

Ahead of the curve — how technology is driving the future of the rental car industry

The world of travel is undergoing radical change. What is the strategic path for rental car businesses, and will it be a bumpy ride?



Microsoft

amadeus

Contents

Foreword	3
Methodology	4
Report objectives	4
Introduction	4
I. Industry landscape and challenges	5
The current landscape.....	5
Challenges.....	6
Challenge 1: Evolving customer expectations.....	6
Challenge 2: Emerging business models and players.....	7
Challenge 3: The inefficient customer journey.....	8
Challenge 4: Disruption of supply chain and operations.....	8
Challenge 5: Keeping up with the sustainability curve.....	9
Challenge 6: Maintaining agile technology capabilities.....	9
II. Evolving trends: How the industry is shaping up	10
Trend 1: The rise of strategic alliances and agile competition.....	10
Trend 2: The evolution of autonomous vehicles.....	11
Trend 3: The developing role of OEMs in the rental car space.....	12
Trend 4: MaaS connectivity.....	12
Trend 5: Big data to accelerate the journey.....	13
III. The road ahead for rental companies	14
Scenario 1: Same rental business model, new features.....	14
Incorporating AI.....	14
Scenario 2: Partnerships with “born-in-the-cloud” automobile companies.....	15
Scenario 3: Book a journey, not just a car.....	16
IV. Conclusion: Rental car companies must take a driving interest in the personal mobility ecosystem	17
Final thoughts	18

Foreword

Amadeus and Microsoft have joined forces to help rental car operators power better, smoother, and more sustainable mobility journeys through travel technologies.

This paper examines new ways of thinking and new paradigms to consider for the rental car and auto-manufacturing industries, both of which are undergoing rapid change. While the rental car vertical faces many emergent challenges, it also has unprecedented opportunities that might not be obvious to traditional operators.

Together, Amadeus and Microsoft hope to provide insight into how and why rental car companies and original equipment manufacturers (OEMs) should

consider connecting to a new travel ecosystem in which mobility as a service (MaaS) will play a leading role. We have interviewed leading industry players, and we share our own technical and industry expertise to help providers deliver best-in-class service to an ever-evolving customer base.

Amadeus and Microsoft strive to help traditional operators evolve legacy platforms and better connect to their current customers and new travelers worldwide through our experience and expertise in the technology and travel space. Our goal is to provide the rental car industry with information on this opportunity for transformation.



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Methodology

This research was conducted by Prowess Consulting, Amadeus, and Microsoft. Interviews were conducted with key industry leaders in the rental car and technology sector between November 2022 and January 2023. Participants included senior management and major decision makers involved in the rental car and technology businesses, encompassing startup, medium-sized, and large enterprises.

Report objectives

This paper:

1. Highlights how and why the rental car industry is rapidly evolving by providing an overview of the industry landscape and challenges.
2. Demonstrates how the industry is evolving through identified trends.
3. Explores opportunities for expanding current rental car businesses to align with the future ecosystem vision of mobility via various scenarios.
4. Demonstrates how data is critical to the evolution and transformational power of MaaS

Introduction

The space-age travel conveniences of the futuristic 1960s cartoon *The Jetsons* are here. A rider simply taps on a smartphone screen to prompt a vehicle to arrive within minutes, and the vehicle already knows how many passengers to expect for the ultimate destination. Drones and smart watches are commonplace, while flying cars and jetpacks are in various stages of development worldwide.

There's no doubt that technology continues to transform every aspect of our lives, and the business model for today's travel industry is undergoing its own rapid changes. While tech innovation is a factor, it's not the only dynamic. The digital transformation of the global travel business is underway, driven as much by demographic, societal, political, environmental, and economic forces as it is by technology.

A major transition in mobility is upon us, and how the rental car industry adapts will dictate its future fortunes.



Industry landscape and challenges

Now is the time for industry decision makers to position their businesses to thrive in a technology and data-driven landscape.

The current landscape

Today, the rental car sector, a prominent part of the greater travel ecosystem, faces the pressures of intense competition and increasing customer expectations, while some operations continue to run on disparate legacy computing models. Those outdated software solutions have older back ends with data residing in silos, which prevents rental car companies from having a holistic view of their customers. Despite these challenges, there are also significant opportunities for rental car companies to differentiate their operational cultures and expand their businesses in previously inconceivable directions.

Two immediate opportunities are the electric vehicle (EV) movement and the global data-infused economy that the rental car business is just beginning to embrace. Those opportunities are also potential pivot points to a new frontier—and to seize them, leaders in the rental car sector must expand their view of what a successful business looks like in the rapidly evolving marketplace.

