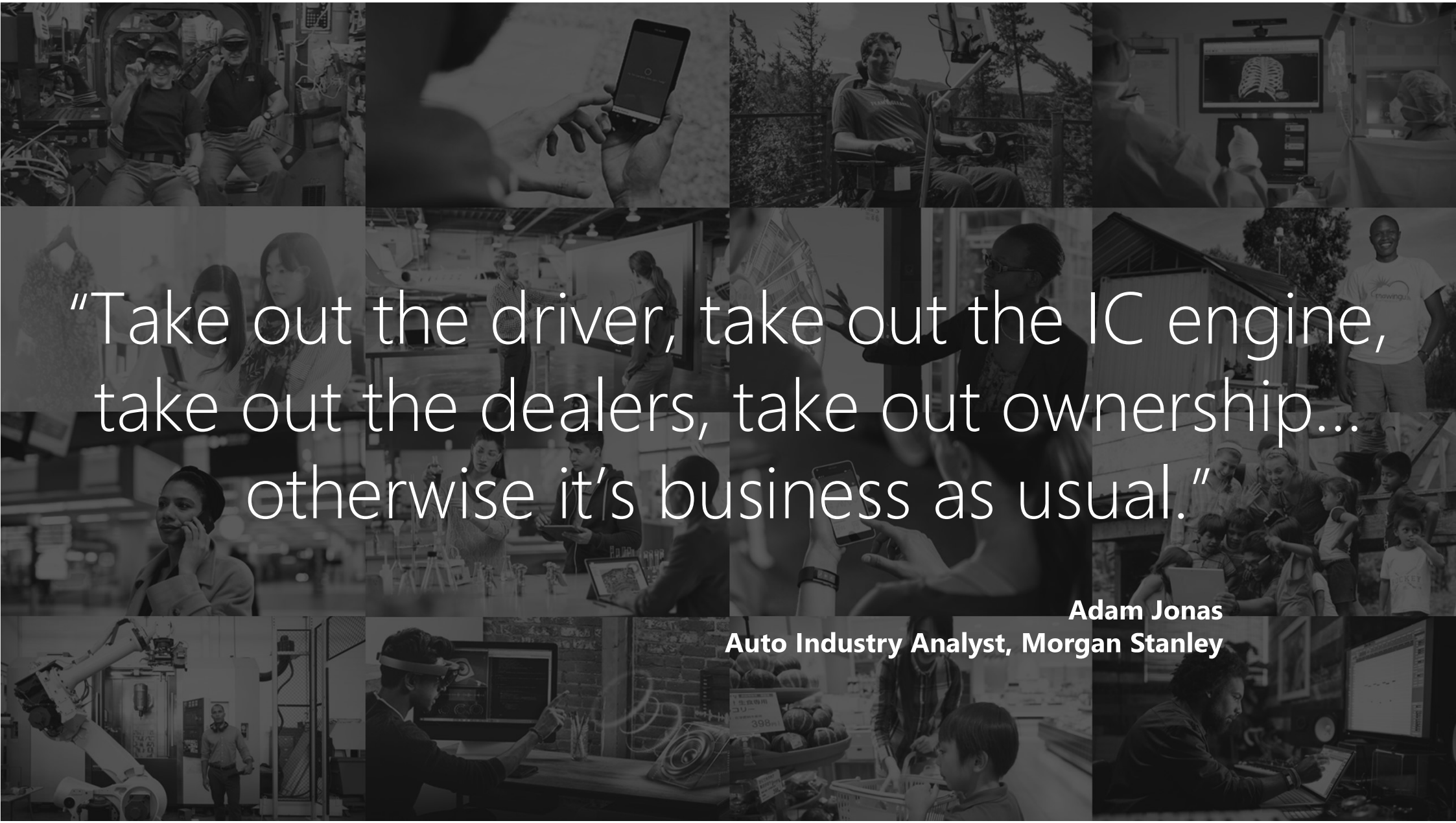
Microsoft
Welcome To The
AUTOMOTIVE SUMMIT
Stefan Andre Raschke
Director, Automotive Sector
Microsoft Germany GmbH



"Take out the driver, take out the IC engine, take out the dealers, take out ownership… otherwise it's business as usual."

