ReVision Auto & Mobility

Andrew Hart (CEO)

# Global Acceleration

How to respond to accelerating changes within the automotive market

October 8th 2025

**SBD Automotive** - Our Mission

sample clients **we support**

# Helping the automotive industry develop **safe, secure, seamless** & **sustainable** mobility

## Our Areas of Expertise

Connected

Autonomous

Shared

Electric

Secure

## Our Services

Data

Insights

Testing

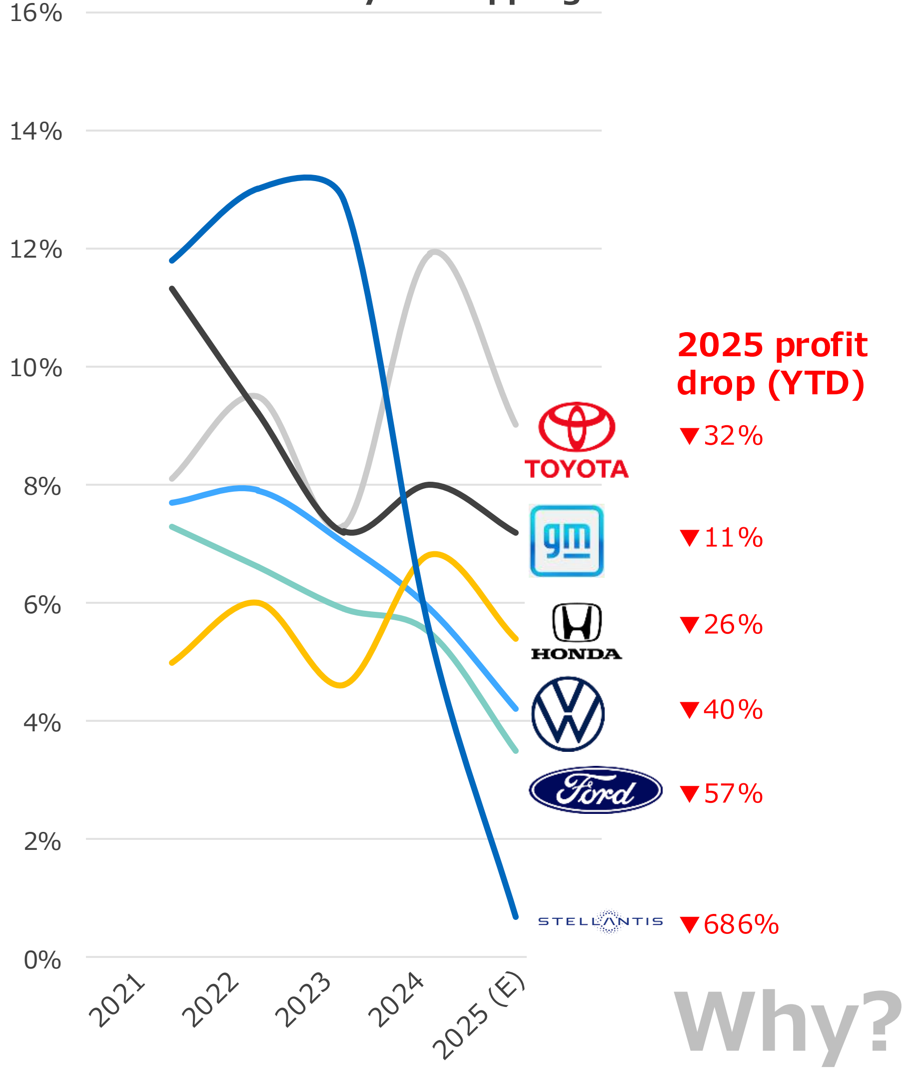
Decision Support

## Our Offices

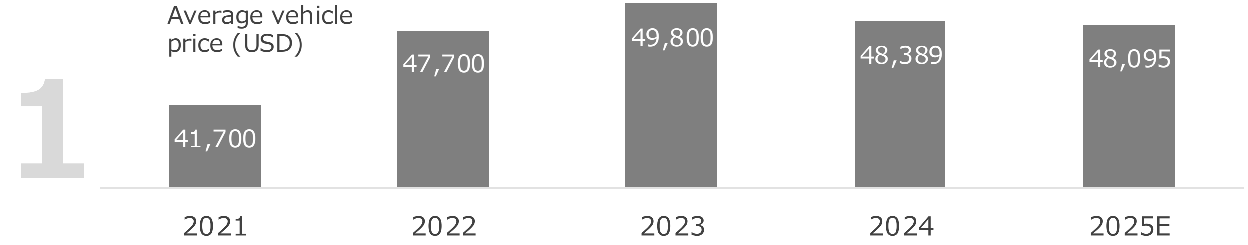
**USA** | **UK** | **Germany** | **India** | **China** | **Japan**