The future vision recognizes that rental car companies belong to an industry that operates in an innovative and interdependent data-centric ecosystem. A critical emerging factor in the rental car market is MaaS. MaaS is defined as the integration of various forms of transport services into a single, holistic mobility service that is technologically accessible, on demand, to the sustainability-conscious customer. Rental car companies, whether they are aware of it or not, are already positioned at the

forefront of this kind of personal mobility ecosystem. Their longstanding brand recognition and operational know-how put them at a crossroads between OEMs, customers, and urban hubs. There is ample opportunity for rental car companies to make use of data and develop cross-industry relationships to meet tomorrow's mobility needs.

Mobility as a service

MaaS gives travelers choice and freedom to use many kinds of transportation streamlined into a single, on-demand service. It includes options like ride-hailing, car-sharing, scooter-sharing, bike-sharing, and even public transport, all in one tailor-made package delivered through a smartphone app with a single payment gateway for the entire journey.

MaaS is a disruptive force because it's a more convenient, sustainable solution that should help reduce congestion. And it's not just applicable to business or vacation travelers—MaaS is a complete lifestyle shift that is dissuading people, especially Generation Z (Gen Z) customers (defined as those born between 1997 and 2012), from vehicle ownership, most notably in urban centers. From EV usage and maximizing the use of one automobile by many drivers, to operating vehicles built with recycled parts, MaaS is the force behind a new culture of getting from point A to point B in an affordable, efficient, and sustainable way.

This emergent rental car terrain can be thought of as a technology-enabled arc. It begins with incremental amenities such as meeting the digital consumer's expectations for touchless reservations and payments through a single gateway. It then provides a means by which each consumer is recognized via a personalized digital ID, which captures preferences and usage patterns that customize each rental experience. The consumer is empowered during the transportation selection process, such as by the availability of searchable, sortable sustainability metrics that the consumer can use to make an informed decision and book a reservation. Operations take place in the cloud, where secure data lives and is used to its fullest potential in business-to-business (B2B) and business-to-consumer (B2C) scenarios. This agile model culminates in a fully realized transport ecosystem that incorporates MaaS and might not even involve a rental vehicle at all.

Challenges

The rental car business is in a state of flux. From the consumer's point of view, renting a car can be difficult in terms of time and usage. From the rental car company's standpoint, there are new roadblocks in what used to be a well-understood market model dominated by brand loyalty and pricing competition.

Customer usage: owning vs. renting or part-time use

With the cost of private cars rising, consumers are learning that it's more cost-efficient to devise a MaaS plan tailored to individual needs. Therefore, rental car agencies can be the vanguard in one of the biggest MaaS trends: a model that is already being adopted, and in which consumers rent a car for an hour, a week, a month, or a year.

"The mobility landscape is undergoing a generational shift," says Hertz's Nieman. "People are looking for a more shared way of moving around, and it's propelled by demographic shifts which will lead to less personal vehicle ownership."

Kyte, a rental car on-demand service operating in major US cities, has customers enjoy curbside delivery for specific usage parameters. "We deliver a car on demand for anything longer than a rideshare," says

Several short-term realities and challenges affect this travel vertical.

Challenge 1: Evolving customer expectations

In today's consumer-centric culture, people expect a seamless, touchless, friction-free experience. Some rental companies are starting to respond. For example, **Hertz** takes a customer-first approach in its passenger engagements.

"We provide custom messaging and education on how to operate the rental vehicle, taking the perspective that someone may never have driven that particular model before, especially in the case of an EV rental," says Jeff Nieman, Senior Vice President, TNC Hertz. "We've worked hard on the digital front to provide short reading clips, videos, and QR codes on keychains so the customer can easily learn not just how to use the car, but where to charge it." Similarly, questions arise around the customer usage of a car. Owning? Renting? Or part-time usage?



co-founder Wiedemann. "Our customers, who tend to be ages 25-39, simply enter a delivery and return address, select dates and times, and choose a vehicle, and they can return the car at any address in our service area."



Customer usage: owning vs. renting or part-time use (cont.)

Prospective customers go beyond younger drivers. “One of our biggest missions is to engage with people who don’t have their own car and prove that they don’t need one,” says Susan Anderson, Global Head of **Uber for Business**. “Young people already know that Uber offers a stress-free and seamless experience, but we know our platform can also help other demographics.” In one example, Uber has entered into strategic partnerships with healthcare providers.

“One way we’re proving that a car isn’t always needed is in the way we’ve broken down barriers to healthcare by providing ride options for patients without cars,” Anderson states.

Clearly, new models and paradigms of car ownership are not outside of the realm of possibility any longer.

Challenge 2: Emerging business models and players

New business models and influential players are competing with the rental car industry, spanning a range of options from ride-hailing apps to car-sharing services to car subscriptions.