Adam Jonas
Auto Industry Analyst, Morgan Stanley

Digital is disrupting automotive industry

Products and technologies

Connected cars

OnStar · QOROS · Uconnect

Autonomous cars

DELPHI · Google

Electric vehicles

BMW · TESLA · NISSAN

Customer expectations

New experiences

waze (OUTSMARTING TRAFFIC, TOGETHER) · brightbox · BestParking.com

Sales and service relationships

cars.com · TRUECar · whocanfixmycar.com

Business models

Car sharing services

CAR 2GO · zipcar · UBER

Pay-as-you-go insurance

metromile

Fleet management services

Omnitracs · ARI

Smart ecosystems

Smart homes

nest · ADT Pulse · TurboCord (EV Charging Made Easy.)

Smart infrastructure

PlugShare · GLOBAL PARKING SOLUTIONS · ABB

Smart cities

SmarterCities · CITYWORKS (a UI LABS Collaboration)

Deliver personalized mobility services

Challenge

Keep up with the rising customer demand for personalized mobility services.

Strategy

Store and analyze information on traffic conditions and the subscribers individual calendar, contacts, message, app and habits on Microsoft Azure.

Results

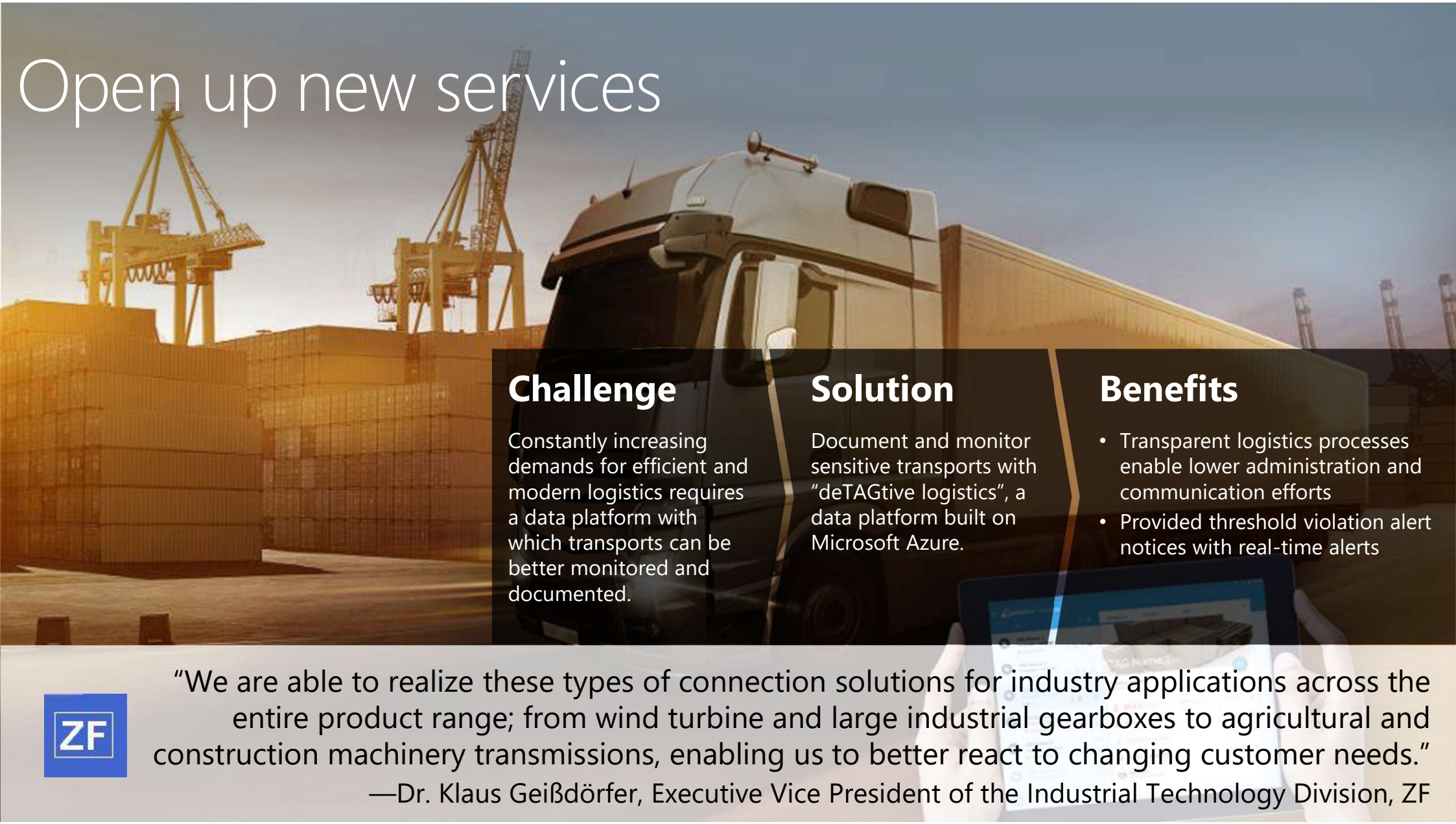
Provided subscribers with a journey management tool that communicate to them when and where they need to be and how to get there.