# This is a tough time to be in the automotive industry

## OEM Profitability is dropping

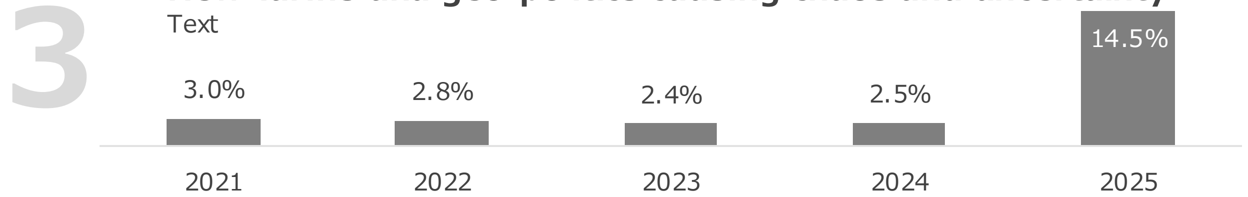



## Post-COVID peak in consumer spending now declining

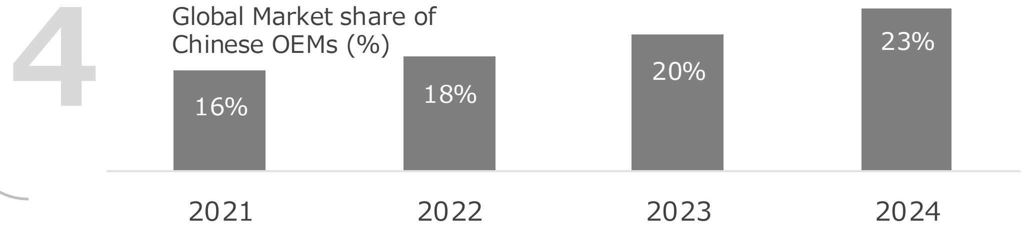



## Tech disruption forcing OEMs to maintain high R&D spend


## New Tariffs and geo-politics causing chaos and uncertainty




## Intensifying competition from Chinese OEMs




Source: OEM Annual Financial Statements, AutoData Vehicle Sales, World Bank

Most common question asked in meetings here in Japan:

# “How are they moving so fast?

# Let's play a game of 'Spot the Difference'

VS

Organizational view

Operational view

Technological view

# Spot the difference – **Technological view**

VS


| | | |
|---|---|---|
| **# of ECUs ▶** | >40 | <25 |
| **ECU development ▶** | <10% in-house | >70% in-house |
| **ECU upgradeability ▶** | <30% of ECUs | >95% of ECUs |
| **ECU customization ▶** | >60% | <20% |

| | | |
|---|---|---|
| **Compute power ▶** | Low | High |
| **Compute efficiency ▶** | Low | High |
| **Compute utilization ▶** | Low | High |

| | | |
|---|---|---|
| **E/E variants ▶** | >15 | <5 |
| **Wiring harness ▶** | >4km | <1.5km |
| **Components ▶** | Automotive grade | Non-automotive grade |

# Spot the difference – **Operational view**

VS


| | | |
|---|---|---|
| **OTA Responsibility ▶** | Planning team | Platform team |
| **Feature backlog ▶** | 3-year backlog | 3-month backlog |
| **Decision criteria ▶** | Competitor data | Usage data |
| **OTA Business case ▶** | Upfront | Iterative |
| **OTA Dev process ▶** | Waterfall | Agile |
| **Validation Testing ▶** | Months (engineer-led) | Days (customer-led) |

# Spot the difference – **Organizational view**

VS

Speed

Consistency

| | | |
|---|---|---|
| **Structure ▶** | Silo org | Start-up org |
| | Bottom-up | Top-down |
| | Engineering-led | Business-led |
| **Culture ▶** | Fear of failing | Fear of being last |
| | Right first time | Fail & learn fast |
| | Profit-centric | Growth-centric |
| **Partnerships ▶** | Keiretsu | Arms-length |
| | Long-term | Transactional |
| | Collaborate | Cannibalize |
| **People ▶** | Experience matters | Youth matters |
| | Age-friendly | Age-limited |
| | Lifetime employment | Hire & Fire |

Japanese OEMs can’t win by trying to play by Chinese rules.

They need to win by playing to their strengths.