- Ride hailing: Both business and leisure consumers have demonstrated a willingness to replace traditional car rentals with ride-hailing services like Uber and Lyft. Even within the ride-sharing category, there are several options that meet the needs of short, in-city trips with a distributed car fleet.
- Car sharing: This type of car sharing enables car owners to offset the costs of their vehicles by renting them to other people when they are not using them. For example, the Swedish company **Lynk & Co** has a wildly popular car-sharing membership that has surpassed company expectations. “In 2021, we had forecast for 9,000 members by year-end. We concluded the year with 98,000 instead,” says CEO Alain Visser. The company saw its membership almost double that number at the end of 2022, with 170,000 members.
- Car subscriptions: Instead of committing to a long-term purchase or lease, car subscriptions allow consumers to pay a monthly fee for access to a vehicle, often including maintenance and insurance. This model provides greater flexibility and convenience for drivers who might not want to be tied to a particular car or brand for an extended period. In addition, some providers offer shorter-term options, such as one-month subscriptions, thus tapping into the traditional car rental market.



Challenge 3: The inefficient customer journey

After a long-haul flight, business and leisure travelers want and expect a smooth car rental process. But then reality bites: long wait times at the counter (which can even occur when a customer has enrolled in counter bypass), repetitive paperwork, pressure to buy additional services like insurance, a complex pick-up process, and the inconvenience when a pre-booked automobile is suddenly unavailable. These factors can render the entire process excruciating, and overall customer satisfaction is declining. As an industry, the rental car business has one of the lowest Net Promoter Scores (NPSs) of any business. Because legacy IT systems might keep customer data siloed, there is no way to personalize the experience, and therefore customers see little difference or preference among rental car companies—except for price.

However, governments are digitizing processes in ways that can improve the customer experience. In 2022, the European Commission (EC) announced the impending launch of four large-scale pilot programs to test the deployment of the European Digital Identity Wallet, part of an overall development of trusted digital personas that can be used throughout the European Union (EU), including “smart” digital driver’s licenses. To help drive the initiative forward, **Amadeus** is part of a digital driver’s license consortium with major car rental companies to ensure that car rental specificities are considered in rental car pick-up flows, including EU cross-border scenarios.

Challenge 4: Disruption of supply chain and operations

Significant problems for the rental car industry began when companies sold off massive portions of their fleets at the beginning of the global COVID-19 pandemic. In addition, factories worldwide were forced to close, interrupting the production of microchips needed for electronic devices, laptops, and cars. The pandemic also closed ports, which further disrupted the supply chain. Because of inventory shortages, rental car companies are keeping vehicles longer, resulting in rental cars that clearly exhibit more wear and tear and require more maintenance. Operationally, these disruptions can leave rental car companies more inefficient than they should be. With fewer auto options, older models, and higher prices thanks to demand outweighing supply, there is less overall customer satisfaction.



Challenge 5: Keeping up with the sustainability curve

Customers today are considering the environmental impact of their lifestyle choices, and this mindset extends to travel planning and mobility. According to a 2021 Amadeus study, two-thirds of consumers—both business and leisure travelers—consider sustainable travel a priority.

The industry has responded in kind. For example, the International Air Transport Association (IATA) has committed to net zero emission by 2050. In 2022, the European Commission mandated that all new cars and vans registered in Europe must be zero-emission by 2035. This mandate is part of the trade bloc's broader "Fit for 55" plan, which aims to reduce the EU's net greenhouse gas emissions 55 percent by 2030 from 1990 levels. Likewise, California and New York in the United States announced a similar sales ban on gas-powered automobiles by 2035. Other states are expected to follow suit.

Challenge 6: Maintaining agile technology capabilities

Existing legacy IT systems struggle to keep up with the pace of technological evolution. With mergers and acquisitions in the rental car industry, there are rich volumes of customer and usage data living on both cloud-based and on-premises servers, yet most of these systems do not connect seamlessly. By updating and consolidating these systems, companies can more easily monetize that data.

Another aspect of the car rental experience that requires agile technology is convenience. From in-vehicle infotainment and navigation to ridesharing and on-demand mobility services—plus touchless reservations and payment—easy vehicle connectivity is top-of-mind for today's consumer. Automobiles are no longer simply a way to travel from point A to point B; they are becoming extensions of consumer digital lifestyles and catalysts for change in what society expects mobility to mean in the future.

Uber for Business helps corporations with sustainability tools

"Clients using Uber for Business can see where their employees are traveling, set controls, and gain visibility into carbon emissions," says Susan Anderson, Global Head of Uber for Business. By giving companies the ability to track carbon emissions data and report on how frequently employees use low-emission trips, Uber is helping organizations manage their ground transportation carbon emissions."

"We think it's crucial data for our clients," says Anderson. She says Uber can help businesses achieve their sustainability goals even before they consider the costs. "We're not just in the business of measuring, but we're also providing solutions such as Uber Green, which gives travelers the option to book 100 percent electric vehicles in most major cities."