"We are building this platform as a foundation for our future services and experiences… and Microsoft Azure and Azure services gave us the right tools."

— Thom Brenner, Vice President of Digital Life, BMW Group

Microsoft Exchange
Email
Calendar
Contacts
Skype for Business Participants
87.5 MHz 10:45
Participants
Tom Meier
Mike Summer
MODE
AUTO
SYNC
AIRBAG

Open up new services



Challenge

Constantly increasing demands for efficient and modern logistics requires a data platform with which transports can be better monitored and documented.

Solution

Document and monitor sensitive transports with "deTAGtive logistics", a data platform built on Microsoft Azure.

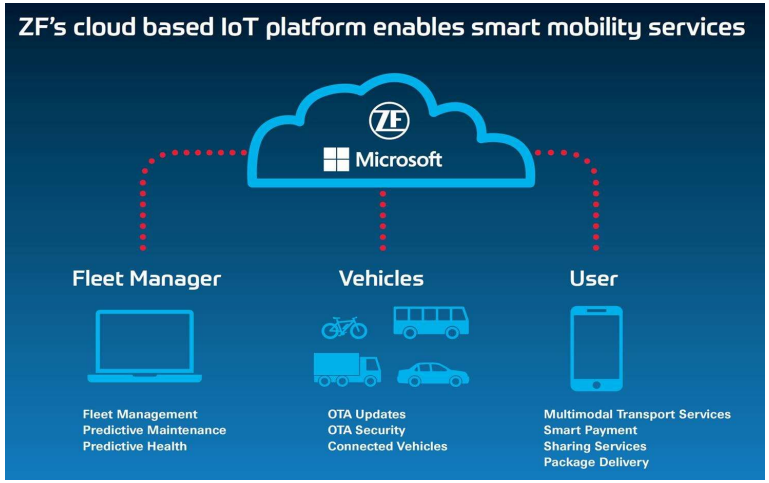
Benefits

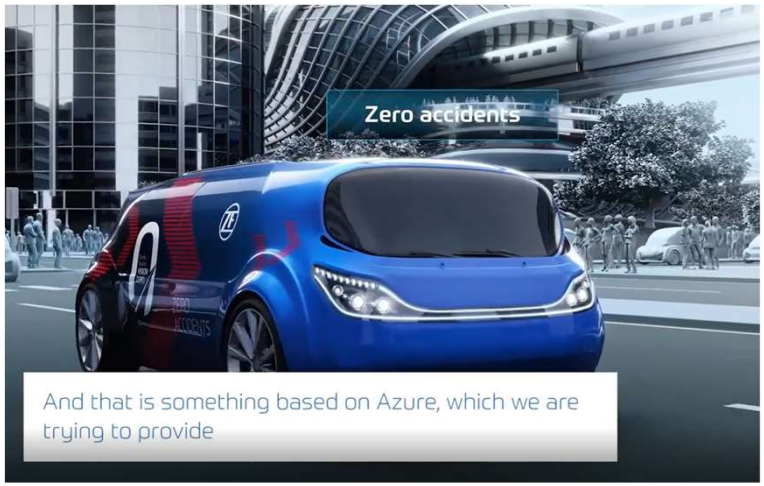
- Transparent logistics processes enable lower administration and communication efforts
- Provided threshold violation alert notices with real-time alerts

"We are able to realize these types of connection solutions for industry applications across the entire product range; from wind turbine and large industrial gearboxes to agricultural and construction machinery transmissions, enabling us to better react to changing customer needs."

