

The Vehicle's Digitalization: Continental's digital journey

Ralf Lenninger

Continental Automotive GmbH

www.continental-automotive.com

Division Interior

A hand is shown pressing a glowing, rounded rectangular button with the word "START" in bold, dark letters. The background is a blurred image of a person in a suit, suggesting a professional or business context. The overall color scheme is dark blue and purple.

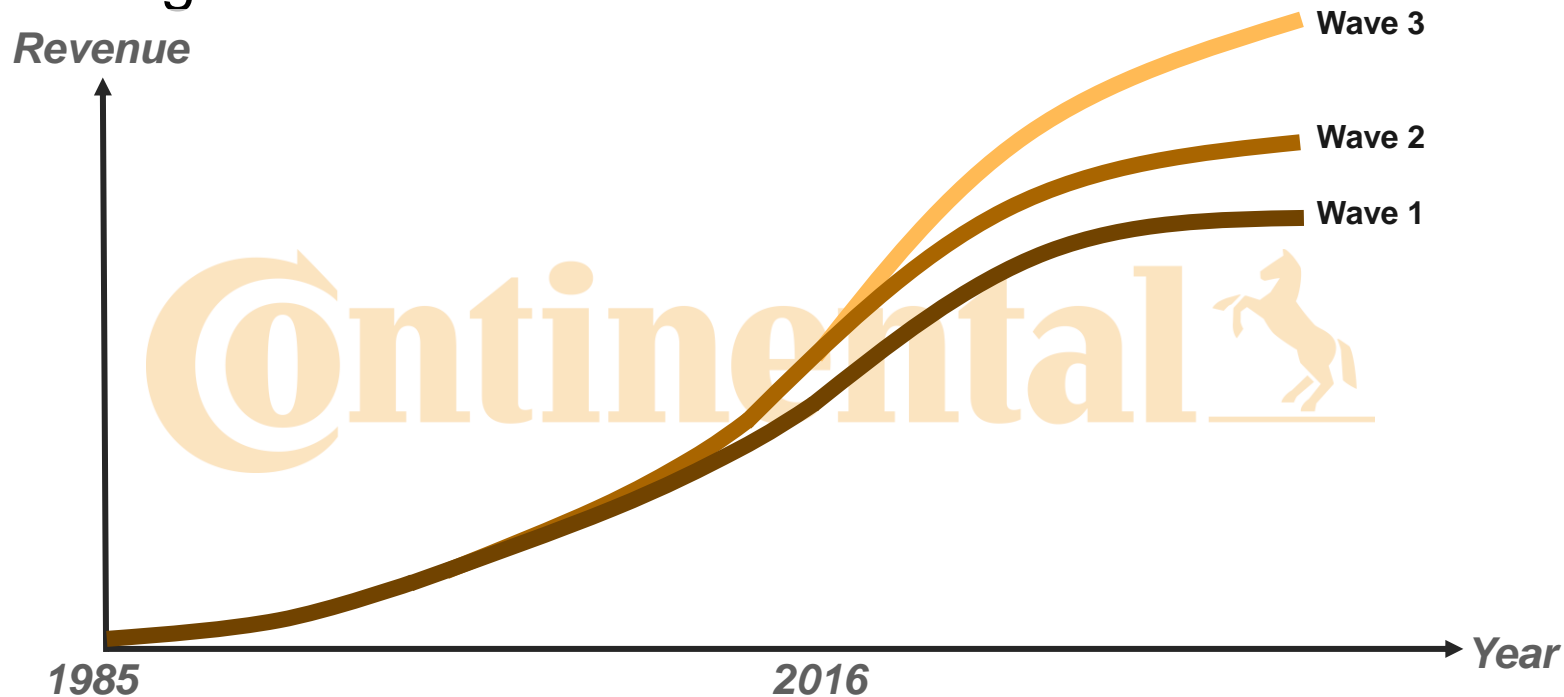
START

Digitalization drives Innovation

The 3 Digital Waves Model

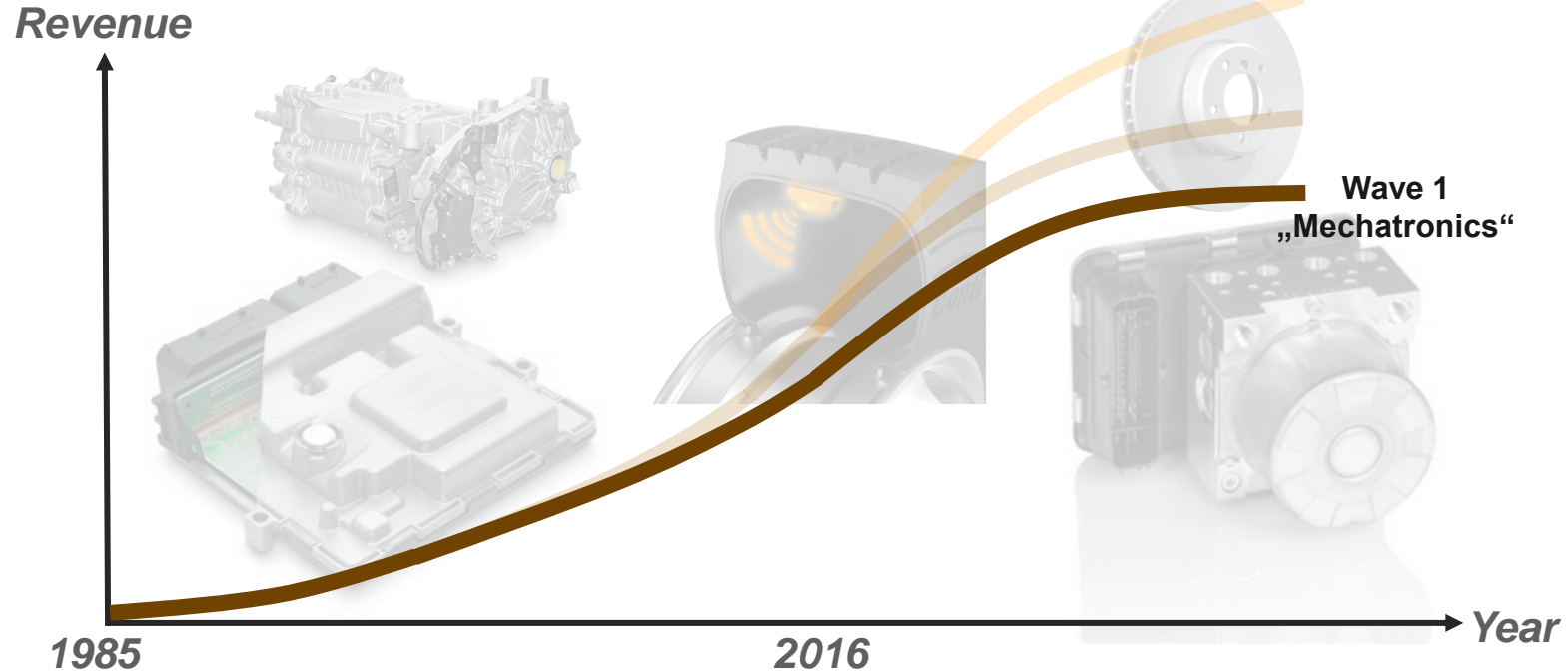
Digitalization Drives Innovation

The 3 Digital Waves Model



Wave 1 “Mechatronics”

Digitalization Makes Mechanics Intelligent



Wave 1 “Mechatronics”

From Opportunity to Business

1

Mass Market

- › 1980+: Digitally controlled:
 - › Engines
 - › Brakes
 - › Clusters
 - › Tires
 - › ...

