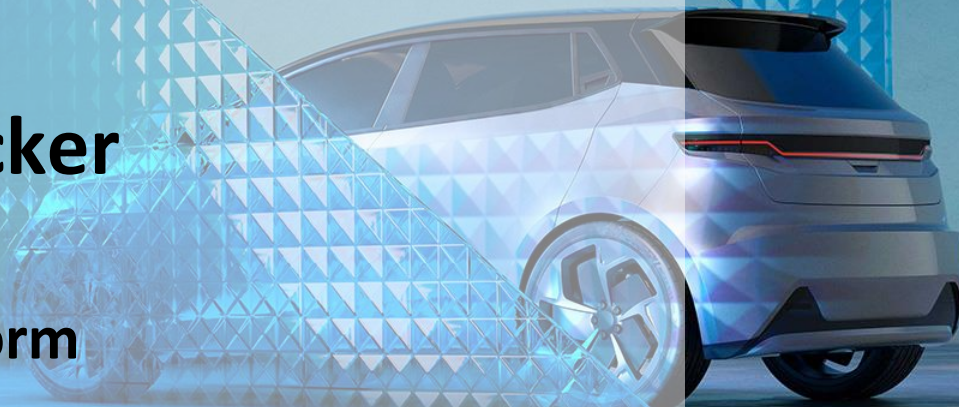# SDV Era and Standardization in Europe

Christian Mecker

07.02.2025

Mobility DX Platform

BOSCH

A software-defined vehicle (SDV) evolves by updating software to upgrade key features.

From **predefined functions** → to **updatability & upgradability**

From **decreasing vehicle value** → to **redefining vehicle value**
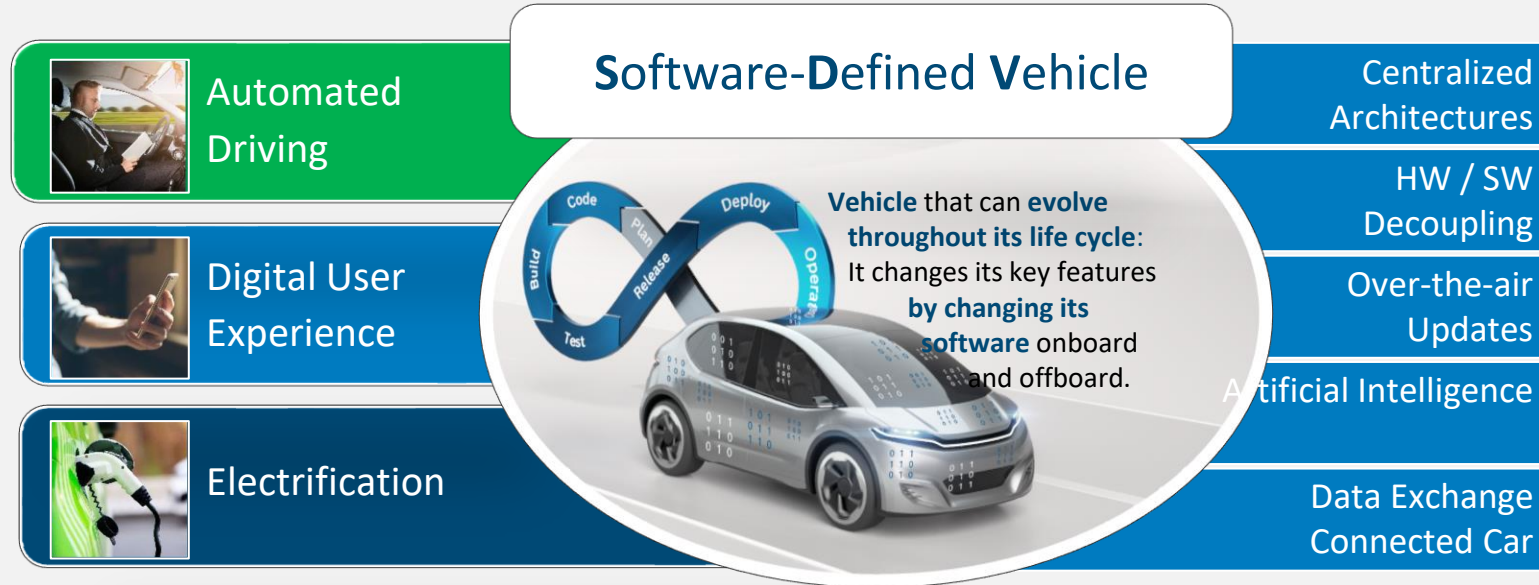
From **driving experience** → to **holistic customer experience**

BOSCH

A "Software-Defined Vehicle" (SDV) changes the entire mobility industry

Strong focus on user experience & functions

Time-to-Market

New development processes and collaboration models

Software-**D**efined **V**ehicle

Automated Driving

Digital User Experience

Electrification

Vehicle that can **evolve throughout its life cycle**: It changes its key features **by changing its software** onboard and offboard.