—Dr. Klaus Geißdörfer, Executive Vice President of the Industrial Technology Division, ZF

Microsoft


ZF's cloud based IoT platform enables smart mobility services
Microsoft
Fleet Manager
Vehicles
User
Fleet Management
Predictive Maintenance
Predictive Health
OTA Updates
OTA Security
Connected Vehicles
Multimodal Transport Services
Smart Payment
Sharing Services
Package Delivery


Zero accidents
And that is something based on Azure, which we are trying to provide

door2door Shared Mobility Solutions
delivery
pickup
delivery
11:15

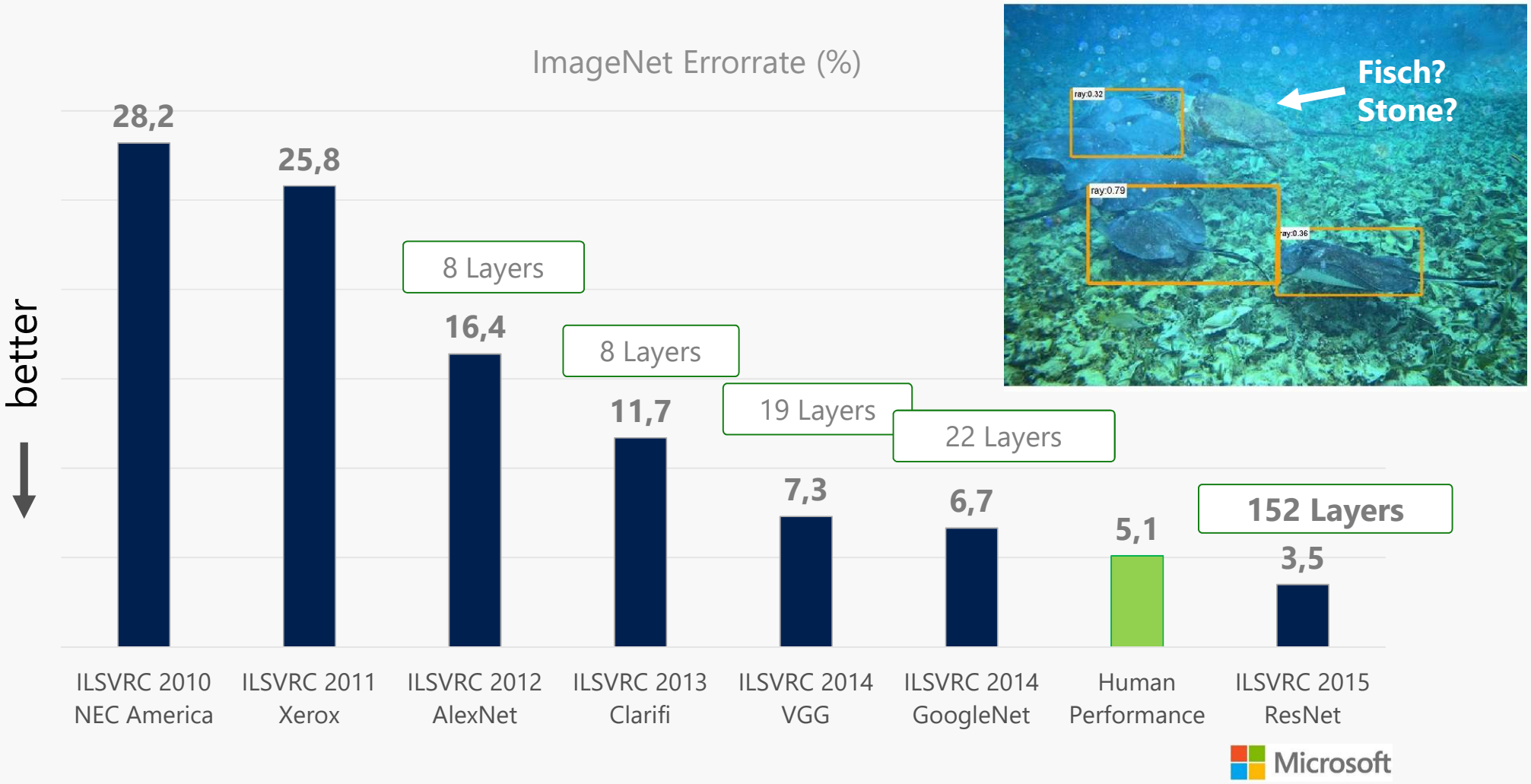
IoT Platform on Microsoft Azure
Microsoft