3

Implementation



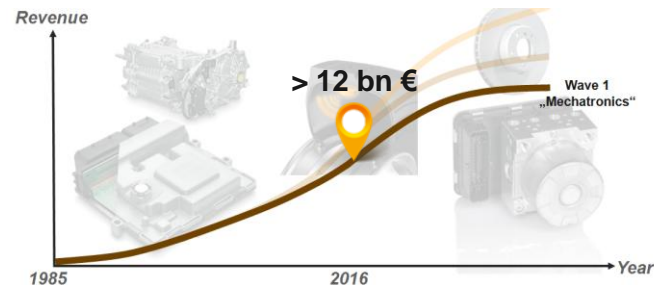
2

Growth Strategy

- Step 1: Acquisition
- Step 2: Integration
- Step 3: Growth

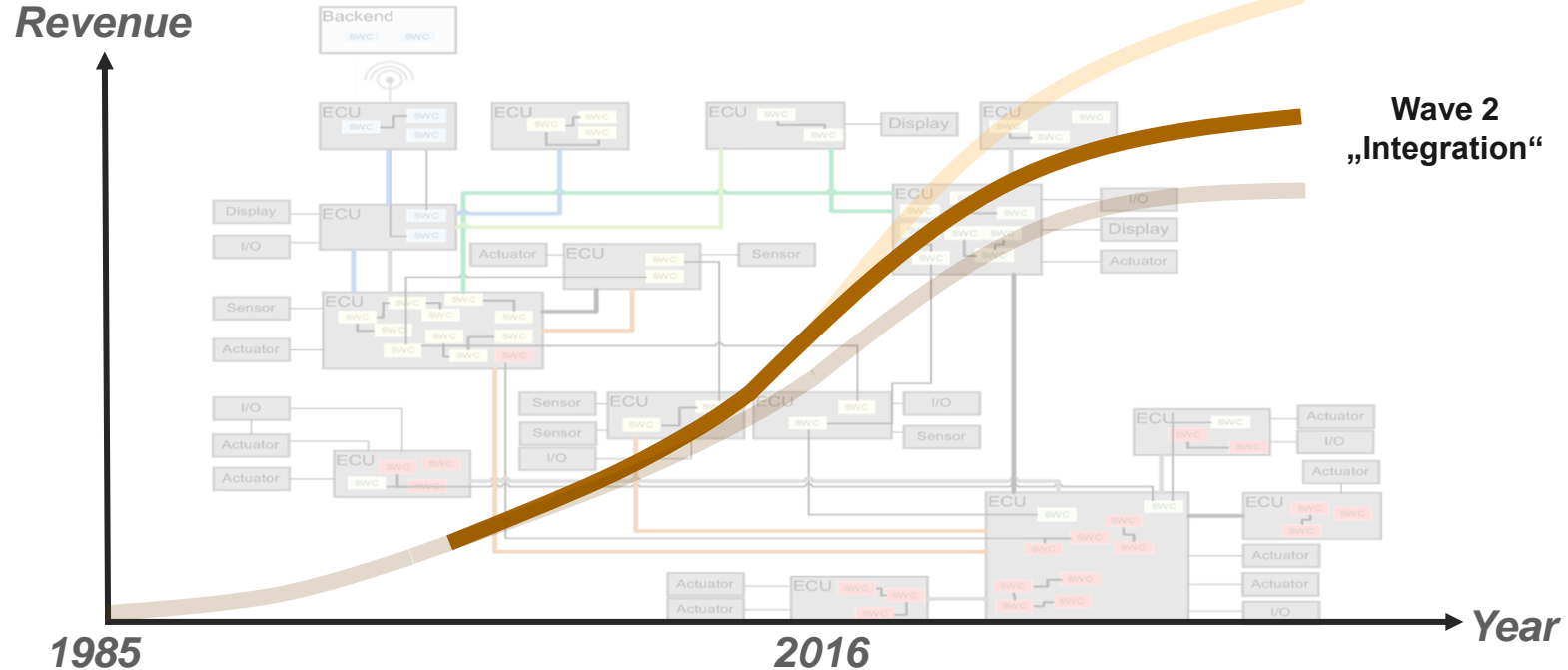
4

Result



Wave 2 “Systems Integration”

Networking of Mechatronics Makes the Car Intelligent



Wave 2 “Systems Integration”

From Opportunity to Business

1

Market

- › Up to 90 mechatronics, ~15,000 interfaces / protocols
- › Integration in a perfect network
- › OEM demanding strong support (mechatronics ++)

