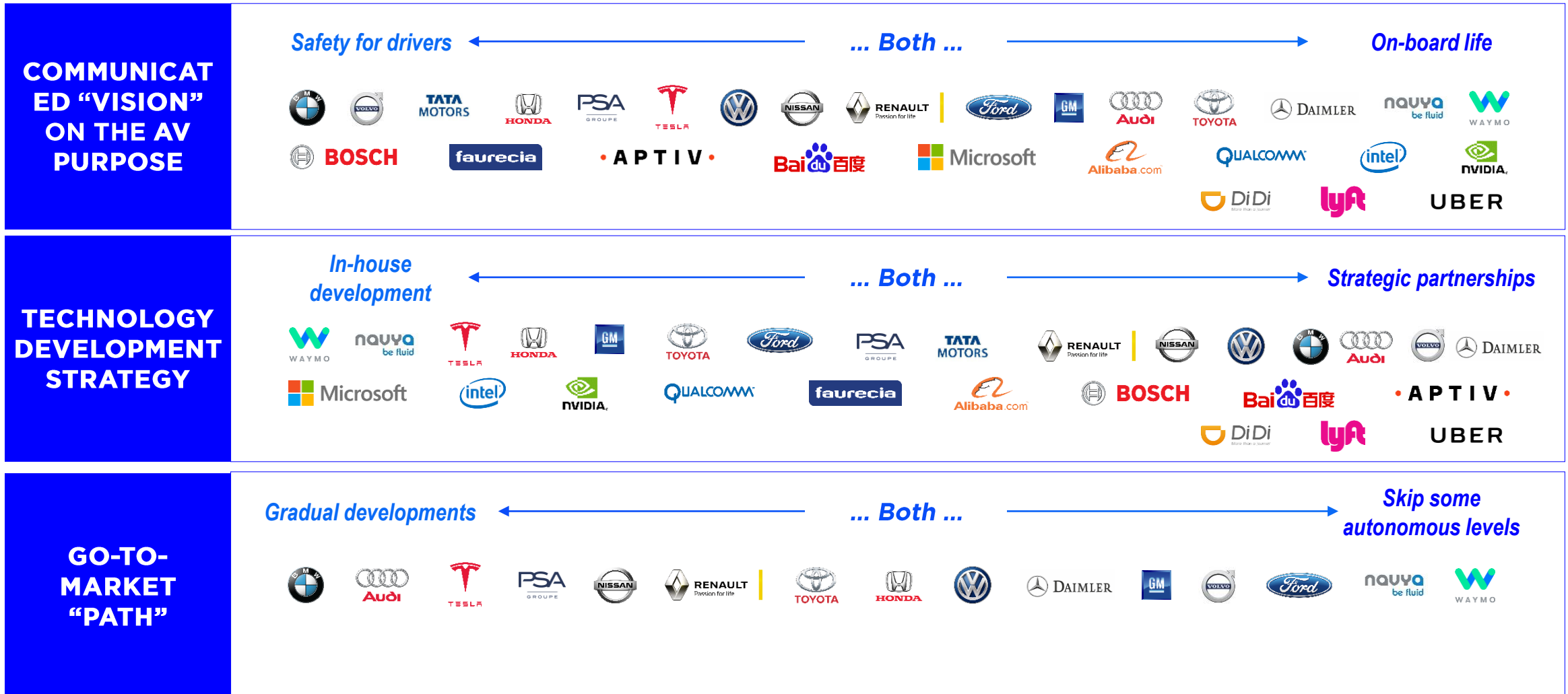
3 Mobility services:

