

ATREUS AUTOMOTIVE AND MOBILITY

## FROM HORSEPOWERTO CODE

The software-defined vehicle as the driver of innovation in the automotive industry – leader or follower?

The future of mobility is now: OEMs and suppliers are solidifying their position as industry leaders by collaborating closely, accelerating software development, and rolling out creative solutions to enhance the customer experience.

When it comes to connected vehicles, intelligent mobility, and personalized services, it's the customer experience that ultimately counts!



# CHALLENGES AND OPPORTUNITIES FOR THE GERMAN INDUSTRY

Software will drive the future of the automotive industry. German OEMs and suppliers are vying to tap into new markets and capitalize on growth potential. The current path to success hinges on rapid innovation and execution, collaborative partnerships between OEMs and suppliers, and a reduction in regulatory complexity. OEMs face the challenge of leveraging software capabilities to develop innovative features and services for car users, enhancing the brand image and delivering tangible value to end consumers.

## THE GERMAN AUTOMOTIVE INDUSTRY HAS IMMENSE OPPORTUNITIES

- Maintain the leading position in the premium vehicle sector.
- Expand into untapped markets and attract new customers.
- Play a leading role in spearheading growth and fostering innovation within the sector.



#### SPEED AND EFFICIENCY:

# MASTERING DIGITAL TRANSFORMATION IN THE AUTOMOTIVE INDUSTRY WITH ATREUS INTERIM MANAGEMENT

German OEMs are encountering competition on a global scale. Innovative software from Chinese suppliers is making waves in the market, while US tech giants like Apple and Google are aiming to revolutionize the automotive industry.

The development of advanced software systems necessitates the acquisition of fresh expertise and enhanced coordination among the various disciplines of OEMs and suppliers alike.

To remain competitive, German manufacturers need to significantly enhance their software capabilities and transform their vehicles into mobile platforms that offer seamless connectivity and digital services.

#### SOFTWARE IN THE CAR:

#### **FIVE FIELDS OF APPLICATION**



#### Infotainment

The demand for software-driven features is increasing at a rapid pace as customers seek more and more functions and services in their vehicles that can only be implemented through software.

**Example:** Natural Language Processing (NLP systems): The systems are capable of comprehending speech accents as well as more intricate commands, such as "Play music by my favorite artist" or "Find the nearest restaurant."



#### **Autonomous driving**

Autonomous driving systems necessitate complex software systems that contribute significant value.



#### **OTA** (over-the-air updates)

This technology for managing and updating software provides a variety of benefits in terms of vehicle safety, functionality, and convenience, enhancing the overall user experience.



#### Connectivity

The interconnection of vehicles enables new business models and software-based services.



#### **Cyber security**

This area plays a vital role in ensuring the safety, security, and privacy of vehicle occupants by shielding them from hacker attacks.



#### **ATREUS COMPETENCE CLUSTER**

**TECHNICAL EXPERTISE** 

- Software development: Agile methods, software architecture, embedded systems, cloud computing, connectivity
- **Systems engineering:** System integration, interface management, modeling
- **Electrics/electronics (E/E):** Control units, bus systems, electrification
- IT security: Cyber security, data protection, compliance

**BUSINESS EXPERTISE** 

- Project management: Agile project management, program management, risk management
- **Change management:** Rolling out new processes and technologies, employee training
- **Strategy development:** Business model development, market analysis, competition analysis
- Leadership: Motivating and leading teams, decision-making

<u>03</u>

01

#### **DATA SCIENCE & ANALYTICS**

- Big data: Analysis of extensive datasets gathered from various sources, including sensor, driving, and customer data
- Machine learning: Development of self-learning algorithms to optimize vehicles and fleets
- Artificial intelligence: Development of autonomous driving systems, use of artificial intelligence in assistance systems, optimization of manufacturing processes

PRODUCT MANAGEMENT

- Product requirements: Definition of functional and non-functional requirements for software products, coordination with stakeholders from the areas of development, sales, and marketing
- Market launch: Development of market launch strategies and campaigns
- Lifecycle management: Further development and maintenance of software products, continuous improvement of product quality

"Code is crucial: Manufacturers who develop cutting-edge software solutions and seamlessly incorporate them into their vehicles will shape the future of the market – it's ultimately the customer experience that matters most."

UZ

04



#### **EXAMPLES OF SUCCESSFUL ATREUS MANDATES**

#### Implementation and acceleration of your projects

Atreus Interim Managers help start-ups, SMEs, TIER1 companies, and OEMs achieve rapid and efficient project development.

**ADAS PROJECT MANAGER** 

- Company: Globally active French Tier 1 company
- **Objectives:** Stabilize project, foster OEM trust, develop site, establish effective processes, develop team
- Results: Scalable software achieved, maturity level improved, OEM partnership solidified, processes optimized, departmental acceptance increased

**CASE STUDY** 

PROJECT MANAGER DEVELOPMENT
DEPARTMENT CONTROLS/SOFTWARE & ADAS

- Company: Globally active automotive joint venture
- **Objectives:** Optimize system development, expand software team, foster ADAS collaboration, enhance internal structures, provide guidance on software integration
- Results: Controls/software & ADAS integrated, processes harmonized, system development aligns with specifications and meets customer expectations

**CASE STUDY** 

### OVERALL PROJECT MANAGER OF "AUTONOMOUS SHUTTLE"

- Company: Globally active German Tier 1 company
- Objective: Convert autonomous shuttles for local transport
- **Results:** Conversion on schedule, driving behavior improved, positive reception

**CASE STUDY** 

### TASKFORCE LEADER FRONT CAMERA

- Companies: Globally active French Tier 1 company
- Objectives: Optimize core team, make software agile, unify processes, enhance automation
- Results: Core team restructured, team building, two-week cycles, automated builds

CASE STUDY

.



#### ATREUS AUTOMOTIVE RECEIVES MULTIPLE AWARDS

# WE ARE DELIGHTED WITH THE RENEWED AND SPECIAL RECOGNITION OF OUR EXPERTISE IN 2023/2024:

Everything new, everything different – the automotive industry is currently experiencing a wave of significant transformation. Those who fail to adapt will find themselves on the losing end of this seismic shift. As a leading consultancy, Atreus provides you with temporary automotive expertise to support your business.

Atreus is recognized as one of Germany's TOP consultants specializing in restructuring and the automotive industry in 2023.



Automotive, Change Management,
Chemicals & Pharmaceuticals, Digitalization,
Retail incl. E-commerce, Human Resources,
IT Consulting & IT Implementation,
Interim Management, Consumer Goods,
Life Science, Mechanical and Plant Engineering,
Operations Management, Performance
Improvement, Personnel Consulting,
Restructuring

Atreus GmbH
Solution Group
Automotive and Mobility
Landshuter Allee 8
80637 Munich, Germany
Germany
Phone: +49 89 452249-0
contact@atreus.de

atreus.com