# Key SDV Success Factors

## #1

Linking decisions to consumer needs

## #2

Building a sustainable business model

## #3

Adapting operating model & culture

# #1 success factor: Linking decisions to consumer needs

# The risk of jumping from SDVs, to AI-DVs to X-DVs

**Sensors** → **Eyes**
Visual perception of surrounding

**SDV** → **Nervous System**
Coordinates signals across the body

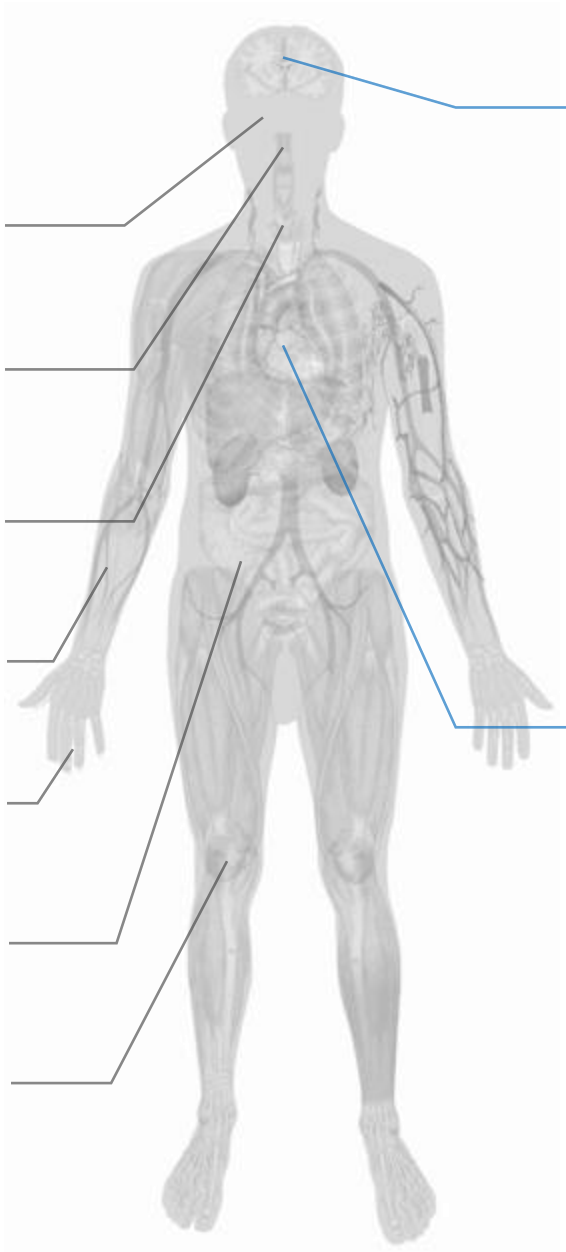
**E/E Architecture** → **Spine**
Connects different parts of the body

**Data** → **Blood Circulation**
Lifeblood providing oxygen to body

**HMI Interfaces** → **Skin**
Enables physical experience

**Cyber Security** → **Immune System**
Defends against viruses

**EV Propulsion** → **Legs**
Convers energy into motion



## Capability

### AI → Brain
The body's decision-making, perception, learning, anticipation

**Brain 4.0** Integrated AI (Super intelligent mobility)

▲

**Brain 3.0** Autonomous AI (e.g. E2E AD)

▲

**Brain 2.0** Adaptive AI (e.g. LLM VPA)

▲

**Brain 1.0** Basic AI (e.g. Smart BMS)

## Purpose

### Goals → Heart
The body's deeper purpose: protecting life, trust, planet & time

**Safe Mobility**
People should never risk their life and health to travel

**Secure Mobility**
People should never feel threatened or attacked while travelling

**Sustainable Mobility**
People should never need to compromise future generations in order to travel.

**Seamless Mobility**
People should never feel that travelling is difficult or inconvenient

# What do consumers value? Let’s go back to basics

Fielded: **November/December 2024**

Type: **Online**

Total responses: **3,302**

Countries:

- UK
- USA
- Japan
- Germany
- Brazil
- India
- China
- South Africa

Car ownership:

- 56% (focus of this presentation)
- 44%

Age ranges

| 16-27 | 28-43 | 44-59 | 60+ |
|---|---|---|---|
| 24% | 28% | 26% | 22% |

Gender ranges

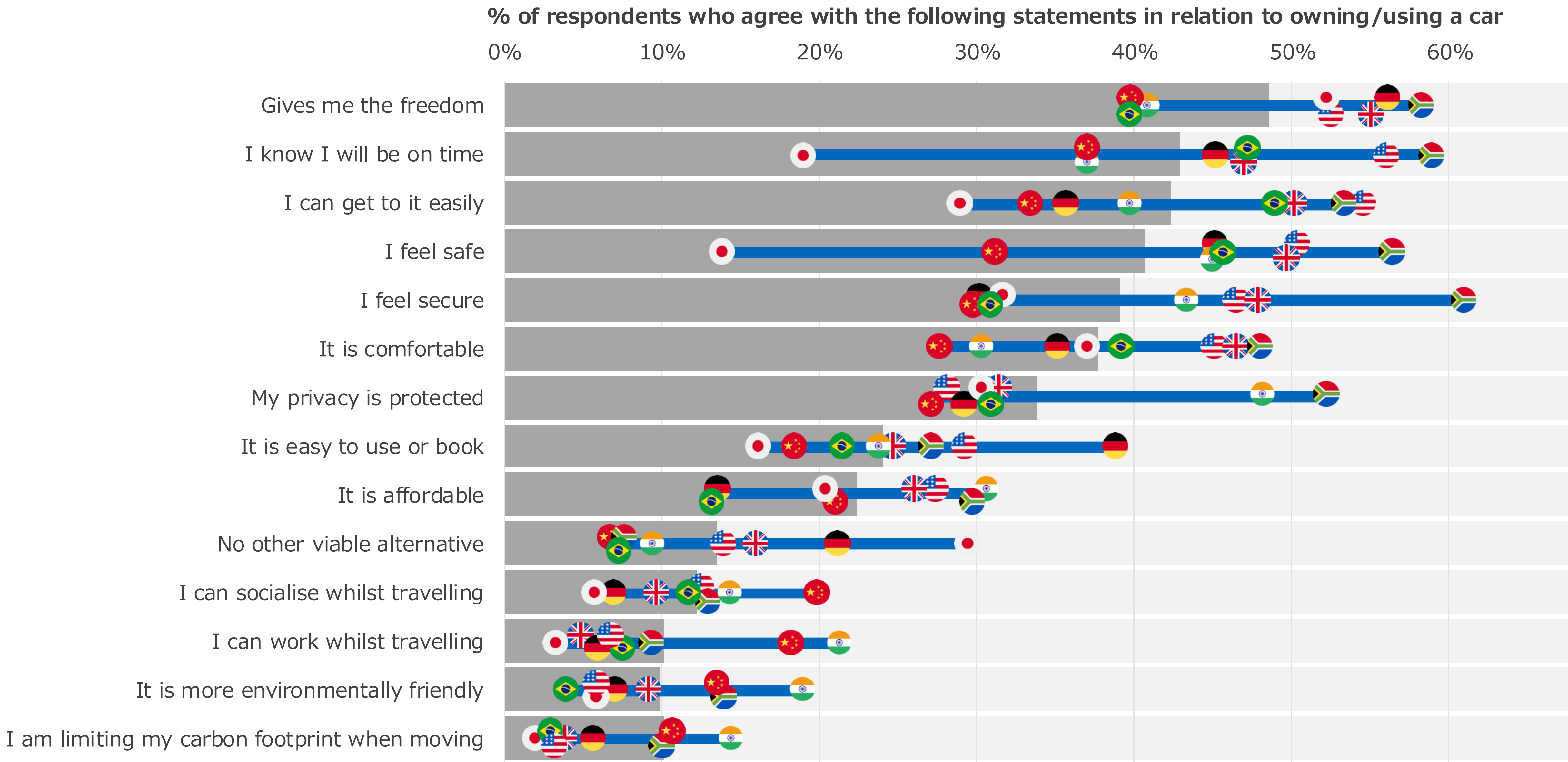
50.2% | 49.5%

Residence

| Urban | Semi-urban | Rural |
|---|---|---|
| 39% | 28% | 34% |

**Full dataset open sourced:** www.4smobility.com

# Differences on why consumers use cars (vs other modes)




**Source:** 4S Mobility survey of Consumer Outcomes (Q4 2024) – Sample size: 1,743 car owners across China USA Japan Brazil U.K. South Africa India Germany

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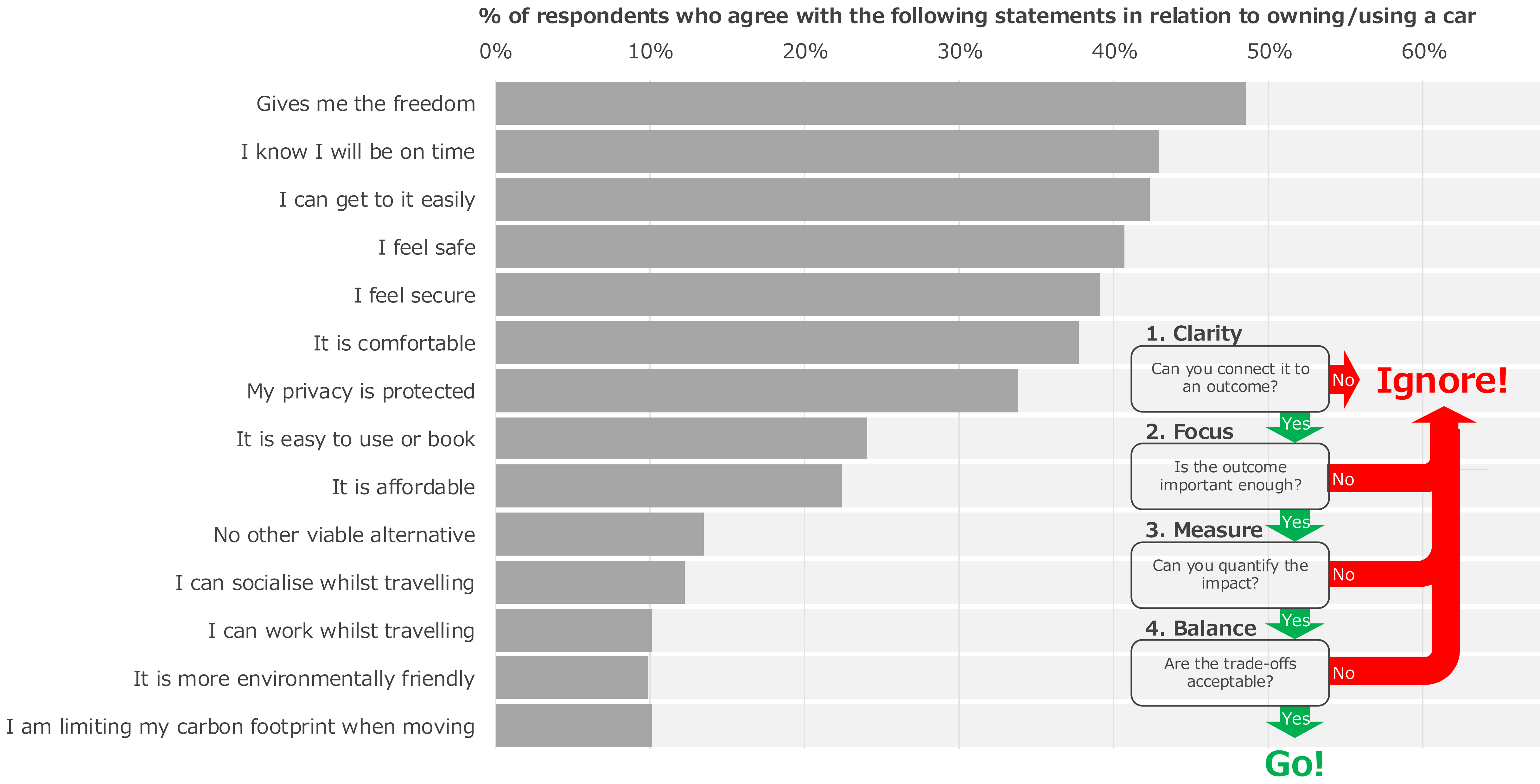