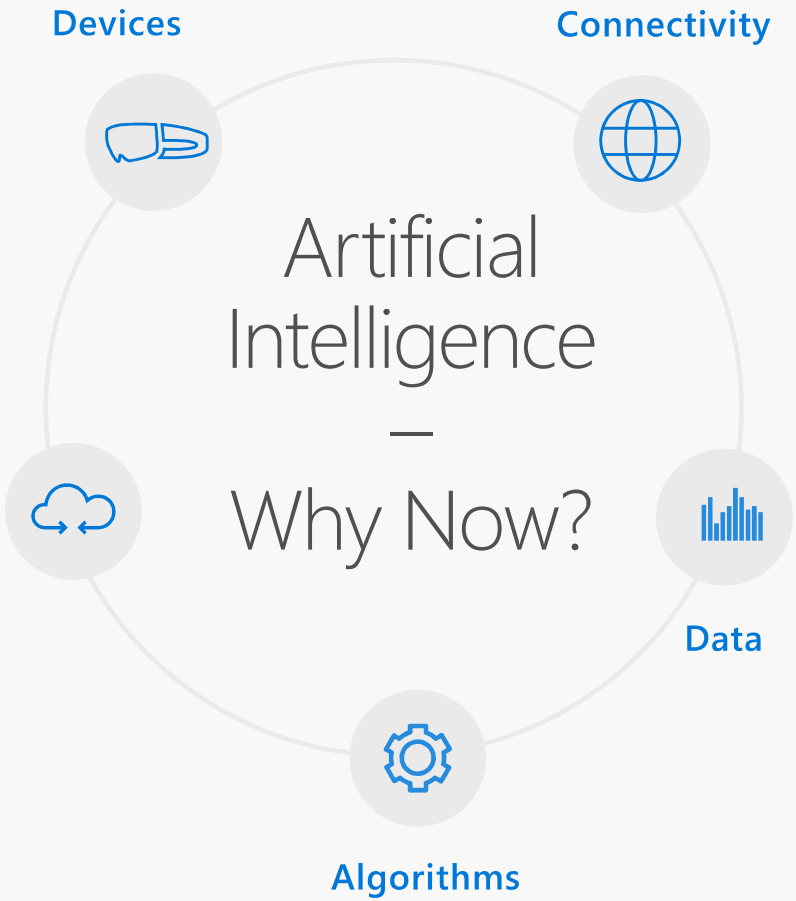
Microsoft

Artificial Intelligence in Automotive

Robert Nahm,
Industry Manager, Automotive Sector
Microsoft Germany GmbH

ImageNet “ILSVRC” – Worldwide Industry Competition for Object Recognition




Devices
Connectivity
Artificial Intelligence
—
Why Now?
Data
Algorithms

Our “Artificial Intelligence” Portfolio