3

Implementation



2

Growth Strategy

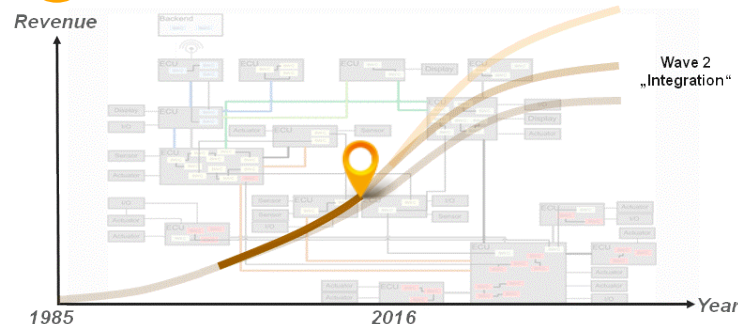
Step 1: Acquisition

Step 2: Integration

Step 3: Growth

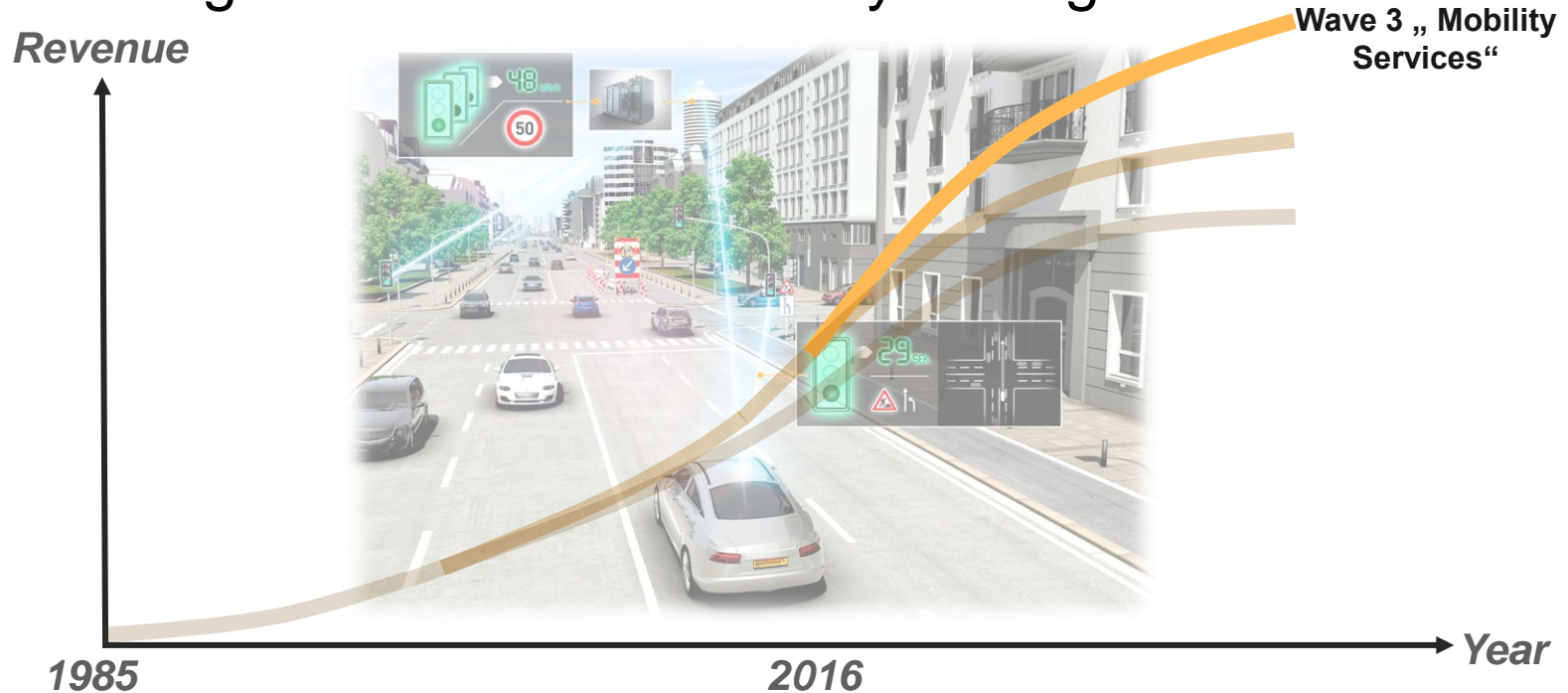
4

Result



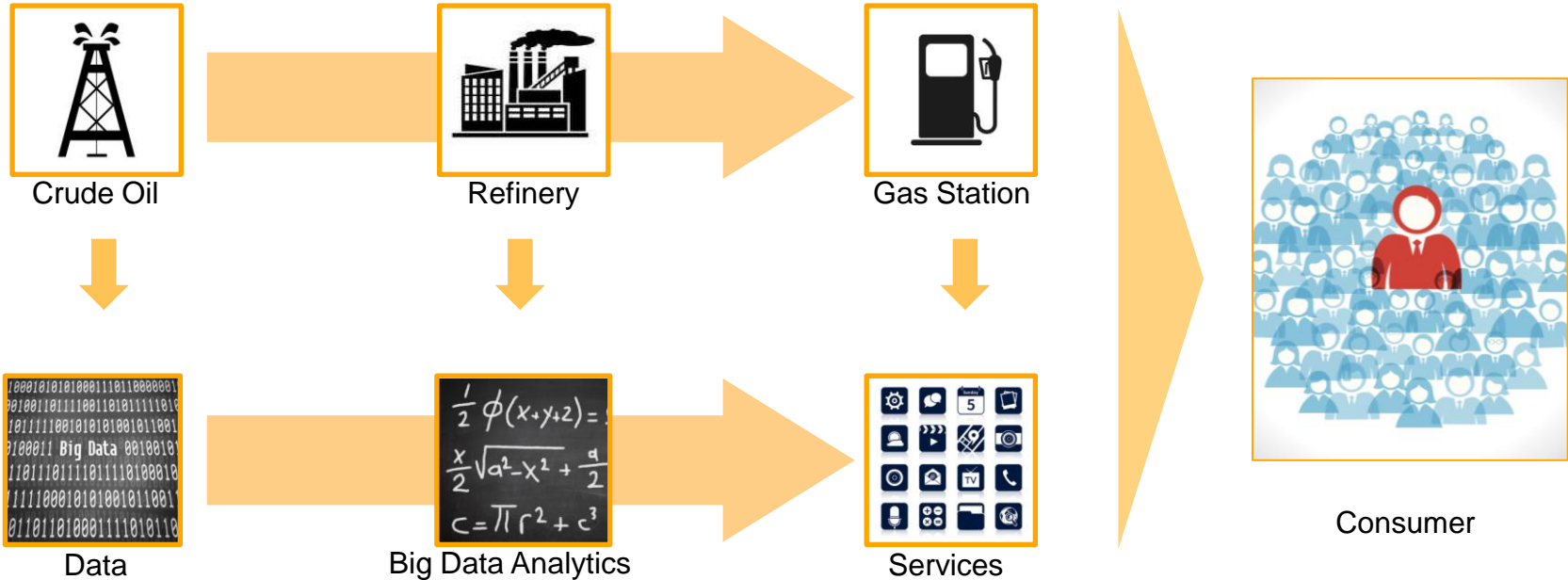
Wave 3 “Mobility Services“

Networking of Cars Makes Mobility Intelligent



Wave 3 “Mobility Services”

