

SMART MOBILITY CONNECT

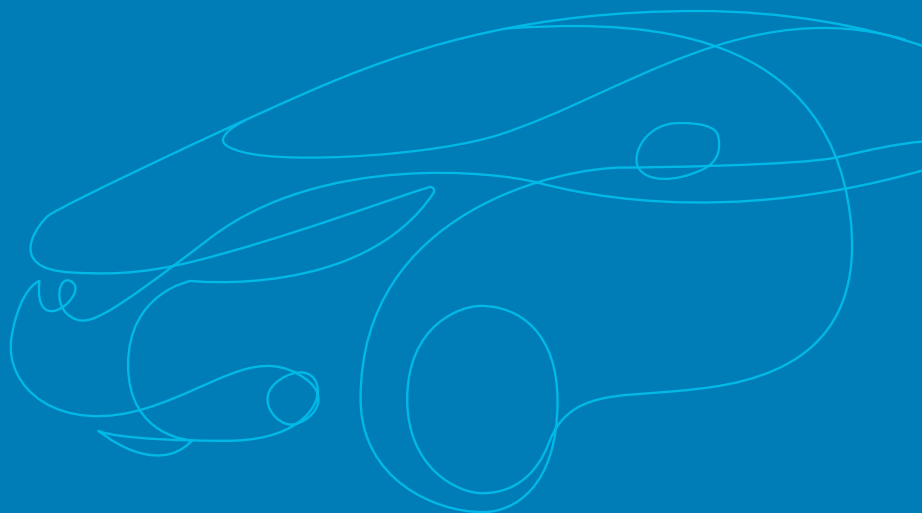
Charting the new mobility
ecosystem of the future

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 automotive ecosystem of the future.





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/

THE NEW REALITY
OF CONNECTED
MOBILITY





Technology is transforming the way we buy, own, lease and use the vehicles around us.

As customers, we expect a digital relationship with our car that is as personalized and seamless as our other online interactions, from banking to social media. New technologies are continuously enhancing these experiences and raising our expectations, with digitally-savvy consumers becoming used to innovation on a daily basis.

For automotive OEMs this means transitioning from a pure-product focus, to a comprehensive product and service offering that places customer experience at the heart of the business. This shift will affect every facet of their organizations.

We view the challenges facing automotive OEMs on six related transformation paths.

57%

of consumers would buy a car from a technology company (such as Apple or Google) if that were an option. In emerging markets, this number jumps to **78%**.

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

From engineers to data owners

While engineering prowess has traditionally been a cornerstone capability for OEMs, and remains important, today it is their fluency and capability in analyzing customer data that will set them apart. The ability to unlock actionable insights and leverage data to improve the customer experience is becoming a top priority. Mastery of data is also crucial when developing new technologies such as autonomous driving.

From ownership to mobility

The rising trend towards mobility services — car sharing, ride sharing, multi-modal packages, and mobility on demand — demonstrates the elevation of experience over ownership. Meeting the needs of the customer is about more than optimizing the experience of the driver.

From product to service

Consequently, automotive OEMs need to rethink their value proposition through offering comprehensive services rather than singular products. Customers expect holistic mobility services that go beyond the vehicles themselves to include services ranging from ride hailing, to car sharing and convenient after-sales services.

From development cycles to rapidity

Alongside this new proposition, the entire way successful OEMs work internally is beginning to pivot. Working processes and technical implementations that are now aligned with vehicle development cycles need to be re-oriented towards update cycles that customers know from their apps and other digital products.

50%

of consumers appreciate having access to a wide range of cars and services that can be used, as needed, for a fixed price and a specified period of time.

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

From centralization to collaboration

Meeting the need for more agile ways of working in this new environment opens the door to collaboration with unexpected partners and new disciplines, creating an open platform for innovation.

From automotive competition to technological competition

As a consequence of these shifts, tech giants have come to play in the competitive landscape. Their heavy investments in connected cars, mobility services, and autonomous driving demand a strategic response from OEMs.

What's next for OEMs?

These challenges and shifts necessitate a fundamental transformation. By moving beyond providing the nuts and bolts, to becoming the brains behind new experiences for their customers, OEMs have an opportunity to transcend their traditional role and win more control of the entire customer experience lifecycle. In order to enable the systematic development of customer-centric product and service innovations however, OEMs need to lead a coordinated transformation across all areas of their business.

Strategy

Key strategic questions that OEM leaders need to resolve include how to define their playing field as manufacturers or sellers, and what form their business model should take. Increasingly, OEMs will take ownership of some core offerings, co-create others with partners, and integrate offerings from third-parties with their own products to create a unique and dynamic value proposition.