- Increased partnerships with digitalized players



Renault will need to find new business models to monetize data & services

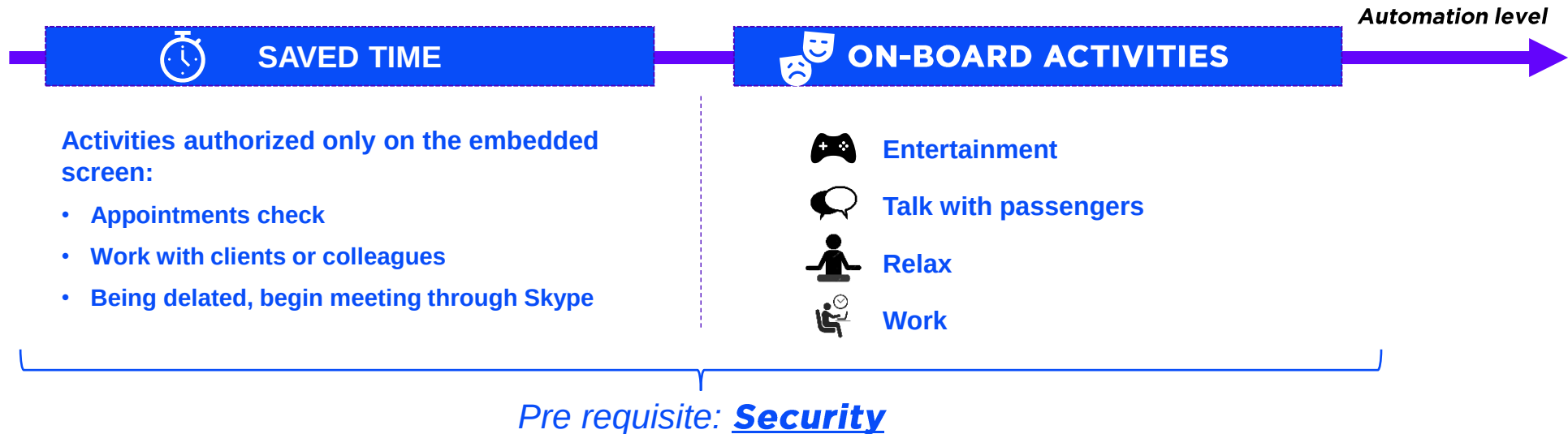
In particular, actors can have substantially different visions, technology acquisitions and go-to-market paths



AV customers' benefits and obstacles for commercialization

The UX will be a key differentiator on the AV market as customers express the need for on-board activities...

