# The Ultimate Vehicle Experience – Today, Tomorrow and Beyond

Charlie Cross
Director, Remote Vehicle Management, **Stellantis**

# HOUSE OF ICONIC BRANDS

STELLANTIS

| | | |
|---|---|---|
| Maserati | Granturismo | LUXURY |
| Alfa Romeo | Sportiness | |
| DS Automobiles | Art of Travel | PREMIUM |
| Lancia | Eleganza | |
| Jeep | Freedom | GLOBAL SPORT UTILITY |
| Dodge | Muscle | |
| RAM | Courage | AMERICAN ROOTED BRANDS |
| Chrysler | Ingenious | |
| Peugeot | Allure | |
| Opel / Vauxhall | German Energy | EUROPEAN ROOTED BRANDS |
| Fiat / Abarth | DolceVita | |
| Citroën | Care | |

€ 6,000

€ 200,000+

## POWERED BY OUR DIVERSITY

**Employees on all continents**

**170 nationalities**

**Plants in 30 countries**

**Operations in 130 markets**

## EXECUTING AT FULL SPEED WITH RECORD 2022 RESULTS

| | | |
|---|---|---|
| €152bn<br>**Net Revenues**<br>+ 18% vs. 2021 | €23.3bn<br>**Adjusted Operating Income** up 29% | €16.8bn<br>**Up 26%** |

# TRANSFORMATIONAL JOURNEY

70% remote work(1)
Real Estate Carbon neutral
-50% CO2 by end of 2025

Empowered subject matter expert
Leadership positions held by women >35%
by end of 2030

Risk tolerant via rapid iteration and innovation
Leveraging Agile

4,500 Software people
by end of 2024
Software & Data, Electric academies

Enabling upgradable and personalized vehicles with extensible tech platforms

# MEGATRENDS IN THE AUTO INDUSTRY BY 2030

- **Worldwide population** approaching 8.5bn people, mobility needed for additional 3bn
- **Electric vehicle sales** could represent more than 35% of new vehicle registrations.
- **Sales of 5G enabled vehicles** are expected to reach 16 million in the EU, U.S. and China
- Further development of **Autonomy**
- **2 digit TFLOPS of Embedded Compute plus applications that can surpass capacity**