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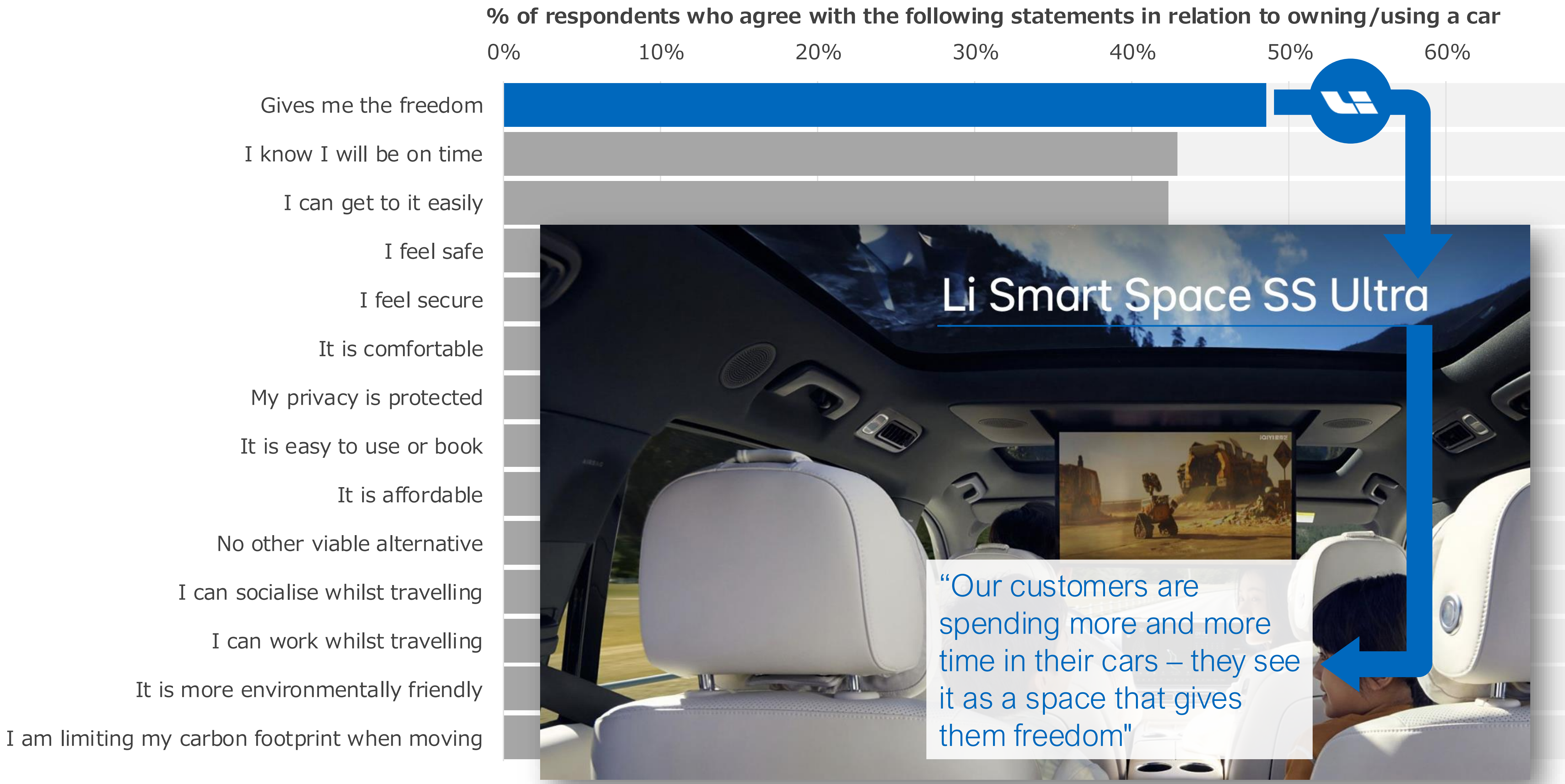