Centralized Architectures

HW / SW Decoupling

Over-the-air Updates

Artificial Intelligence

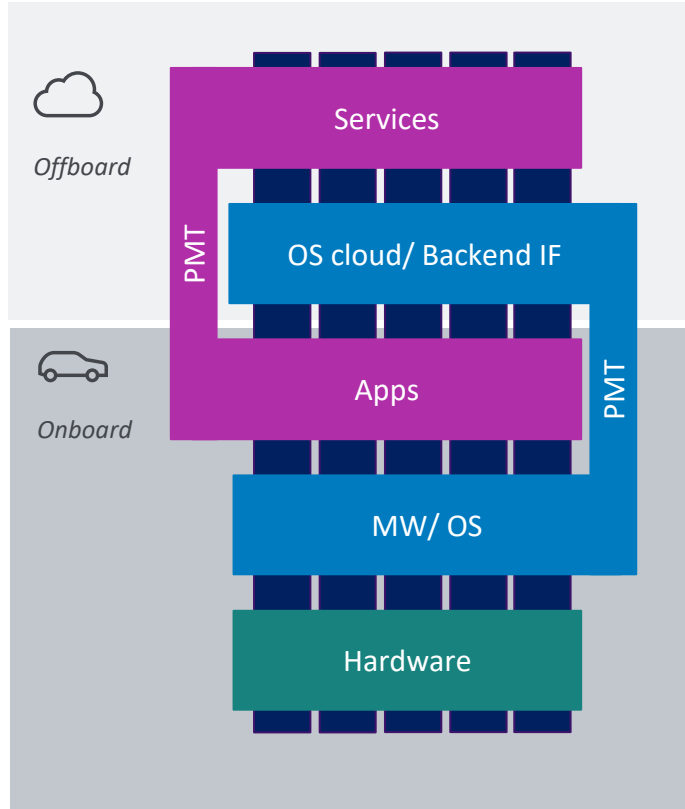Data Exchange Connected Car

Legacy & increasing complexity

Regional requirements & risk mitigation

Innovation & competition from China

High investments & increasing costs

BOSCH

Bosch's offer as Innovation Partner towards SDV

Mobility Tech Stack…

Offboard

Onboard

- Services
- OS cloud/ Backend IF
- Apps
- MW/ OS
- Hardware

PMT

PMT

…our approach …

"ReUse of SW" :
Flexible and ready for SW sharing

"Standardize":
Open and based on global standards

"Integrate and Common Use":
Right-performance & SoC-agnostic

… and our contribution …

SaaP | Apps & Services **ready for deployment.**

API Expert | Globally driving standardization.

Cloud Partners | Partnerships in place. **Flexible & avoiding lock-in.**

SDV Enabler | Customized & holistic **SW Stack & SW Factory.**

Integration Partner | Experience in **complex system integration**

High-performance compute | Decades of ECU experience.