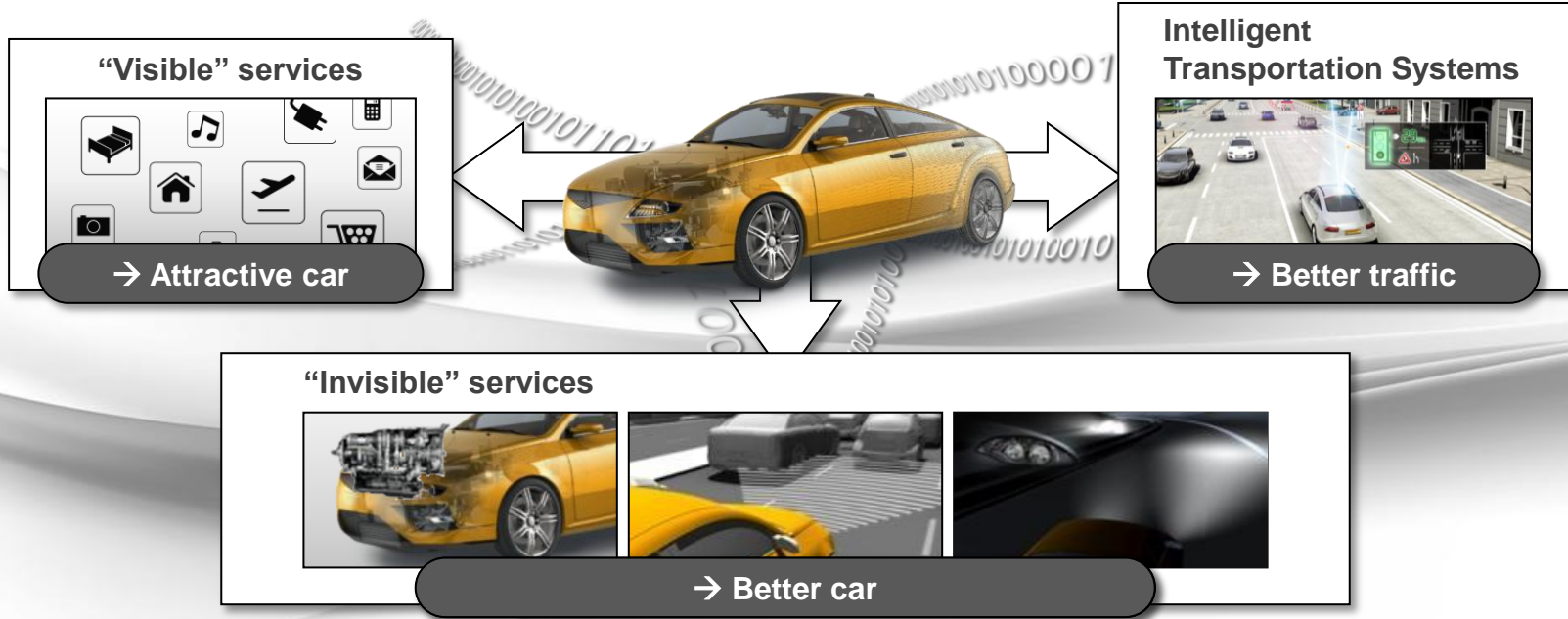
Services Principles: Value Add Chain



erne

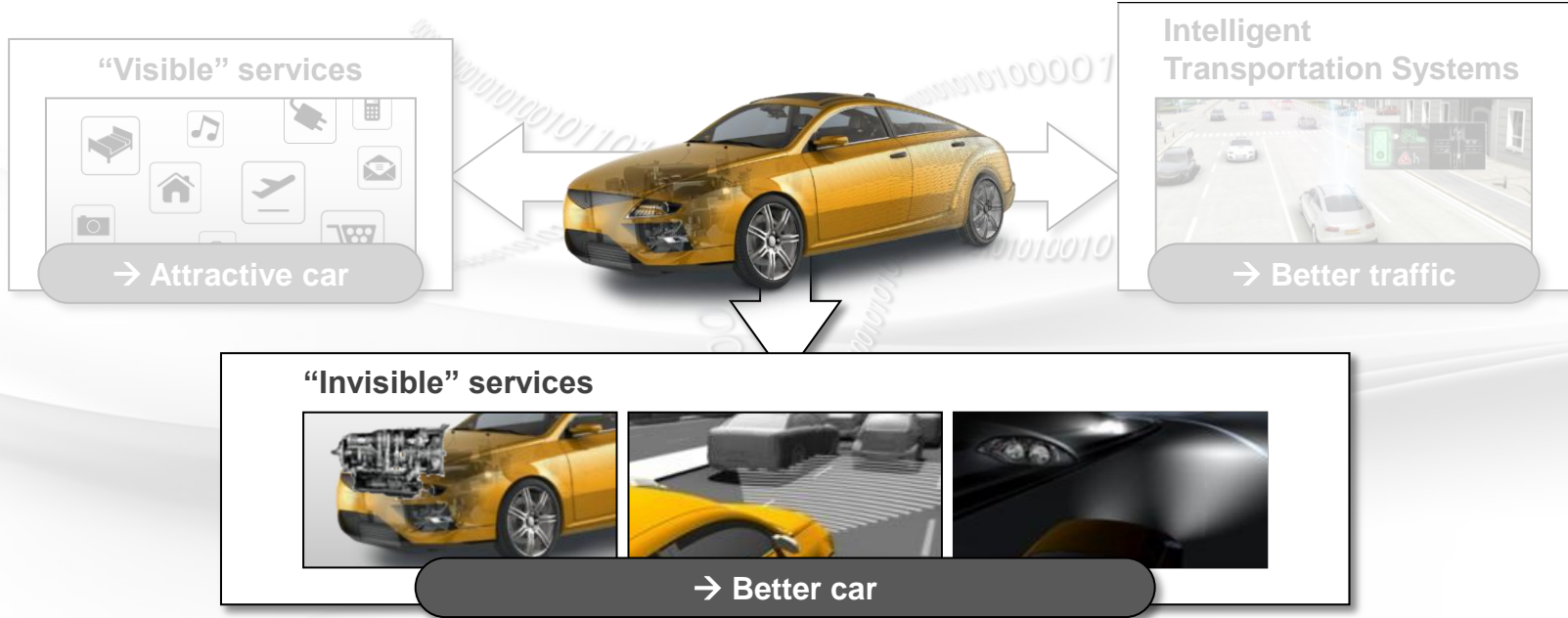
The Vehicle as Part of the IoE

What are the Benefits?



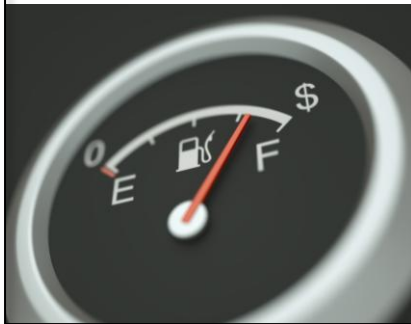
The Vehicle as Part of the IoE

What are the Benefits?

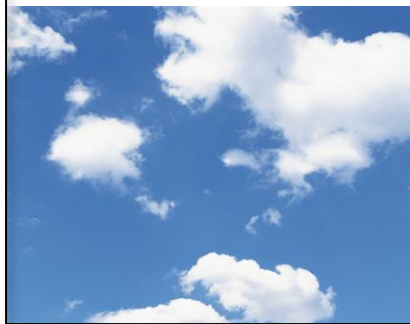