Technology makes journeys as easy as possible

"Our customers have come to rely on that 'Uber magic,'" adds Anderson. "Technology is the bread and butter of what Uber does. We have algorithms to minimize the amount of left-hand turns a vehicle must make, for example, to connect passengers and drivers to each other quickly, reliably, efficiently, and affordably." Startups are nimble at providing these touchless experiences as expected by customers in all industries. In the car industry, customers are seeking more digital control over their vehicles and embracing the agile, flexible convenience that technology brings.

2

Evolving trends: How the industry is shaping up

Traditionally, rental car companies have competed among themselves for the same market share. But now the entire industry faces trends that could radically and permanently widen the landscape. Instead of competing for a larger share of the same pie, there is now an opportunity to garner a larger share of a much bigger pie.

Trend 1: The rise of strategic alliances and agile competition

Business models are shifting the emphasis from hardware to software, and from product-centric approaches to service- and customer-centric strategies. As with so many other industries (such as restaurants and retail), service and convenience rule the day for rental car companies. Customers have increasing power to choose the make and model they desire, even bypassing the rental car company altogether.

Unexpected and innovative partnerships such as the Hertz-Tesla affiliation, the Uber-BMW promotion, or Turo's "Drive to Table" partnership with Michelin-starred restaurants have demonstrated ways to launch new products and services; build existing and new consumer loyalty; and derive new revenue streams. Sweden's Lynk & Co has completely re-envisioned how people use cars and how car-related services are provided. In 2022, the company joined forces with insurance company Allianz Partners to offer new mobility insurance for month-to-month members across Europe.

For several years, Lynk & Co has partnered with Ericsson on the Ericsson Connected Vehicle Cloud car-sharing platform, which enables a car owner to remotely grant access to their car via a smartphone. Using the Lynk & Co app, owners can control, monitor, and share their vehicles from their smartphones or directly from their cars.

Lynk & Co reaches customers with a membership-based approach. "We like to call ourselves the Netflix of the car

industry," says Alain Visser, the company's CEO. For a flat monthly fee, members can access a car on a flexible, month-to-month basis and share the car with friends, family, and the Lynk & Co community.

"We are trying to turn the industry upside down," Visser states. "Everything is included in the monthly fee, including service and warranty. The software of the car app also allows users to share it, like an Airbnb model. The more the vehicle is shared, the lower the cost is for all." Another perk of membership: Lynk & Co social clubs in major European capitals where members can meet and socialize.

Online car-sharing companies like Turo give customers transparency about all cars available by location and date, letting them choose among cars shared by local hosts. For these drivers, it's important that the platform is easy to use, offers spontaneous availability, and doesn't require refueling the vehicle before returning it to its owner.

Other providers offer rental cars on demand, with the added flourish of door-to-door service. "We put a virtual garage in everyone's pocket through our app," says Francesco Wiedemann, Co-Founder of Kyte. "We provide access to a variety of cars at the touch of a button and deliver it to your front door. When you no longer need it, we pick it up wherever you are and the car 'disappears' back into your virtual garage."

Make no mistake: asset-light companies like Turo, friendly pay-as-you-go Lynk & Co, and Kyte—with its valet delivery service—are now competitors for traditional rental companies.

Trend 2: The evolution of autonomous vehicles

The use of autonomous vehicle (AV) fleets in constrained and well-defined environments is a near-term possibility. Many vehicles on the road today already offer driver-assistance technologies, making the arrival of completely autonomous vehicles inevitable.

“It took 100 years to evolve from an internal combustion engine to an EV,” says Hertz’s Nieman. “But I don’t think it’s going to take 100 years to get to fully autonomous vehicles.” According to Nieman, the technology is much closer, with plenty of autonomous vehicle use cases already in Japan, China, and the United States.

“Autonomous vehicles will further propel shared use and mobility models,” Nieman says, “reducing the need to own a vehicle.” Autonomous cars will optimize where people are in relation to where the cars are, and vehicles can be dispatched to move people around, he says.

In 2022, Uber announced partnerships with several autonomous development companies, including **Aurora**, **Motional**, and **Nuro**. “We have strong aspirations of where we’ll be with AVs in terms of transportation and deliveries by 2030,” says Noah Zych, global head of Uber autonomous mobility and delivery. “AVs don’t care about a pickup far from an urban core. In this way, AVs unlock different types of trips that drivers don’t necessarily want, such as a 3 a.m. airport pickup.”

The Eclipse software-defined vehicle (SDV) community has created a cross-vertical platform for the development of innovative automotive-grade in-car software stacks that brings diverse players together. In addition, the MaaS Alliance is a public-private partnership platform working to establish the foundations for MaaS that engages transport operators, service providers, public authorities, and users. The alliance aims to establish a common approach to MaaS by unlocking the economies of scale needed for successful implementation and adoption of MaaS in Europe and beyond.