CUSTOMERS BENEFITS WILL BE THE SAVED TIME AND THE ON-BOARD ACTIVITIES



ON-BOARD ACTIVITIES WILL BE KEY TO VALUE THE AV

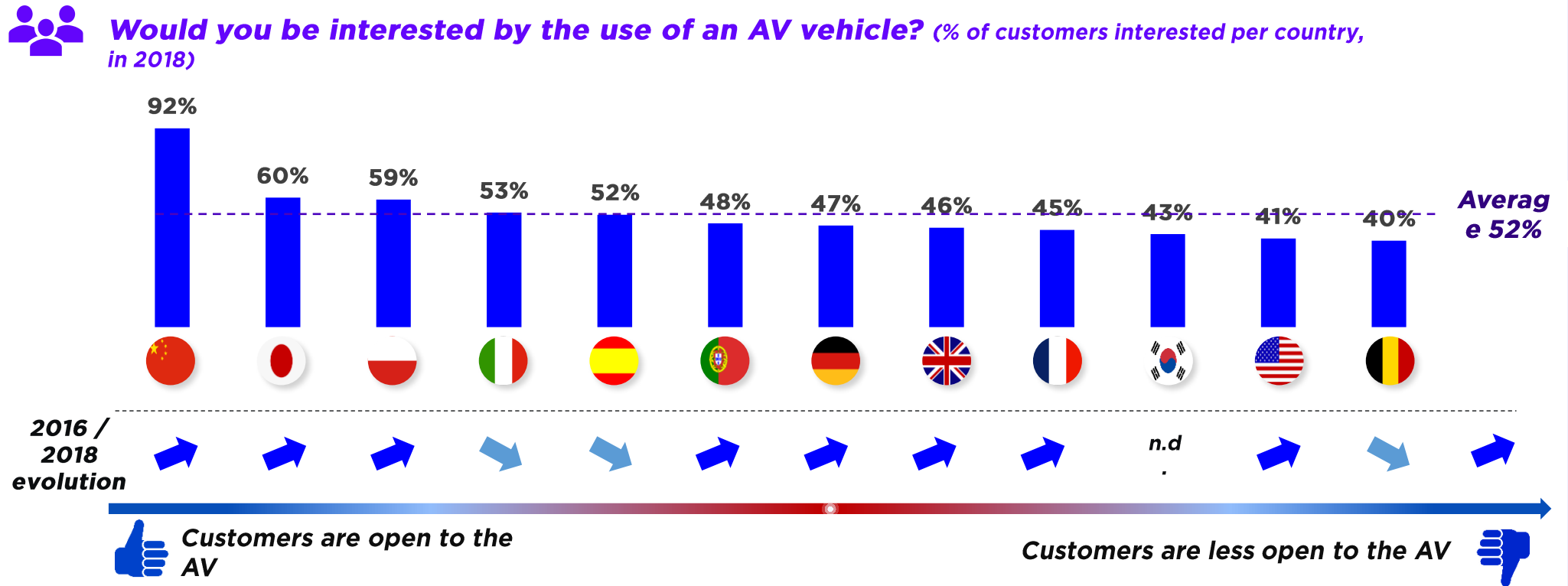


60% of consumers absolutely or partly agree when buying a self driving car that they will be **only interested in what they can do with their time in the car**

AV customers' benefits and obstacles for commercialization

However the customer openness to the AV is globally mitigated, China PRESENTING THE HIGHEST AV interest level, BUT IS INCREASING...

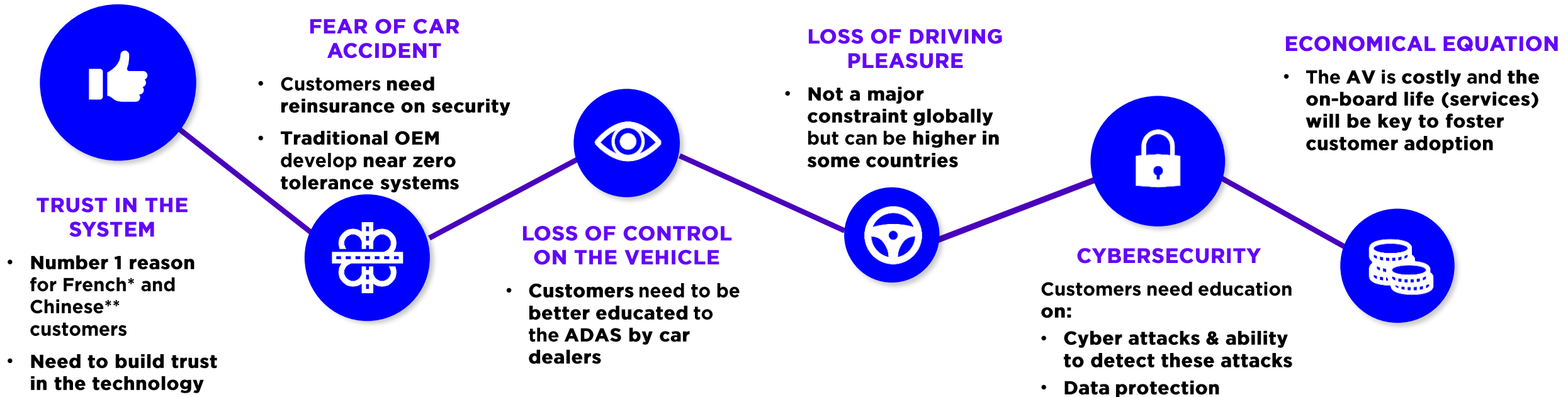
CUSTOMERS
INTEREST FOR
THE AV VARIES
FROM A
COUNTRY TO
ANOTHER



The reasons why customers from these countries are less open to the AV are different from a country to another

AV customers' benefits and obstacles for commercialization

... it is therefore key for OEM to resolve the 6 major customers obstacles



The end