The Better the Vehicle Knows the Road, The Better the Vehicle Will Be

More Efficient



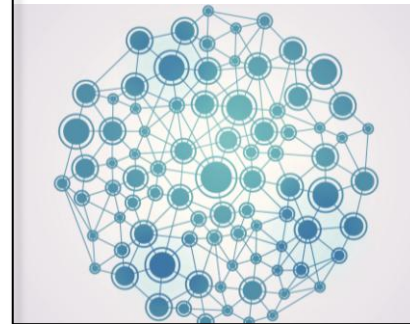
Cleaner



Safer



More intelligent



Static eHorizon

CV Cruise Control – SOP 2012

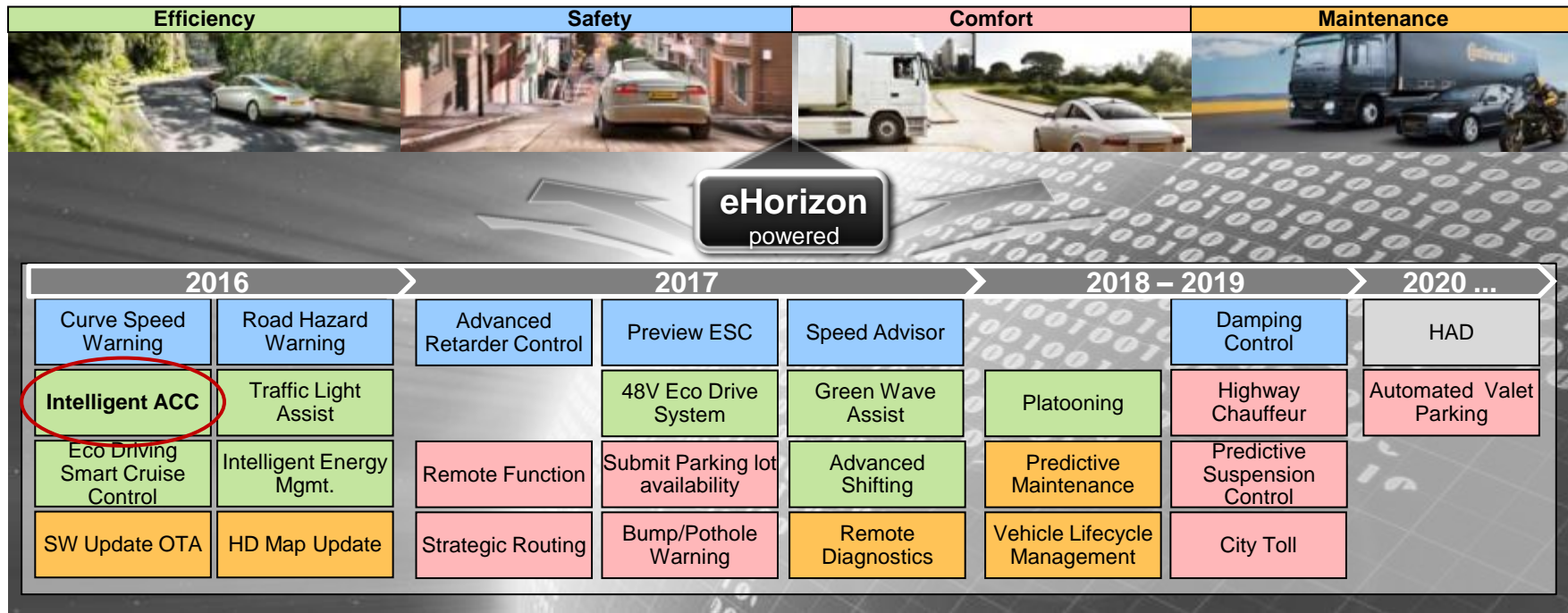
3% Average Fuel **Savings**
That Means:

- 267 Mio. Liter of Diesel
- 704,236 Tons of CO₂
- €360 Mio. Fuel Costs



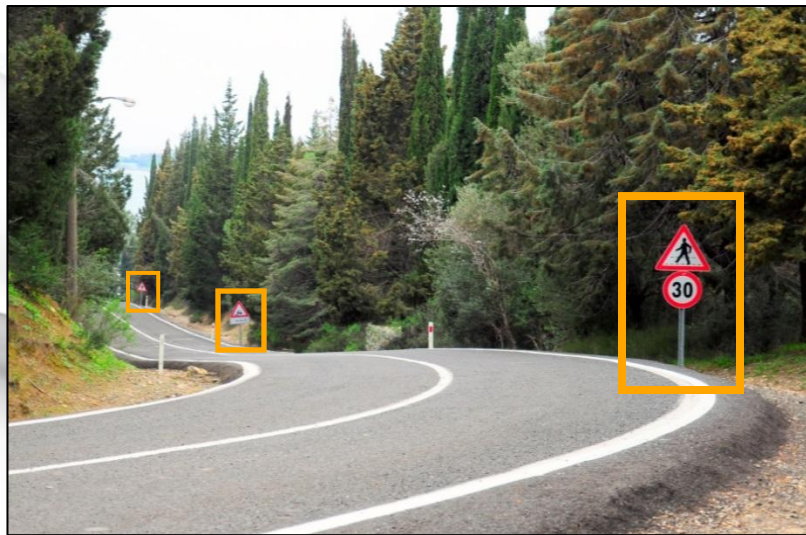
Evolution of the eHorizon (dynamic)

Predictive Maintenance



eHorizon References

Connected Enhanced Cruise Control *powered by eHorizon*



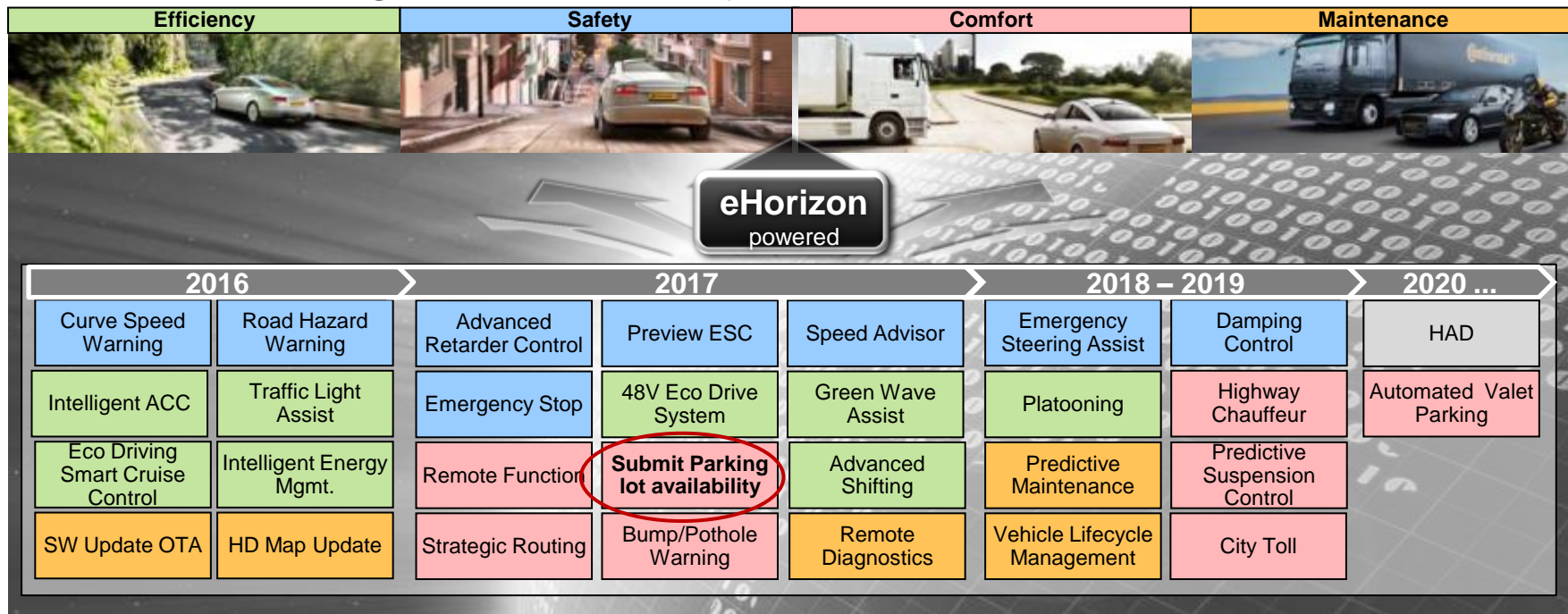
› Road Model delivers precise and lane specific speed limit information