Car manufacturers **General Motors (GM)** and **Cruise** have also partnered with Microsoft to make use of the Azure cloud platform for data storage and artificial intelligence (AI)/machine learning (ML) capabilities. As part of the long-term strategic relationship, **Microsoft** looks to accelerate the commercialization of Cruise’s autonomous EVs for a “future world of zero crashes, zero emissions, and zero congestion,” as stated by GM Chairman and CEO Mary Barra.



Trend 3: The developing role of OEMs in the rental car space

Some OEMs are now beginning to regard themselves as not only automobile manufacturers, but also as mobility solution providers. They're meeting their end users where they are and learning their preferences via customer-engagement data gleaned from rental car companies. OEM leaders realize that to protect the traditional business of selling cars, they must reach customers in new ways.

Polestar, a Swedish EV brand, teamed with US-based Hertz in 2022 to commit to delivery of more than 65,000 EVs to Hertz, which already offers customers Tesla EVs. "Our partnership with Hertz is an exciting milestone that provides the opportunity for a significant number of potential new customers to experience an EV for the first time, and it will be in a Polestar," said Thomas Ingenlath, Polestar's CEO.

While not much can be changed in a purchased vehicle throughout its seven-year lifecycle (on average), telematic solutions—which blend telecommunications and informatics to gather data that improves the driver's experience—support a shift from a hardware-driven customer relationship to one that's software driven and that integrates the offline and online worlds. For example, over-the-air (OTA) updates are wireless software improvements that can upgrade a car's software with additional (or more accurate) functionality and feature settings. OEMs can quickly, conveniently, and automatically issue operating system (OS) refreshes to a vehicle in the same manner that a smartphone receives updates from its provider.

This OEM business model could significantly impact rental car businesses as OEMs are positioning themselves to become dominant players in the MaaS economy.

Trend 4: MaaS connectivity

MaaS is a transformational phenomenon that offers a convenient and sustainable alternative to private car use. Delivered as a single service, MaaS enables city-based trip planning, cost comparisons, and purchasing. According to market researcher Reports and Data, the MaaS market will expand more than eightfold over the next few years, from approximately \$42 billion US dollars (USD) in 2018 to \$372 billion USD by 2026. Consider the European app Whim, which integrates public transportation, short taxi rides, car rentals, and bike shares all in one app. Users can purchase services as one-offs within the app, or they can purchase a package with unlimited public transit rides, flat-fare taxi and car rentals, and 30-minute bikeshare rides. Instant System is another platform that provides MaaS solutions in collaboration with transport authorities and operators to meet the daily mobility needs of cities.

Automobile-restrictive regulations in major cities around the world will accelerate the MaaS trend to decongest cities overburdened by traffic. In Paris, the first Sunday of each month is designated as a car-free day, and the city of Rome has committed to banning diesel vehicles from the city center by 2024.

These urban customer usage patterns support the expanding MaaS marketplace and the parallel effort to reduce city traffic. The options of public transit, ride hailing, ride sharing, car sharing, and bike sharing are coming together to create a crowded, competitive MaaS market.





Trend 5: Big data to accelerate the journey

Data will increasingly drive many functionalities, such as offering a searchable, sortable database for consumers to refer to as they book transportation that meets their expectations. For rental car companies, the use of big data and business intelligence technology will allow them to optimize their fleets in terms of use, service, and customer retention. Additionally, it will reveal metrics that enable companies to not only forecast future usage patterns but also provide personalized customer experiences.

“Most likely, there will be much less physical counter presence—data will be used so consumers can access their automobile in a keyless, counterless manner through an app,” says Jehan de Thé, Group Public Affairs Director at **Europcar Mobility Group**, and a MaaS Alliance (Europe) board member. “The Europcar app will tell customers the location of their car in the parking lot and provides an image.”

Europcar is also considering how to make use of customer data for the greater movement toward MaaS. “We are willing to share data with cities and public transport authorities to help them with their mobility plan,” explains de Thé. “Data is a way for rental car companies to be embedded in a solution as part of the travel and tourism industry and not stand alone.”

SIXT SE, an international mobility service provider whose business encompasses car rental, sharing, ride-hailing, and subscriptions into one service, uses data to manage its fleet. “Data-driven insights help us in general create the best possible experience for our customers,” says SIXT’s Chief Business Officer Vinzenz

Pflanz. “For example, by making sure that the right vehicle is at the right place at the right time.”

Data insights can also support an improved, more individualized experience at the customer’s request. “We can imagine a scenario where a traveler sets a seat position and programs their preferred radio stations in one of our cars, and the next time they rent from any SIXT location, those seat and radio station settings, and even the climate controls, can be pre-set,” says Pflanz.