# CAPABILITIES & FEATURES

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PERSONALIZATION

CONTEXTUAL AWARENESS

CONVERSATIONAL VOICE

IMMERSIVE AUDIO

ARTIFICIAL INTELLIGENCE

GAMING & ENTERTAINMENT

CONNECTIVITY

SENSOR CAPABILITIES

# TODAY TO TOMORROW

## TODAY:
## BUILDING ON STRONG FOUNDATION

**~12M CONNECTED**

CONNECTED VEHICLES, POWERED BY CLOUD PLATFORM

**CONNECTED FEATURES**

400M+ ACTIVE SUBSCRIBERS FOR 3P APPS, SERVICES

## 2030:
## INNOVATION IN THE FORE-FRONT

**~34M CONNECTED**

HYPER CONNECTED VEHICLES, DEEP INTEGRATION INTO IOT

**SERVICES BEYOND MOBILITY**

ENGAGING ALL SENSES, EXTENDING MOBILE, WEARABLE

# PATH TO IN-HOUSE SOFTWARE DEVELOPMENT

# EXPLOSIVE GROWTH

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## IN HOUSE CONNECTED VEHICLE APP DEVELOPMENT PLATFORM

### 2015

900 VEHICLES, TESTING TOOLS ONLY

### TODAY

6.5M VEHICLES

500 MILLION DATA TRANSACTIONS PER DAY

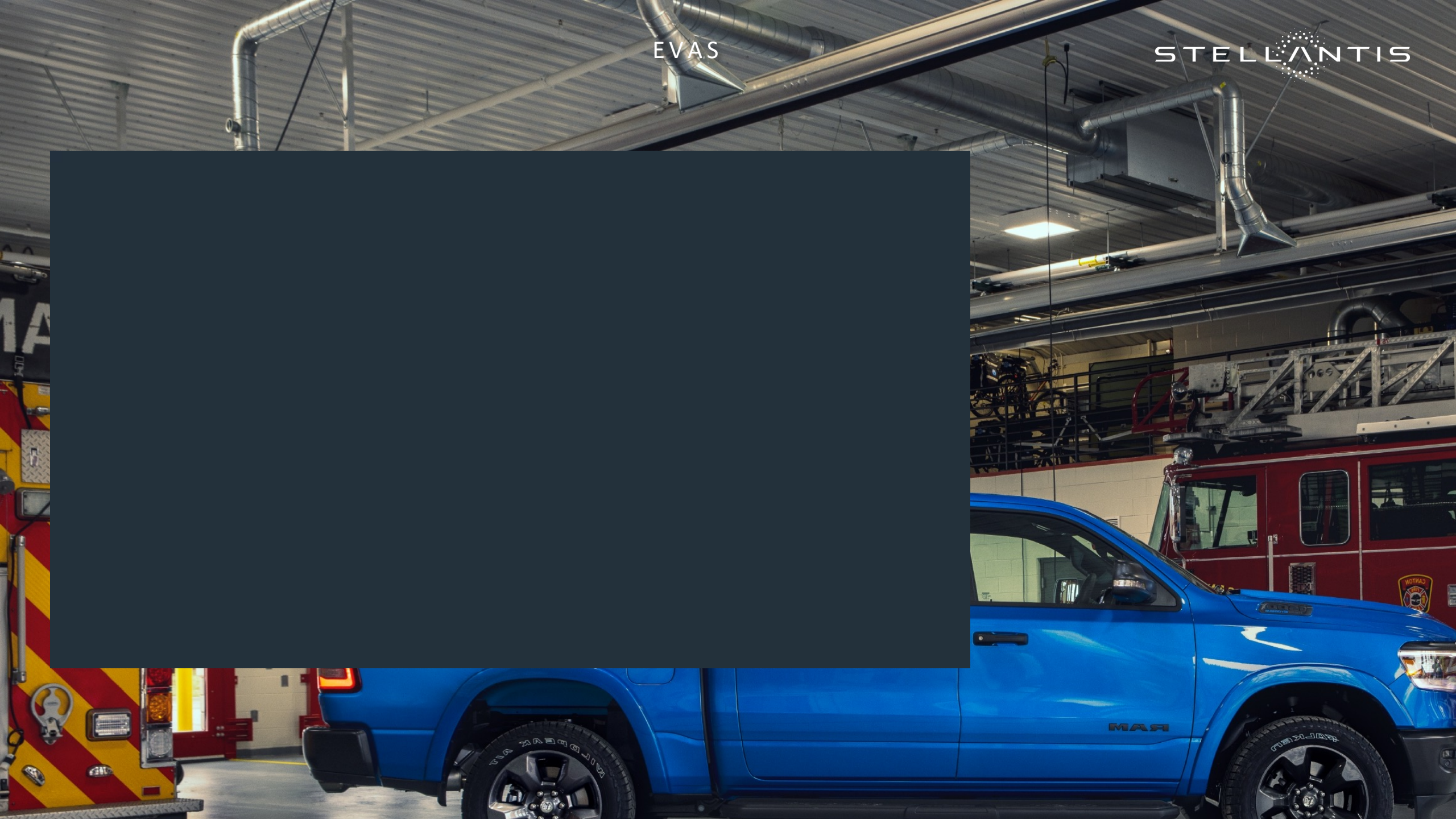
5 TRILLION DATA POINTS PER YEAR

### FUTURE

30M+ VEHICLES

REAL-TIME REMOTE INTERACTION

CUSTOMER CONFIGURED SERVICES


STELLANTIS
RAM

H.E.L.P

STELLANTIS

Breakthrough technology that enhances vehicle safety globally is a key element of the Stellantis Dare Forward 2030 strategic plan wi
the aim to become number one in customer satisfaction for products and service

## Auto Deployment

Auto deploys when sensors indicate a safety need

- Collision or Airbag sensor
- Rollover, accident, etc.
- Automated Driving System “takeover”