**Source:** 4S Mobility survey of Consumer Outcomes (Q4 2024)

# #2 success factor: Building a sustainable business model

# Established OEMs have big hopes for growing Lifetime Value

**Software revenue realization per car/year**

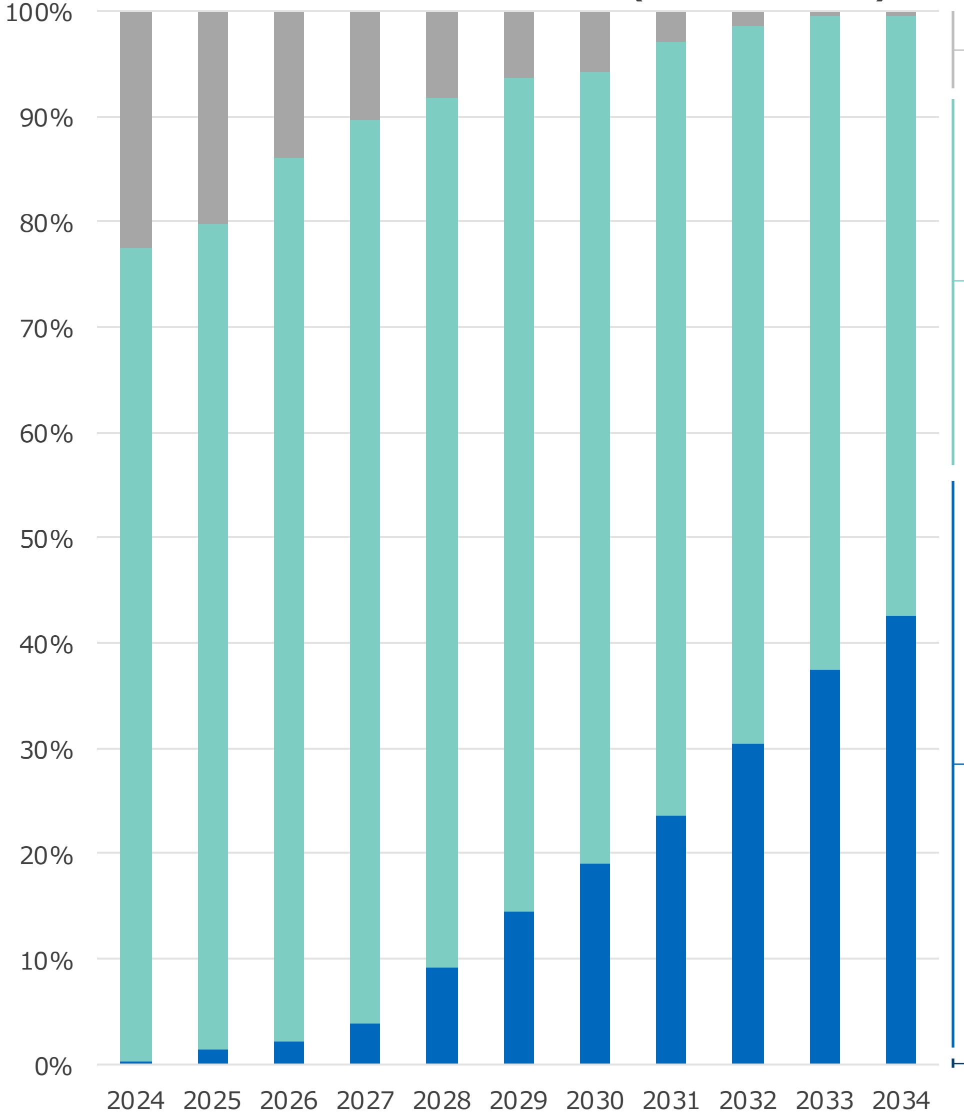
## 2023/24

## Future/planned


**Note.** Definitions assigned to software services are different from one OEM to another so these figures may not be comparable 1:1 (e.g., feet management services are included by some)