It’s clear that partnerships between a technology company, app, or digital system can provide insights into the rental car industry. For example, Amadeus uses forward-looking booking and search data to enable rental companies to optimize fleet planning and revenue-management capabilities. Beyond the rental car vertical, Amadeus can also forecast travel patterns by looking at airline booking information and hotel occupancy data to understand the true performance of destinations.

There are also programs that standardize data sharing between mobility providers. The overarching goal of facilitating data aggregation and exchange is key to enhancing seamless travel and multimodality/intermodality and applying a sustainability approach to smart cities. In Europe, EONA-X is a dedicated data space for mobility, transport, and tourism, developed along the lines of the Gaia-X interoperable digital governance initiative, in which Amadeus participates. Similarly, PrepDSpace4Mobility is laying the foundation for a secure and controlled way of pooling and sharing mobility data across Europe.

3

The road ahead for rental companies

The ultimate question facing rental car companies is how to address the altered business landscape and stay competitive. Three potential scenarios arise as to how the landscape might shift, requiring all those in the industry to adapt.



Scenario 1: Same rental business model, new features

In this scenario, rental car companies continue in the way they currently operate, but with touchless, hyper-personalized “white-glove” customer service based on data. For example, companies can offer tailored options that go beyond size and model, such as car color, seat position, pre-set audio playlists, sustainability metrics, and even autonomous delivery to the curb when a passenger arrives at a transportation hub. A digital pre-validation of their driver’s license and the use of payment methods such as digital wallets would reduce the need for customers to stand in lines and bypass the rental counter. In this model, a digital identity allows the customer to simply enter the vehicle and drive away.

In late 2022, Amadeus announced its investment in urban mobility innovator Eccocar to help accelerate experimentation that will ultimately enable digital IDs and keyless car rentals across multiple brands. The investment will allow Amadeus to offer additional mobility options beyond car rental and pre-arranged transfers to customers across its global platforms. In the long term, the flexible nature of Eccocar will allow more seamless travel use cases along the end-to-end journey.

Incorporating AI

By working data analytics and AI into operations, rental car companies can make use of data for business operations such as fleet utilization to improve

profit margins. Those that invest in IT infrastructure capable of harnessing data from legacy systems stand to increase efficiency substantially. These companies can use emerging technologies to perform operational tasks such as rapidly inspecting vehicles for damage, cleanliness, fuel and mileage levels, and service records to ensure that the vehicles are in optimum working order.

ChatGPT brings a variety of new business capabilities

The introduction of the large language AI model ChatGPT helps companies with tasks such as summarizing content from different data sources, generating marketing email copy, and even helping with software programming. The rental car industry can benefit with more personalized booking experiences through concierge-style services that start long before the customer arrives at their destination.

Other capabilities include the following:

- Bot-delivered and AI-delivered services enable unprecedented economies of scale and scope to provide improved customer experiences, better service quality, and higher levels of employee productivity.
- AI-powered chatbots can increase customer loyalty with better and faster problem resolution. In one study, chatbots resolved 80 percent of customer problems during the first interaction.¹⁶ The chances for customer retention automatically increase with these positive experiences.

By adopting new technology-based approaches, rental car companies can also optimize staff levels, especially to scale those levels up or down to handle customer-centric services. Optimal database management and data-exchange capabilities will allow rental car companies to implement more personalized customer experiences, thus enhancing their efforts to increase brand loyalty and potentially boost ancillary sales.

Scenario 2: Partnerships with “born-in-the-cloud” automobile companies

Rental car companies can provide companion services for born-in-the-cloud automotive manufacturers like Tesla, Polestar, Fisker, and Nio that maintain virtual dealerships and do not own (or own few) facilities for service maintenance or car resales.

This scenario requires diversifying in several ways. For rental car companies, there’s an opportunity to configure vehicles based on usage models that meet customer demands, resulting in flexible leasing and financing. Rental car companies can also protect drivers from economic fluctuations. “SIXT has longstanding relationships with the OEMs and is a reliable purchasing partner of vehicles. This is valid in times of under- as well as overproduction,” says SIXT’s Pflanz. “That’s why SIXT can offer its customers an almost stable price level, depending on product.”

OEMs also have an opportunity to reimagine their business-to-business (B2B) strategies by including autonomous and low-emission vehicles in their offerings to service providers. While such a shift requires agile decision making, the reward is that OEMs gain more direct and frequent access to customers, providing a better understanding of customer preferences and continuous improvement of the end user experience.

The lynchpin to enabling this scenario is software providers, who can assist rental car companies by helping them grow with new operating models and become leaders within their industry. For example, a Microsoft and Amadeus model could develop new technologies to help car rental companies to move off their legacy IT platforms. In such a partnership, Microsoft could offer cloud solutions and IT components, while Amadeus would bring its deep travel-industry knowledge and IT expertise.