Platform Approach

Agent

Cortana

Applications

Office 365 / Skype

Dynamics 365

Services

Bot Framework

Cognitive Services

Cortana Intelligence

Cognitive Toolkit

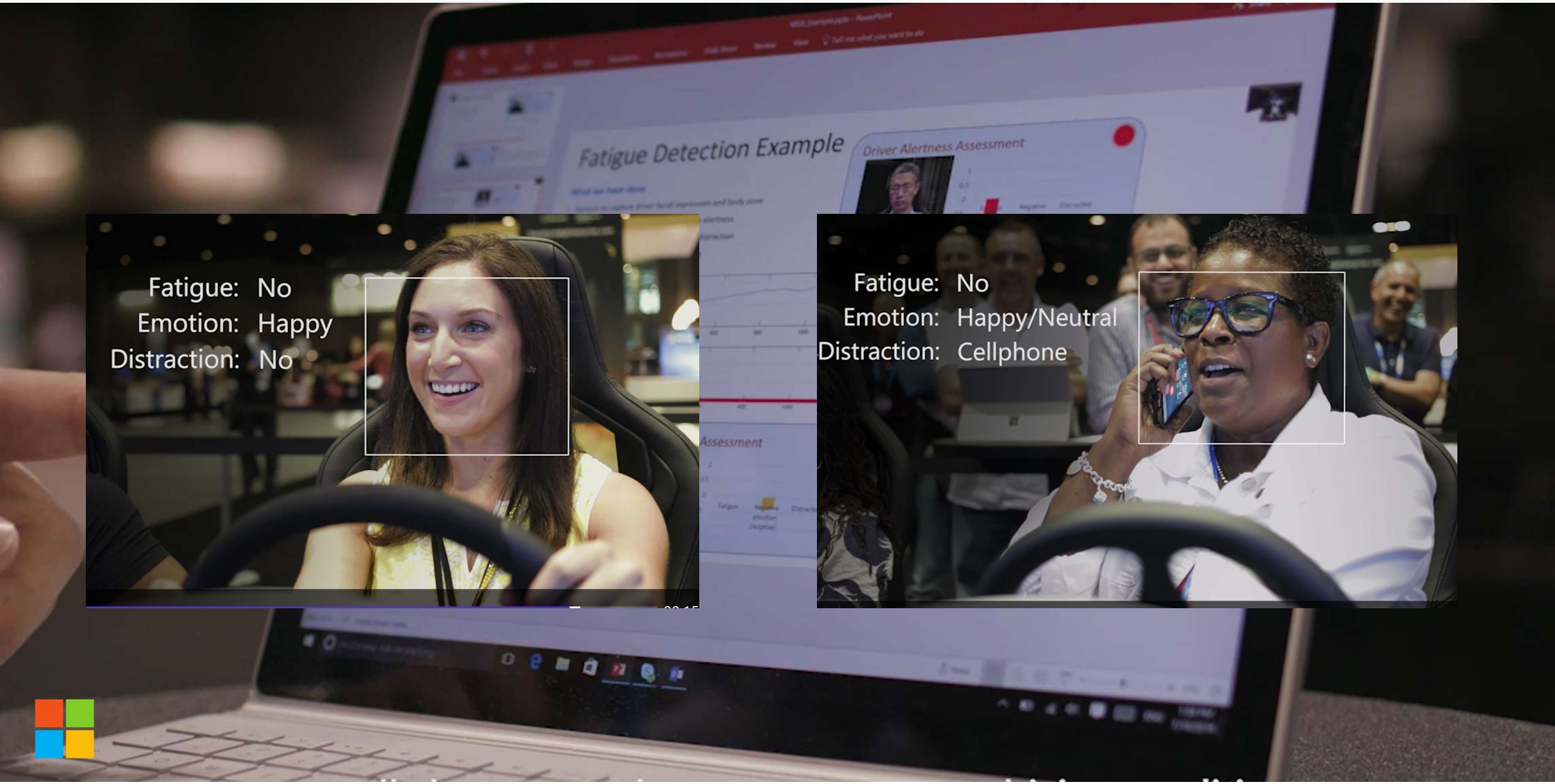
Infrastructure

Azure Machine Learning

Azure N Series

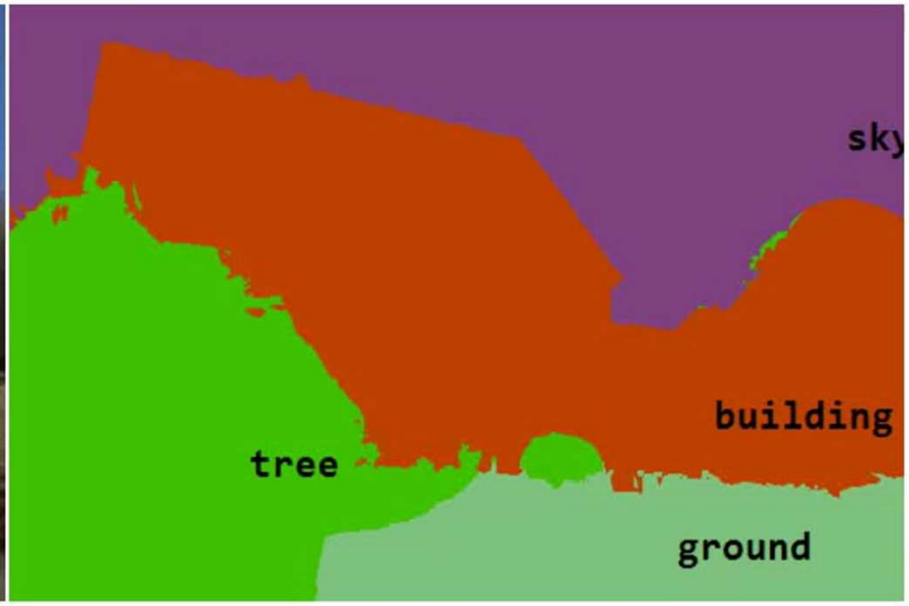
FPGA