BOSCH

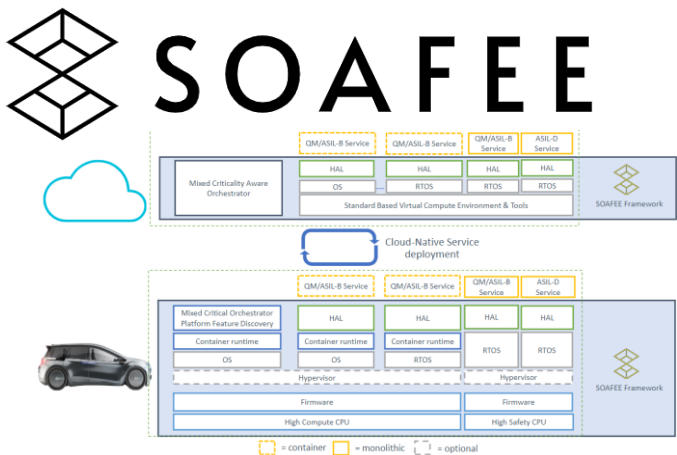# Standardization is Key
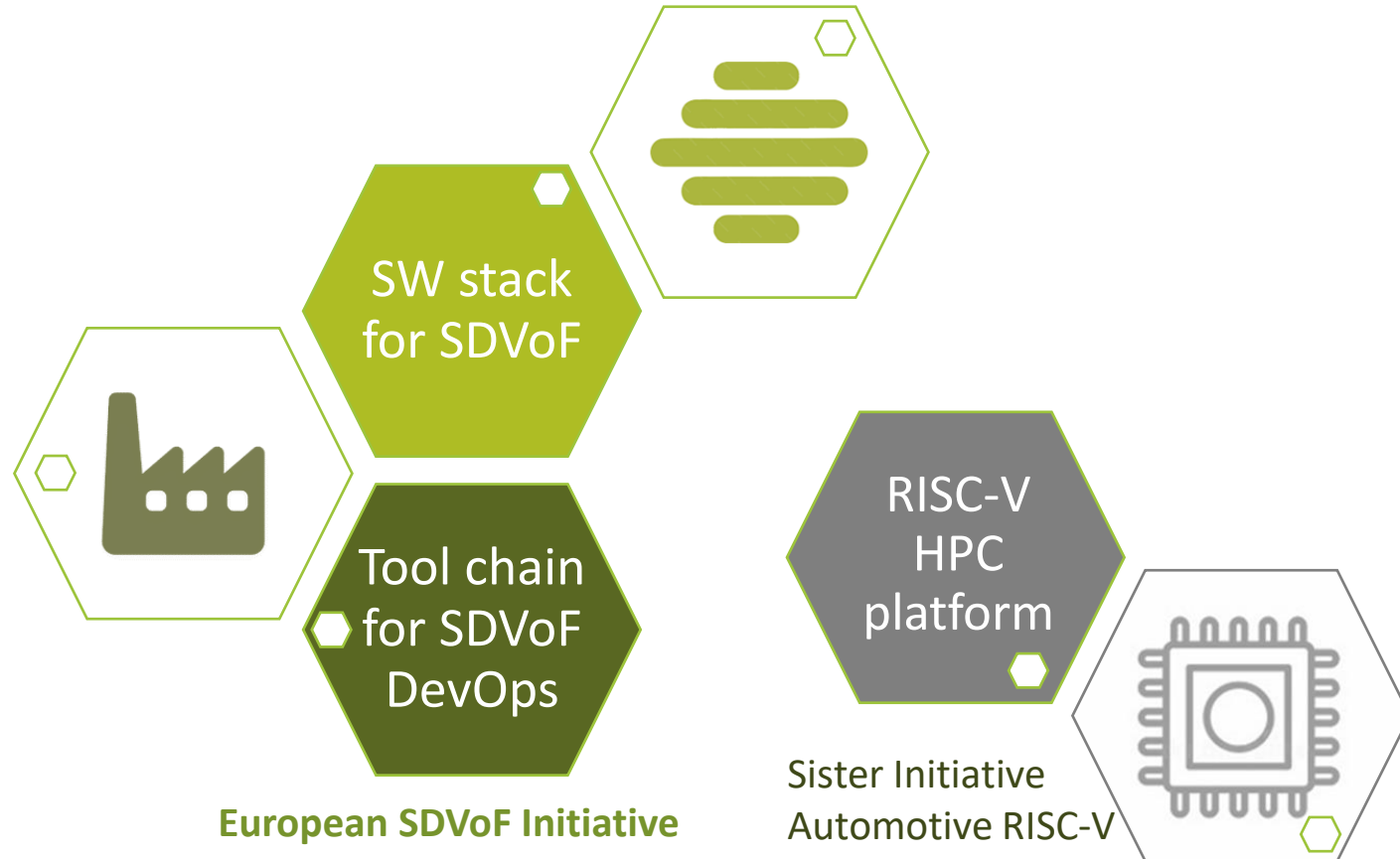

COVESA: the Connected Vehicle Systems Alliance

AUTOSAR: Automotive Open System Architecture

SOAFEE: Scalable Open Architecture for Embedded Edge

BOSCH

European driven "Software defined Vehicle of the Future" (SDVoF) Initiative

SW stack for SDVoF

Tool chain for SDVoF DevOps

European SDVoF Initiative

RISC-V HPC platform

Sister Initiative Automotive RISC-V

ご清聴ありがとうございました
Thank you for your attention