# ...and are investing in SW platforms to tap into this value

**% of Global new vehicle sales (Volume OEMs)**




**Vehicle 1.0**
'Let's design a new system to add a feature'

**Vehicle 2.0**
'Deliver new features by adding new software'

**Vehicle 3.0**
'Let's design systems that deliver their value through future features'

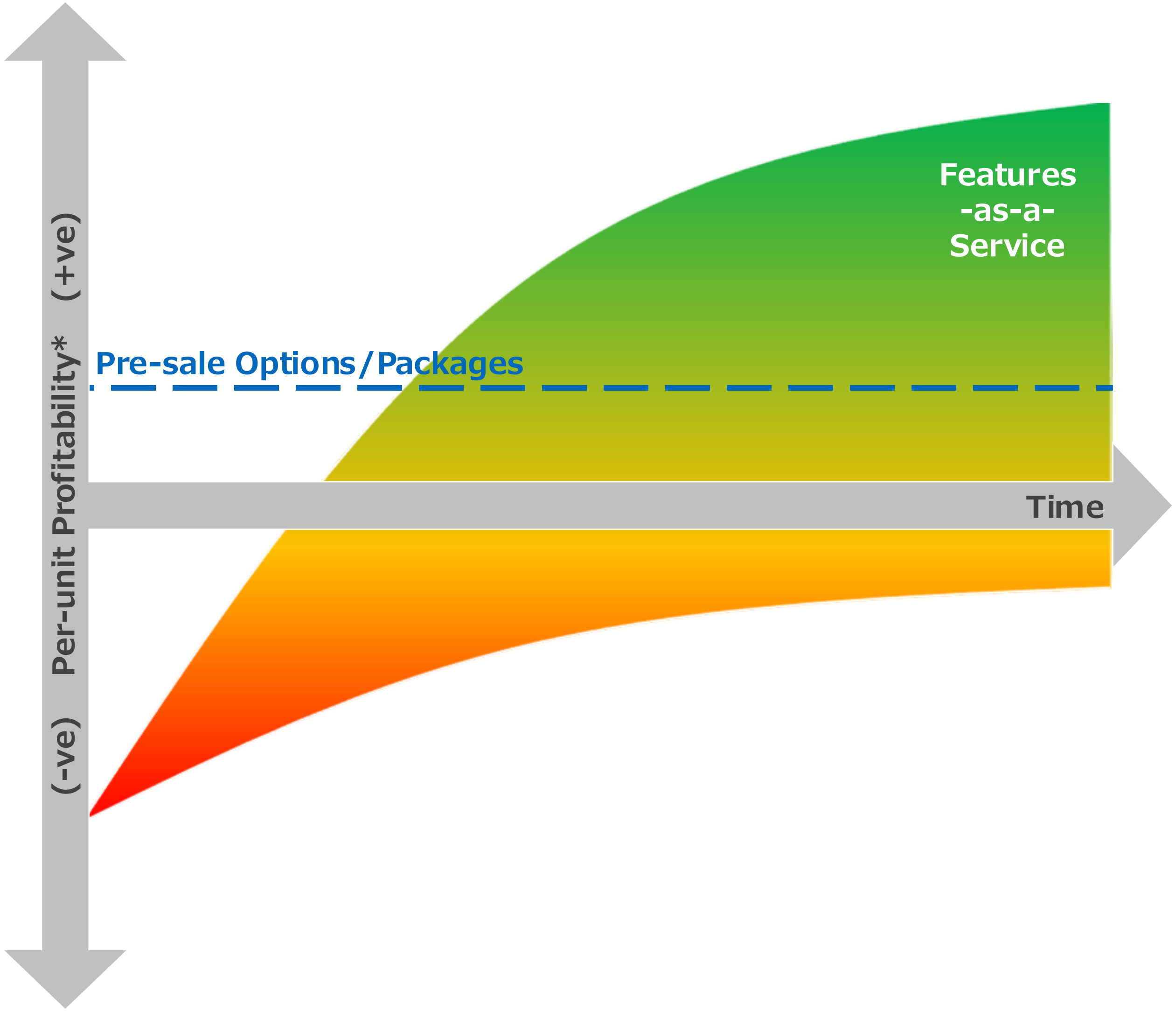
**Vehicle 4.0**
'Let's design a car that's an extension of the cloud'

