# The road to softwarization

Measuring the digital value shift in automotive



# Context

The rise of smart vehicles, autonomous cars, and generative AI has put software in the driver's seat for the automotive industry – shifting how automotive companies view the entire value chain, and what connected mobility means for the customer experience.

Our report, *The art of software: The new route to value creation across industries*, explores how organizations are adapting their businesses for software-driven transformation, and how companies can overcome challenges to take advantage of new revenue streams, more efficient operations, and better customer experiences.

What does that mean for the automotive industry?





## The future of automotive will be driven by software



## The future of automotive will be driven by software

Nearly one-in-four automotive companies believe they already operate as a software company today. Close to fifty percent believe they will be a software company in the next three-to-five years. Automotive leaders anticipate that generative AI will play a growing role in how code is created within their organizations.



of auto organizations believe **software is critical** to their future product and service strategies. Automotive leaders predict that



of code will be created with assistance from generative AI in the next three years.



#### Figure. 1

Percent of organizations that agree with the statements below



## Early investment in software gives companies a head start

road to softwarization

## 2 Early investment in software gives companies a head start

As the focus on software grows, so does anticipated share of revenue. Automotive companies are already seeing benefits from early investments in software products and services. These benefits come in the form of new revenue streams, faster R&D, and the ability to provide improved customer experiences – all important ways to maintain a competitive edge in the market.

### Figure. 2

Software investments are balanced across different functional areas...



...with companies seeing benefits across the value chain



New revenue streams based on **software-defined products** 



**Faster R&D** for existing products and services



Competitive **advantages** (ex. increase in market share)

Improved customer experiences

## Figure. 3

Auto companies anticipate nearly one-third of total revenue to come from software by 2030



## Accelerating software transformation starts with strategy

9 The road to softwarization

## 3 Accelerating software transformation starts with strategy

These early wins are promising but, according to our research, a majority of auto companies are only in the early stages of software-driven transformation. Sixty-nine percent of automotive companies fall into the "experimentation" stage – meaning they have identified specific use cases or have implemented a pilot program for one product or service to start. Only 43 percent of automotive companies say they have a comprehensive software-driven transformation strategy currently in place.

### Figure. 4

Maturity of software-driven transformation in products/services





## Becoming a software-driven organization

Software-driven transformation requires automotive companies to redesign their business models, software organization, and engineering processes.

At Capgemini, we've identified six key pillars organizations should follow to achieve a successful software transformation – combining strategy, design, operations, sustainability, and technology to drive the automotive industry forward.

## Streamline through agile methodologies, software factories, and generative AI Amplify velocity and quality through agile methodologies and software factories Accelerate software development with generative AI

#### **Organize** to be software-product and services-centric

Shape a software-product and services-centric organizational structure

#### Strengthen your talent and skills

• Create a comprehensive **talent** and skills approach

#### Strategize

your approach to software-defined products and services

• Develop a strong software **strategy** for your organization

#### Design

for human-centric, sustainable, and scalable software

- Place **customer experience** at the core of software strategy
- Define an **architecture** migration roadmap for standardization, modularity, and scalability
- Integrate **sustainability** as a key element in software design decisions

## Collaborate within the ecosystem

- Engage with strategic partners and the ecosystem on key initiatives
- Foster a collaborative software excellence **culture**

Download The art of software: **The new route to value creation across industries** to learn more about our approach, and how organizations can achieve software-driven transformation.

Download report 🛛 👽

Softwaredriven

transformation

## About Capgemini

Capgemini is a global business and technology transformation partner, helping organizations to accelerate their dual transition to a digital and sustainable world, while creating tangible impact for enterprises and society. It is a responsible and diverse group of 340,000 team members in more than 50 countries. With its strong over 55-year heritage, Capgemini is trusted by its clients to unlock the value of technology to address the entire breadth of their business needs. It delivers end-to-end services and solutions leveraging strengths from strategy and design to engineering, all fueled by its market leading capabilities in AI, cloud and data, combined with its deep industry expertise and partner ecosystem. The Group reported 2023 global revenues of €22.5 billion.

Get the future you want | www.capgemini.com

