

SMART MOBILITY CONNECT

CONNECTED ECOSYSTEM

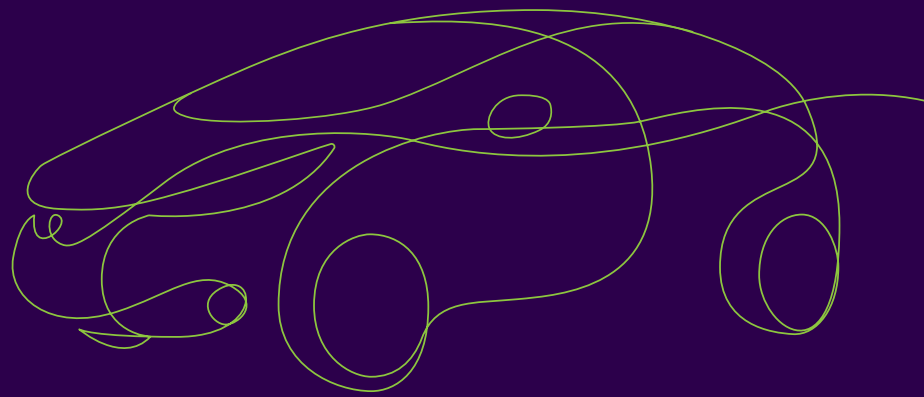
Charting the new mobility
ecosystem of the future

PRELUDE

As technology and new competitive threats disrupt the automotive industry, automotive players need the vision to transform their businesses and stay relevant.

We bring the industry insight and multi-disciplinary expertise to support OEMs and other automotive businesses on their transformation journeys.

Our series of Smart Mobility Connect offerings addresses their critical challenges and drives business growth by bringing to life the smart mobility ecosystem of the future. Here we zoom in on the third of these offerings – **the Connected Ecosystem.**



Detailed information about each of the four core offerings
– Connected Customer, Connected Services and Products,
Connected Ecosystem and Customer Engine – is available at:
www.capgemini.com/service/invent/smart-mobility-connect/

45%

of consumers say they would like to be able to buy in-car apps and services (e.g. additional navigation features) online. This rises to **62%** in emerging markets.

Cars Online 2017: Beyond the Car, www.capgemini.com/service/cars-online-2017-beyond-the-car/

Digital technology is transforming the automotive industry and reshaping the value chain.

Automotive and non-automotive companies are now working on new software solutions and other technologies to create a next generation of connected vehicles that will be increasingly electric, autonomous, and shared. In future, these companies will be competing with players from the technology industry. They'll quickly develop solutions that bring value to the customer and challenge current automotive offers in more innovative ways.

As a result, automotive companies must strive to broaden their skillset, partnering with other companies in order to leverage their ecosystems and compete effectively through new products and services. Several automotive players are already doing just this. Investments in car-sharing platforms car2go and DriveNow have enabled BMW and Daimler to scale their opportunities and to improve their business model. These forms of cooperation will become more common as players battle to achieve long-term profitable business models around mobility.

The automotive industry faces a tremendous change in how its players conduct business with suppliers, partners and competitors. Automotive players need to master the shift from being a product company to a service company. New market entrants, in particular those from the technology industry, increase competition. Companies like Google and Apple already have their automotive platforms, Android Auto and Apple Carplay. The plans of these new entrants to launch their own cars and therefore manage their own automotive ecosystems, present a threat for automotive companies.

Moreover, digital services in the car are becoming an important revenue stream. This makes it difficult for OEMs on the one hand to offer an open system for third party providers, and on the other hand not to lose control over the services and revenue stream. Applications like Amazon's Alexa are integrated into the car and thus make direct customer contact. These developments present OEMs with the challenge of handling multiple big, innovative players simultaneously. These players are advancing quickly, thanks to their ranks of highly skilled employees; and in contrast to many OEMs, fast development cycles, integrated teams and collaboration tools are integral to their culture.

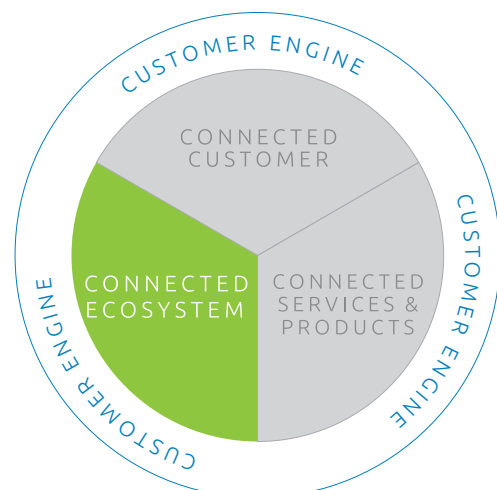
Finally, customer expectations and usage of products are changing. Free downloadable smartphone apps and subscription models are standard expectations for most customers today. This demands that OEMs rethink their business models and internal organization in order to meet their customers' needs.

We collaborate with automotive leaders to address these challenges by:

- Defining their future positioning within the digital value chain
- Creating cooperation models with non-traditional partners to set new standards in mobility
- Realizing the vision through carefully designed, agile business and operating models, finding new ways of combining products and services
- Creating customer loyalty by anticipating future needs throughout the customer journey, ensuring that customers come back for more.

We provide in-depth support to OEMs and other automotive businesses in three focus areas: **Digital Value Chain, Collaboration Model and Business Model.**

Smart Mobility Connect Offerings



DIGITAL VALUE CHAIN

In the past, the automotive landscape consisted mostly of OEMs and respective automotive suppliers. The OEM's voice to the customer was the dealer. Through new technologies like e-Mobility and digitalization, new players have entered this landscape.

e-Mobility has brought the rise of established cell suppliers like Samsung SDI and LG Chem coming from other industries into the automotive sector. In the digital space, Google and Apple have their own automotive infotainment platforms. Amazon is exploring new ways to sell automotive parts, arrange test drives and even enter the OEM's ecosystem, by integrating its voice assistant Alexa. In essence, these new players are trying to gain access to the automotive customers.