Operations

OEMs need to reimagine internal services and ways of working. Accelerating the process from conception to realization; optimizing existing systems with new tools; and building new capabilities and expertise are all critical. Operations must also become more customer-centric to deliver a superior service that builds competitive differentiation and loyalty. To keep pace with expectations shaped by technology giants, the customer experience needs to become a seamless end-to-end journey, rather than a set of disconnected touchpoints. It must be simple and intuitive, proactively anticipating customers' needs. And it will increasingly be characterized by situational relevance – drawing on all available data and Artificial Intelligence to deliver more appropriate and personalized interactions.

Technology

Keeping up with technological change is one of the main concerns for OEM players. They need to experiment with new technologies in a safe environment, rapidly prototype and test innovative solutions, and de-risk the rollout of successful solutions at scale to move the business forward.

Culture

OEMs will need to attract new skillsets into their organizations, ranging from engineers, product designers and researchers, to the psychologists, marketers and data analysts who will create an environment that fosters creativity and innovation. The culture must adapt to enable agility, with small cross-functional teams, result-orientated processes, and a clear client focus. OEMs need to break new ground by collaborating with new and sometimes unexpected partners as part of a broader ecosystem.

INVENTING THE FUTURE

At Capgemini we see the corporations of the 21st century as living companies. Companies that need to constantly adapt, evolve and grow as they address multiple disruptive forces. The ability to invent and reinvent being at their very core.

For automotive leaders today, inventing the future is about adopting an inventive mindset to solve new problems. It means developing new business models, new customer experiences, new products and services, and new operations of the future. Success will be determined by their ability to drive customer-focused change and continuous learning, challenging the status quo and not taking no for an answer.

To navigate disruption and intensifying competitive threats, OEMs need to create a smart mobility ecosystem designed with people at its heart. This will unlock new growth

potential and transform them into innovative, customer-centric businesses. Smart Mobility Connect is our response to OEMs undertaking that journey. It offers a strategic and technological framework to bring the mobility ecosystem of the future to life.

This is a transformation that encompasses many aspects of OEMs' businesses, and can only be delivered through a combination of disciplines working together: Strategists, technologists, data scientists, and creative designers. It requires a shift in traditional thinking and ways of working, to embrace new forms of agile, multidisciplinary collaboration. This will bring the potential to ideate and prototype, test and scale the innovations that will change the course of the business.

ENGINEERING	DATA
DRIVER	PASSENGER
PRODUCT	SERVICE
PERFORMANCE	CONVENIENCE
RIGOROUS	RAPID
CONSIDERED	EXPERIMENTAL
SPECIALIZED	COLLABORATIVE
LINEAR	ITERATIVE

BRINGING TO LIFE WHAT'S NEXT

We bring the mobility ecosystem of the future to life through a host of products and services within three core pillars: Connected Customer, Connected Services and Products, and Connected Ecosystem. The technological framework that helps us deliver on our approach, the Customer Engine, connects these pillars and integrates intelligence into each stage of the journey.

Connected Customer

Today's consumers expect automotive companies to respond and interact with them in real time and across all relevant channels. For a long time automotive players have relied on their engineering power to manufacture immaculately designed and flawless products. Now the increasing need for holistic mobility services is forcing automotive OEMs to connect the customer not just to their car, but to their entire ecosystem.

We help businesses reimagine the customer experience across all channels utilizing cutting-edge technology. We help create seamless customer-centric strategies and solutions, using advanced technologies to heighten the impact of customer experience. We leverage real-time data to provide actionable insights, resulting in quick-turnaround, innovative solutions that sustain and deepen customer engagement. We also help organizations create customer loyalty by anticipating future needs along the holistic customer journey, ensuring that customers come back for more.*

Connected Services and Products

Automotive products increasingly need to be supported and complemented by digital services. The entire customer journey and its processes blend online and offline elements.

Connected services and products not only provide OEMs with additional potential for revenue creation, but also the chance to differentiate themselves from competitors. E-commerce is one example of this: The online direct sales model for cars through OEMs challenges the longstanding status quo of a three-stage sales model with importers and dealers. This requires a complex process to be handled online by advanced systems, with much less human interaction.

We identify high-potential areas for new connected services and products based on data and insights into consumers' willingness to pay. We seek to increase customer satisfaction by ensuring products and services are accessible through the right channels and tailored to individual needs. We pioneer end-to-end mobility solutions that span the future urban landscape of mobility services.*

Connected Ecosystem

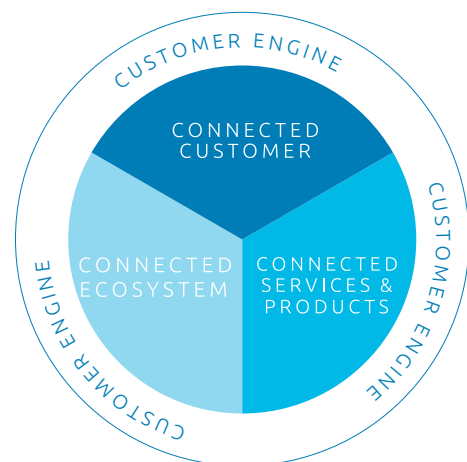
The automotive industry faces a tremendous change in how its players conduct business with suppliers, partners and competitors. Automotive players need to master the shift from being a product company to a service company. New market entrants, in particular those from the technology industry, increase competition. 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 not to lose control over the services and revenue stream. These players are advancing quickly, thanks to their ranks of highly skilled employees.