“OEM and cloud-based company partnerships are a win-win. We need cars, and the OEMs know the world is changing. Their dealerships used to be their entry to customers. But in the new world, companies like Kyte are the entrance to customers. The benefit for an OEM to work with us is our data-sharing capabilities. They can use us as a marketing channel for promoting cars within certain demographics.”

— Francesco Wiedemann, Kyte co-founder



A customer's relationship to EVs would likely begin with renting a car. The rental car company partnering with a cloud-based car OEM might be incentivized to offer additional services for these new, digitally connected EVs. Rental companies are likely already in the business of selling their vehicles every 12 to 24 months, so the rental company in this scenario could offer these selling services to the original OEM. In addition, the rental company could offer innovative new business services such as car subscriptions. In this model, the customer rents a car and likes it so much that they become a "vehicle subscriber" for a defined period of time (18 months to two years), with the subscription including insurance and maintenance.

Scenario 3: Book a journey, not just a car

Members of Gen Z, particularly in high-density urban areas, are redefining transport as a mobility culture. Seventy percent of Gen Z don't have a driver's license, and 30 percent of them have no intention of ever obtaining one.

In this scenario, transportation and technology are synonymous, delivering on the promise of MaaS. The rental car company transforms itself into a multimodal

MaaS operator, providing a service that complements its existing rental business. Rental companies could become the conduit for customers to book and pay for multimodal journeys, which can lower capital expenditures (CapEx) and increase margins using generated data.

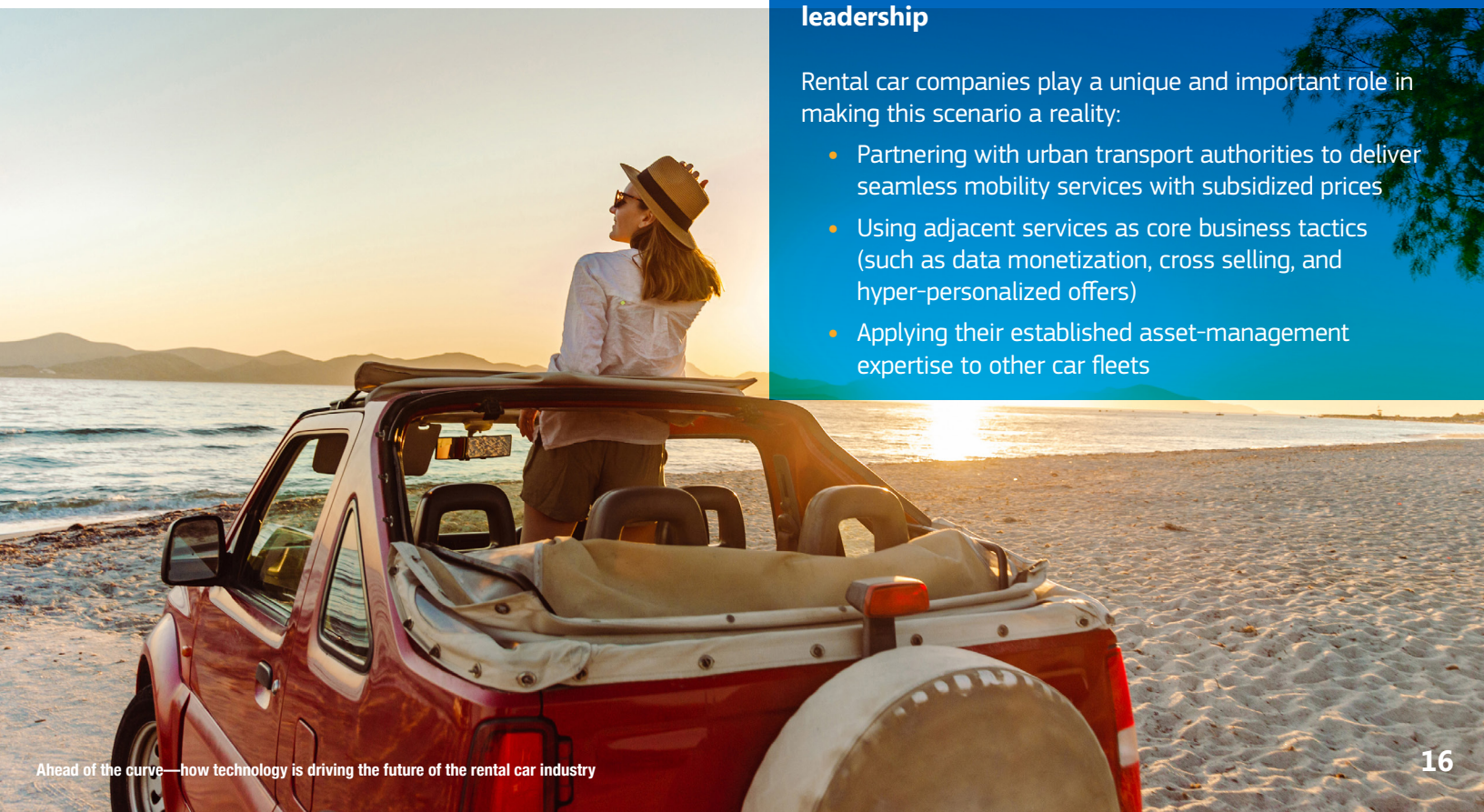
For travelers, a MaaS app can be used to plan, book, and pay for a journey, which might or might not include a rental car. The app serves as a unified gateway that nimbly creates and manages the trip, including combining costs into a single payment. The fee might be charged per trip, or it might be a monthly charge based on a limited or predetermined distance. The booking is entirely based on customer preferences for service period, destinations, sustainability, and/or price. During journey planning, AI can help incorporate the appropriate and available combination of transportation modes. SIXT currently offers this service, combining rental, sharing, and subscriptions into one service, which results in higher per-vehicle utilization and greater profit margin.