In response, automotive players must rethink their positioning in the digital value chain. They must decide whether to become a pure hardware manufacturer, an integrated service provider focusing on the customer, or something in between. These decisions will also have an impact on the skillset of an OEM and how to choose the right partners up- and downstream.

What we offer

We analyze which parts of the digital value chain OEMs currently occupy to derive a suitable future positioning within the digital value chain. This can then transform an OEM from a hardware supplier into a service and mobility provider with closer customer contact.

Client case study

Issue: A premium OEM had launched several digital initiatives. However, slow processes, high costs and a lack of digital skills were hindering their success.

Solution: Together with the premium OEM, we analyzed their steps in the digital value chain from strategy, UX-design, and IT development up to operations. From here, recommendations were made as to which steps the OEM should take alone, and which should be engineered by partners.

Benefit: Deep knowledge of the customer's organization and processes led to objective and practical recommendations on how to build upon the OEM's strengths, and augment them with the right partners.

COLLABORATION MODEL

Based on an OEM's targeted position in the digital value chain, a suitable collaboration model has to be derived. OEMs are increasingly investing in IT start-ups or partnering with digital companies, either as joint ventures or through business process cooperation like the Intel/BMW cooperation on autonomous driving. They even partner with competitors to secure their future success, as Audi, BMW and Mercedes are doing while acquiring HERE. Creating critical mass is among the main reasons for collaboration, as players aim to achieve platform relevance and knowledge transfer from other industries or leading technology companies.

What we offer

We evaluate cooperation models that enable OEMs to reach their target position in the digital value chain. As a result, we help in selecting the right partners and investment opportunities. As a global IT player, we can act as a partner to provide our end-to-end capabilities such as ready-to-use digital platforms, our ability to scale products, and our technology-driven know-how.

We offer three different options for partnering:

1. IT Joint-Venture (JV)
2. Innovation JV
3. Business process cooperation.

Client case study

Issue: Coming from a car-centric perspective, Valeo wanted to offer an end-to-end mobility solution (including hardware and software) for potential fleet customers. They therefore needed a partner able to provide user-centric services.

Solution: Valeo and Capgemini joined forces to develop a mobility solution for fleet customers. We had full command of IT integration, developing and operating the mobile app and platforms with customized digital services.

Benefit: Our experience in customer-centric IT integration, development and operation made it possible for Valeo to split tasks and benefit from our knowledge.



BUSINESS MODEL

As customer behavior changes, car ownership is becoming less important for many while mobility remains relevant. This has an impact for OEMs on how to measure profit. In the long run, the success of OEMs will no longer be measured primarily by the number of cars sold. Connected cars bring the potential for upselling during the whole lifecycle, as customers will buy more and more services around their cars.

With the resulting generation of huge amounts of data, automotive companies need to find ways of using that data to generate business. New business models will arise, such as usage-based insurance or location-based services, where third-party providers could integrate their offers on the OEMs' platforms. As a consequence, new ways of measuring business will be required, as well as the skills to set up a sustainable business model. Players from the connected ecosystem need to collaborate in a manner that benefits all involved in the collaboration.

What we offer

We help OEMs leverage their ecosystems to create new business models using value-adding operating models for platforms, and finding new ways of combining products and services (including data as a service). We then build the right go-to-market strategies.

Client case study

Issue: A premium OEM faced challenges with customer relevance and fast enhancements on their digital platform. This challenge came from traditional system architecture that had not been built for continuous updates, but only for one or two major upgrades per year.

Solution: We offered a modular architecture that uses basic principles and empowers the markets to enact customer-relevant changes based on common architecture. The architecture focuses on cloud and API elements, but gives each market enough freedom to act. This meant an opening of the central platform within the company. From a cultural perspective, the approach invites all to share relevant developments as one team and creates a hive approach.

Benefit: We showed how to use the 'asymmetrical weapons' that are typical for state-of-the-art tech companies, within traditional companies. As a result the business model became much more agile and responsive to changes.

THE WAY FORWARD

Staying relevant and competitive in a changing landscape means OEMs have to partner and collaborate as much as they compete and contest.

Applying an inventive mindset is key to staying ahead, as we believe the mobility ecosystem of the future will connect people with technology in ways that haven't been seen before.

Together with our clients we bring to life what's next, to create a smart mobility ecosystem designed with people at its heart.

Discover how Capgemini Invent enables businesses to reinvent mobility for people

www.capgemini.com/service/invent/smart-mobility-connect/

About Capgemini Invent

As the digital innovation, consulting and transformation brand of the Capgemini Group, Capgemini Invent helps CxOs envision and build what's next for their organizations. Located in more than 30 offices and 10 creative studios around the world, its 6,000+ strong team combines strategy, technology, data science and creative design with deep industry expertise and insights, to develop new digital solutions and business models of the future.

Capgemini Invent is an integral part of Capgemini, a global leader in consulting, technology services and digital transformation. The Group is at the forefront of innovation to address the entire breadth of clients' opportunities in the evolving world of cloud, digital and platforms. Building on its strong 50-year heritage and deep industry-specific expertise, Capgemini enables organizations to realize their business ambitions through an array of services from strategy to operations. Capgemini is driven by the conviction that the business value of technology comes from and through people. It is a multicultural company of 200,000 team members in over 40 countries. The Group reported 2017 global revenues of EUR 12.8 billion. *People matter, results count.*

Learn more about us at

www.capgemini.com/invent

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