## Manual Control

Drivers can activate if the vehicle is i
Park or Parking Brake engaged

- Smart screen control
- Button near Hazard lights

PROJECT MOONBASE

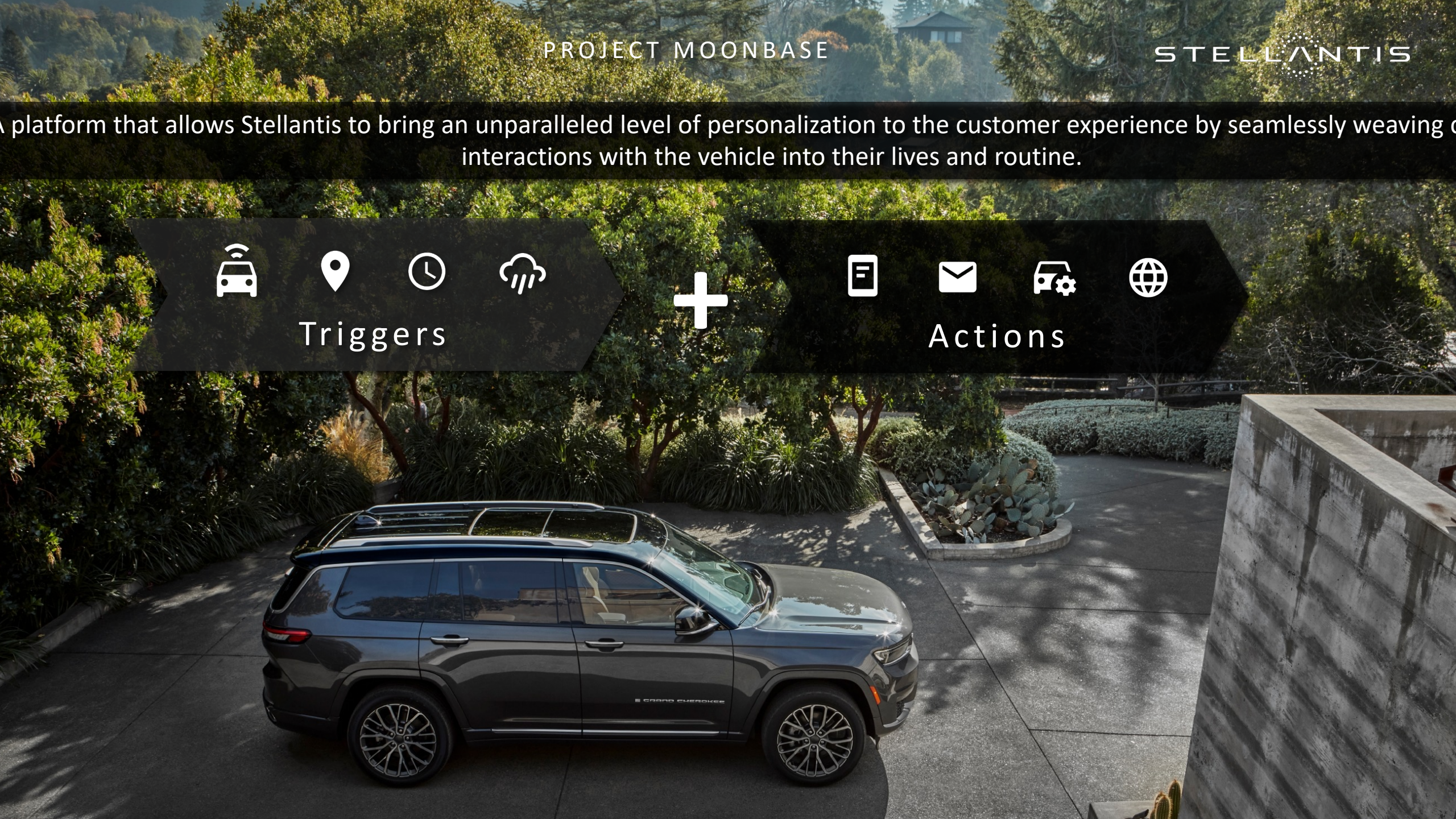
STELLANTIS

A platform that allows Stellantis to bring an unparalleled level of personalization to the customer experience by seamlessly weaving c
interactions with the vehicle into their lives and routine.

Triggers

+

Actions



PROJECT MOONBASE

STELLANTIS

Triggers

+

Actions

PROJECT MOONBASE
STELLANTIS
Triggers
Actions

-2°
mph
9
WAYPOINT 4
2°
S
31.285° N
121.578° E
OFF ROAD MODE
Warnings
Recommendations
Meet Ups
Repair Shops
Navigation Point I
AVG SPEED
TRAFFIC MONITOR
TIME TO REFUEL
1.3
REMAINING TO DESTINATION
TRIP DETAILS
HAZARDS ON ROUTE
ROAD CONDITIONS
RIVER DEPTH
MUD DEPTH
POTHOLE WARNING
WATCH OUT HERE
NOTES
NOTES
NOTES
Jeep

# PILLARS OF SMART COCKPIT

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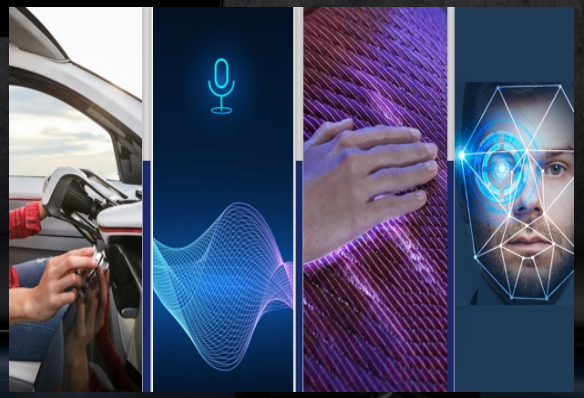
## Cloud First

## Empathetic UX

## Multi-modal



## Closed loop feedback

## Intelligence in Cloud

Smart Cockpit is designed with the foundational concept of improving experience everyday and not waiting for FOTA.

## UI visualizing Car's thinking

Visualization will engage users into the car's thinking and decision making process based on several physical and synthetic sensors.

## Engage all Senses

The user experience will be beyond touch and voice. All inputs and outputs will be leveraged to provide a multi-sensory engagement with user.

## Continuous evolution

Smart Cockpit learns to improve its logic by tracking customer feedback and reaction to the recommendations.

COMING SOON

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# STELLANTIS | Developers

Account

Vehicle Data

Retrieves array of recent data sensor values

Retrieves last known data sensor values for a vehicle

Remote Commands

Sends remote commands to v

Feedback

Submit general feedback, que

Submit Bug Report

POST /v1/{vin}/remote

**Request samples**

Payload

Content type
application/json

Copy

```
{
    "command": "START",
    "pin": 1234
}
```

developers.stellantis.com

# Thank you