"The automobile industry has been doing the same thing for more than 100 years: building cars, then selling them to dealerships," says Lynk & Co's Visser. "Why can't mobility be more of an experience, rather than a single product?"

Rental companies are well positioned for MaaS leadership

Rental car companies play a unique and important role in making this scenario a reality:

- Partnering with urban transport authorities to deliver seamless mobility services with subsidized prices
- Using adjacent services as core business tactics (such as data monetization, cross selling, and hyper-personalized offers)
- Applying their established asset-management expertise to other car fleets





Conclusion: Rental car companies must take a driving interest in the personal mobility ecosystem

The possibilities for transformation in the rental car business are numerous and exciting. It's clear that technological advances are impacting business models, operational processes, and the customer experience. Rental car operations must take a marketplace strategy that considers these advances.

The mobility ecosystem sits at the intersection of transportation and technology. It will be driven forward by technology-enabled capabilities that continue evolving at lightning speed. Consumers are beginning to consider the automobile as a smartphone on wheels, and the rental car industry should approach their business accordingly.

To create loyal customers—and improve the ratings that customers give the rental car companies—the entire rental process and the full range of automobile capabilities must become more software-defined. This cultural shift is a matter of convenience, safety, efficiency, loyalty, and necessity for all stakeholders, and it benefits all of them significantly.

“There is a massive opportunity for companies to be a backbone to provide the assets and the means for customers to access transportation without car ownership, where and when they want it,” says Hertz’s Nieman. “But there is one thing that will remain true—whether we’re discussing EVs, scooters, or autonomous means of transport—somebody will need to own them.”

Key takeaways for the rental car industry in the future of mobility

- More business to go around: Rental car companies will not be competing for pieces of current market share as they know it—they will compete for a greater share of a bigger opportunity.
- Rise of new disruptive players: Ride sharing, ride hailing, and MaaS are challenging traditional car rental models. Not only are these transportation alternatives often less expensive and more eco-friendly than renting a car, they’re disrupting the established marketplace with fresh ideas and advanced technology.
- Sustainability is a selling point: Ride-sharing and rental car companies are already empowering consumers with more responsible and sustainable transportation options. Sustainability is an increasingly important factor in customer decisions, rather than an afterthought.

Final Thoughts

Rapidly evolving market dynamics will drive the rental car industry to shift its perspective from a vertical-centric view to an ecosystem approach. And Amadeus and Microsoft are working together to develop technologies that will support the industry so that it not only survives but thrives.

“The most successful companies will navigate this change by developing unexpected transportation and MaaS partnerships, and by prioritizing data sharing in the domains of digital identity, authentication, and sustainability metrics,” says Amadeus VP Altmann. “This is how rental car companies will be able to differentiate themselves from their competitors and help ensure their continued success.”

“Rental car companies and the travel industry as a whole must have a ‘moment of unity’ to embrace the future of a shared data-driven ecosystem of mobility services across the entire travel vertical,” says Julie Shainock, Global Leader, Travel and Transport, at Microsoft. “Moving from a walled garden of one’s data to a more open ‘public park’ lets companies embrace this new data sharing ecosystem, which ultimately assists in driving not only a better, frictionless customer experience but also increases operational efficiency.

“Coupled with our commitment to maintaining customer trust by protecting identity through all the endpoints as part of our Zero Trust principles,” she continues, “this technology will empower our rental car partners to enable new innovations that will make the ride ahead a much smoother one.”



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Amadeus is a technology innovator that connects the entire travel ecosystem at every stage of the journey. Amadeus offers the hospitality industry solutions for reservations, sales and catering, property management and operations, all focused on a better end-to-end experience for guests, employees, managers, owners and partners.

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