While many OEMs still need to adapt their cultures to agile working, digital companies are accustomed to that style of working. Fast development cycles, integrated teams and collaboration tools are standard for them.

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.*

Smart Mobility Connect Offerings



* For more information about this pillar, visit www.capgemini.com/service/invent/smart-mobility-connect/



We collaborate with players in the automotive industry to define their future positioning within the digital value chain. We create cooperation models with non-traditional partners to set new standards in mobility. We help businesses realize their vision through carefully designed, agile business and operating models, finding new ways of combining products and services.

Customer Engine

The Customer Engine is the blueprint for a reference architecture which shows how Smart Mobility Connect can be implemented in an OEM's business. By providing a library of use cases, it accelerates the development or configuration of bespoke services for our clients, and can be leveraged in conjunction with the applications in their wider systems landscape.

We demonstrate the use cases to our clients to show what OEMs can achieve in their mobility ecosystem from the perspectives of the end customer, the OEM, the dealer and third parties. This allows our clients to quickly and flexibly conceptualize, develop, implement and scale innovative use cases and services, leveraging cutting-edge technology and deep cross-industry expertise.

The Customer Engine encompasses the following disciplines that can be leveraged on a modular basis according to our clients' specific needs:*

- Innovative use case portfolio
- Integration along sales levels and value chain
- State of the art AI-enabled CX ecosystem
- IT and data infrastructure
- Target AI-enabled architecture
- Rich set of AI enablers
- Delivery models
- Customer experience design

* For more information about the Customer Engine, visit www.cappgemini.com/service/invent/smart-mobility-connect/

SUMMARY

As OEM players face a series of challenges from rising customer expectations to completely new competitors, new business models, monetization of data and cooperation with unexpected partners, a transformation of their business is required.

The mobility of the future will be delivered by an ecosystem of partners coming together to connect people with technology in ways that haven't been seen before.

We pride ourselves on shaping and empowering a new mobility ecosystem that is open, intelligent and dynamic.

To help automotive players bring to life what's next, we apply an inventive mindset, helping them unlock new growth potential and transform into innovative and truly customer-centric businesses.

Discover how Capgemini Invent enables businesses to reinvent mobility for people

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



A TRACK RECORD OF TRANSFORMATION IN THE AUTOMOTIVE INDUSTRY

“At Audi we have a great ambition for digital business. We are creating digital services, mobility services, platforms and solutions for customers, dealers and new ecosystem partners. With digital business, we want to contribute to the operating result. Obviously, we are looking for partners who can help us to realize our ambition, challenge us, provide knowledge as well as insights from other industries and bring strategies to life. Capgemini is one of these partners, supporting us with the capabilities of a modern digital consultancy.”

Nils Wollny, *Head of Digital Business Strategy and Customer Experience, Audi AG.*

Who we are

At Capgemini we collaborate with most of the leading automotive companies in the world, and with many other players in the smart mobility ecosystem, bringing deep industry-specific insights, business process knowledge and technology expertise to deliver results for their businesses. Our clients include OEMs and tier 1 suppliers, as well as retailers and automotive service providers. We work with the 15 top OEMs and 15 top tier 1 suppliers, and have been a strategic partner to some of them for over two decades.

Cars Online, our perennial report on industry trends based on surveys of thousands of consumers internationally, has become a benchmark for automotive players. By understanding the voice of the customer, we help our clients envision the future of the automotive ecosystem, and bring to life what's next.

Our insight into the automotive industry is complemented by an end-to-end portfolio of business and technology skills tailored to the needs of automotive companies, from innovation and strategy to customer engagement, process engineering to AI and emerging technologies, and deep expertise in digital manufacturing, supply chain and automation.

As a Group, we collaborate with a wide range of clients in other industries including Financial Services, Consumer Products, Retail, Energy and Utilities, Manufacturing, Electronics and High Tech. Our insights into navigating digital transformation and disruption in these industries all contribute to our vision for the smart mobility ecosystem.

We champion an inventive mindset and unconventional ways of working to tackle the new and evolving reality of the automotive landscape: from incorporating agile methodologies, learning and adapting in real-time, to rapid iteration and prototyping. Instead of a few fixed and inflexible update cycles per year, we make new features available in the hands of real customers for piloting much more frequently.

Our team includes over 500 staff with deep automotive knowledge and more than 10,000 staff working on automotive projects at any given moment. Our global practice is led from automotive hubs across Asia, Europe, and the Americas.

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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