› ACC longitudinal control adapts to speed limits and curve radiuses

› or AFFP gives feedback while vehicle is manually driven

Evolution of the eHorizon (dynamic)

Submit Parking lot availability



Park&Go @SG

First concrete result for Singapore's population & Smart Nation

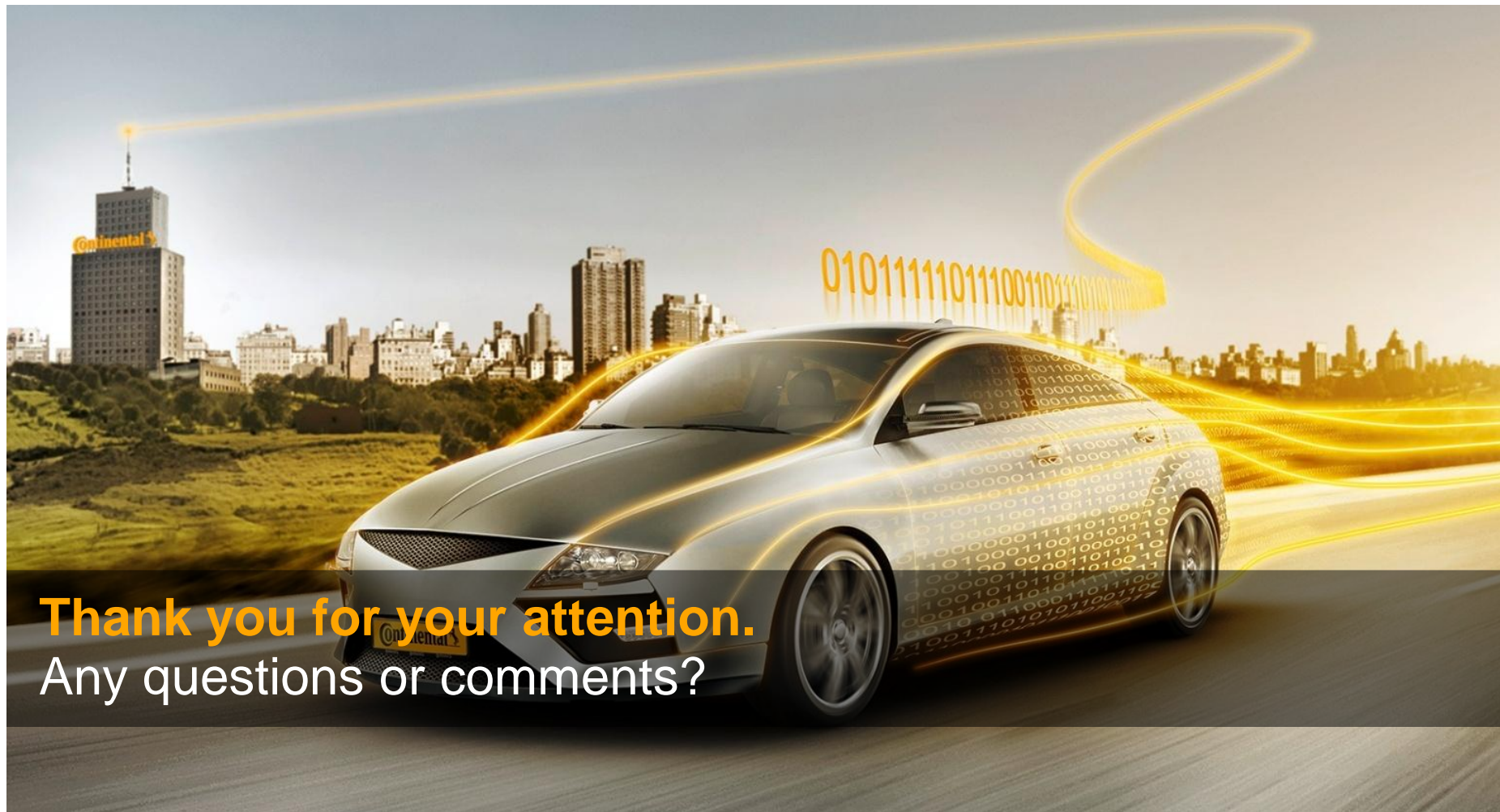


The central banner contains the following logos and text:

- Continental
- A*STAR
- Institute for Infocomm Research
- TUMCREATE

The smartphone screen displays the Park&Go app interface with the following data:

Location	BLK	Distance
POTONG PASIR AVENUE 1	BLK 118 TO 120	2.23 km
LORONG 5 TOA PAYOH	BLK 35A	2.35 km
TOA PAYOH TOWN CENTRE	BLK 186/191 TO 193	2.36 km
LORONG 5 TOA PAYOH	BLK 48	2.31 km
LORONG 5/6 TOA PAYOH	BLK 48 TO 49	2.45 km



Thank you for your attention.
Any questions or comments?