Ending distracted driving with cognitive services

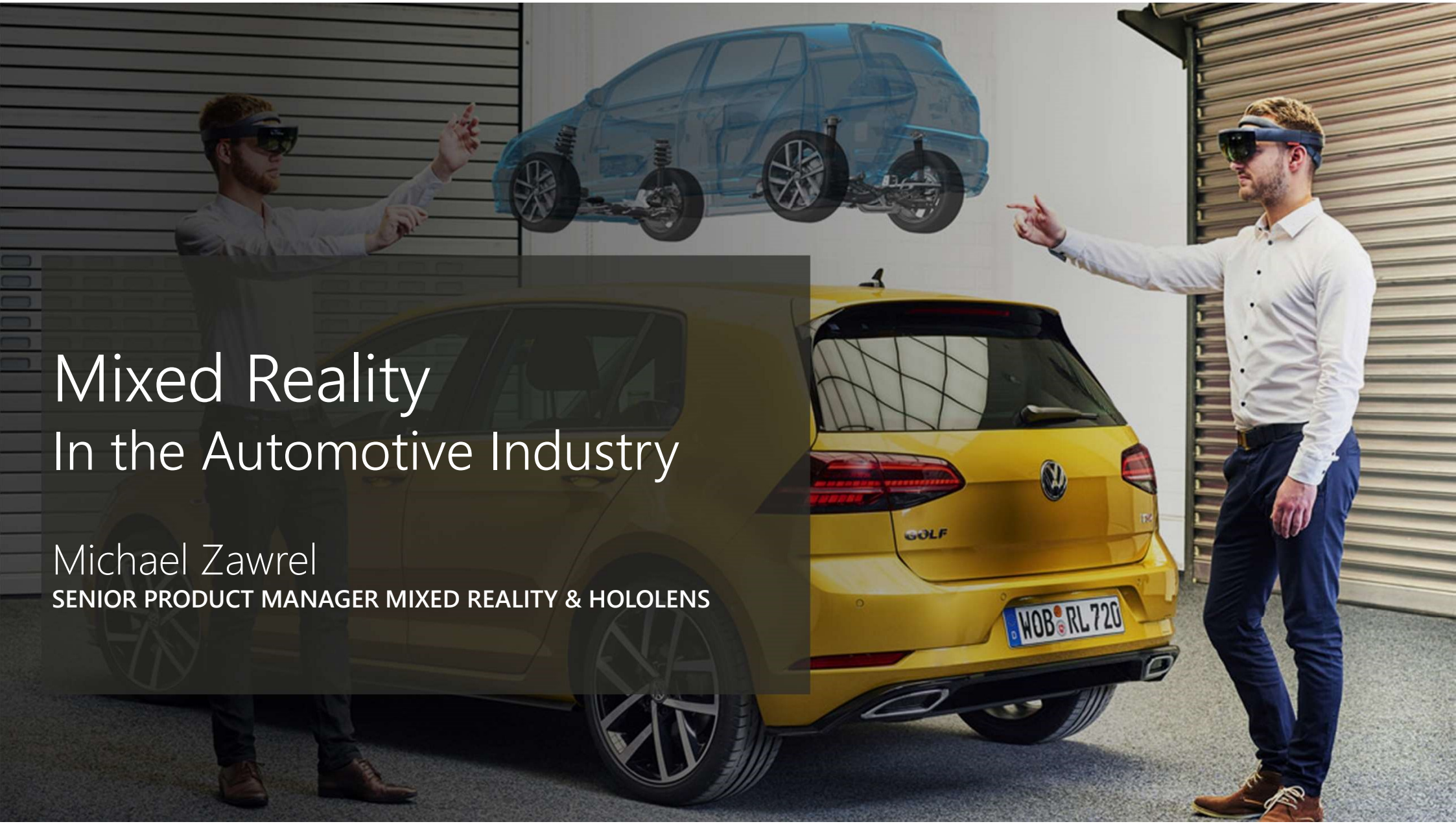


Computer Vision Examples using Microsoft Cognitive Toolkit

input video



segmentation result



Mixed Reality
In the Automotive Industry

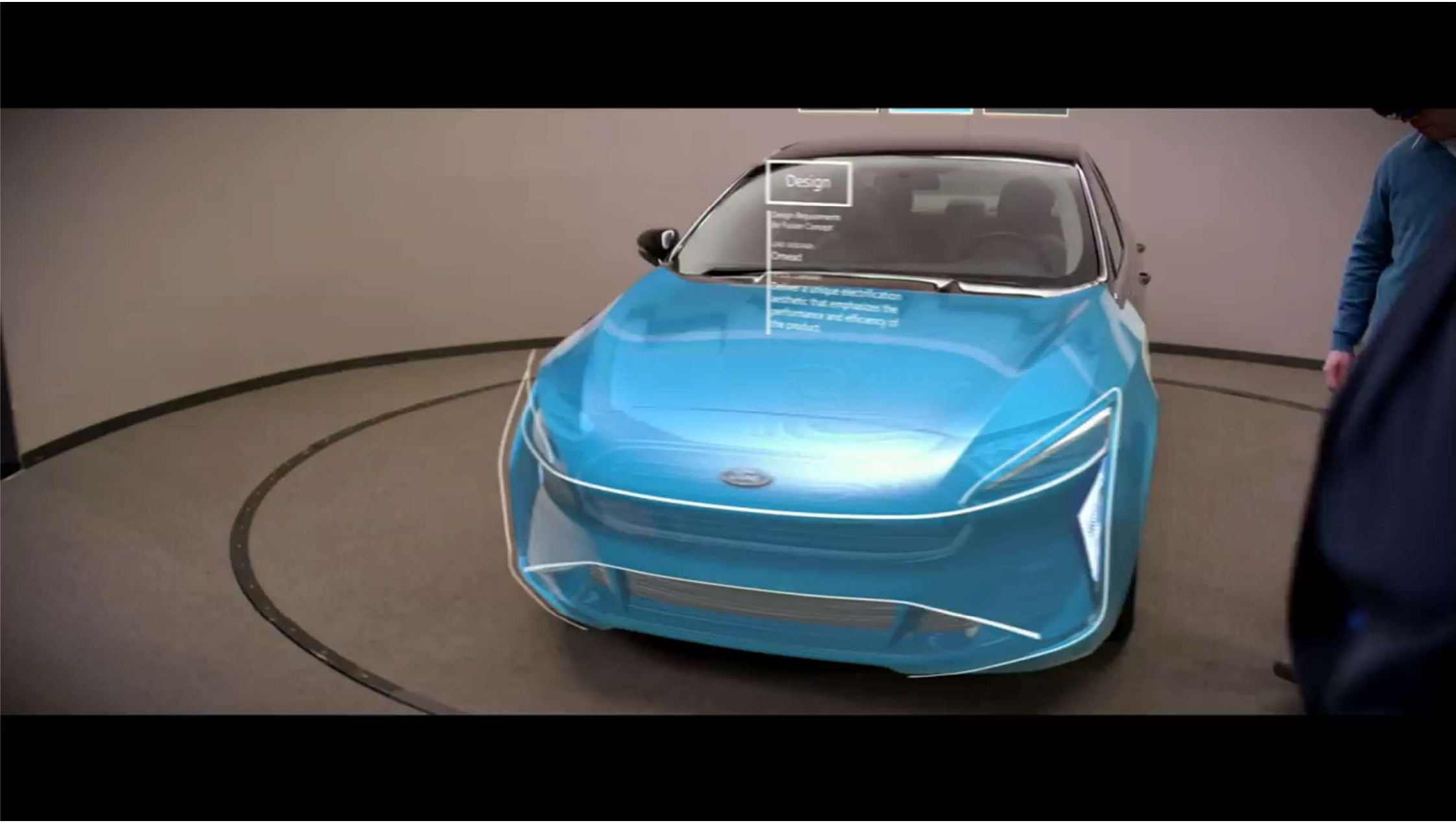
Michael Zawrel
SENIOR PRODUCT MANAGER MIXED REALITY & HOLOLENS

BMW

EXPRESIVE FRONT
WITH INVERTED DOUBLE KIDNEY GR

Place Cell Fr
Place Cell Frame
wings at the top of
at the bottom of th
pins up
hole
STEP
BAE SYSTEMS
INSPIRED WORK

Fusion Concept
Add Annotation
View Annotation Gaze
Engineering
Design
Manager
Ford


Design

Engineering
Design
Manager
33 MM

Mercedes-Benz

GOLF
WOB RL 720

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