**Impact on innovation**

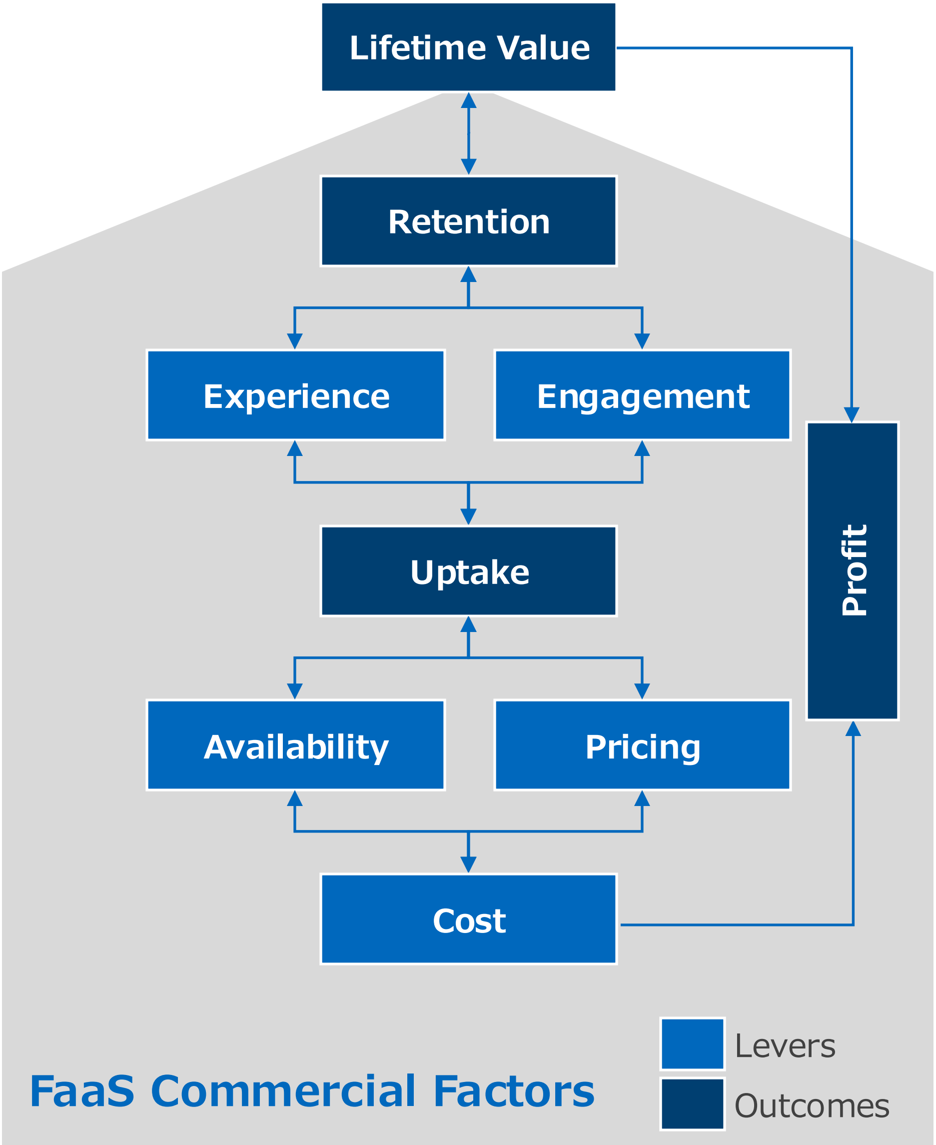

Source: SBD Report / Software Defined Vehicle Forecast (402)

# But success also requires new business & engagement models

## OEM push towards FaaS/FOD...




## ...requires a lot to go right



# #3 success factor: Adapting operating model & culture

# OEMs continue to experiment with different org structures

| Org Strategy | Examples |
|---|---|
| **Project team**<br>Scrappy team set up to deliver quick & dirty solution | JLR (Gen 1) |
| **Function-lead**<br>Major function (typically engineering/IT) takes lead | HONDA, BMW |
| **Business Unit**<br>New team with own P&L set up & given 'full' ownership | STELLANTIS (SWX)<br>(SW Dev Centre) |
| **Subsidiary**<br>Subsidiary spun-off to create more freedom & agility | VW (CARIAD), TOYOTA (Woven), gm (Onstar) |
| **Acquisition**<br>Investment or acquisition of capabilities from outside | (Rivian/Xpeng investment) |
| **Partnership**<br>External partner leveraged to deliver end-to-end solution | VOLVO (GAS) |
| **Platform-first**<br>Highly vertically integrated HW/SW functions from Day 1 | TESLA, Apple |

"Automotive SW programs rarely fail because of org structures or resourcing, but rather a **lack of retrospection, alignment & decision-making governance**.

# Organizational factors that increasingly affect feature planning

**Cohesion**
'We all agree on where we're going'

**Commitment**
'We all buy into the plan'

**Collaboration**
'We all work together to deliver'

| | Questions teams should be asking themselves |
|---|---|
| Having clear and shared goals | 1. How clear is the P&L ownership for SW/Services & Lifetime Value? |
| | 2. How aligned are teams around common X-functional 'Tier-2' goals/KPIs? |
| Aligning decisions to consumer needs | 3. How strong and aligned is the understanding of consumer needs? |
| | 4. How clearly defined are the outer CX limits of the SW/Services platform? |
| Balancing patience vs agility | 5. How strong & focused is the Board's commitment towards Lifetime value? |
| | 6. How good are teams at contingency planning and knowing when to pivot? |
| Focusing on and responding to the right things | 7. How strong is knowledge management & signal contextualising/filtering? |
| | 8. How effective are teams at agreeing on de-contenting and simplification? |
| Making decisions quickly and effectively | 9. How strong are cross-functional decision-making processes & governance? |
| | 10. How much influence does the SW/Services teams have over vehicle decisions? |

# Techniques adopted by other OEMs to improve feature planning

## One P&L

- Single P&L covering both vehicle & non-vehicle sales
- Continuity of team support post-launch

## Early-Stage Scorecard

- Cross-functional vehicle program scorecard to assess early-stage competitiveness against common KPIs

## Golden CX Rules

- Globally-aligned set of personas and CX rules
- Direct connection between feature roadmap & golden rules

## Unified Backlog

- Single common backlog for ideating, exploring & deploying OTA
- 2-week dev & beta testing goal

## Tiered SW Governance

- Global governance program for evaluating SW decisions
- Tiered governance based on impact

# Key SDV Success Factors

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# THANK YOU

## QUESTIONS?


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