



Put your car rental business into overdrive

Boost profitability through telematics and fleet management innovation.

GEOTAB[®]

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Introduction

The car rental industry is navigating a period of significant transformation. A blend of shifting customer expectations, mounting market competition and operational complexities is challenging businesses to rethink traditional approaches. For rental companies, effectively managing vehicle fleets while maintaining profitability requires solutions that go beyond conventional methods. The stakes are high, with even small inefficiencies in operations or overlooked costs cutting deeply into margins and hindering long-term growth.

Amid this evolving landscape, telematics has emerged as a powerful tool for overcoming these challenges. By integrating advanced technologies such as real-time data tracking, predictive analytics and seamless digital solutions, telematics equips car rental companies with the insights needed to streamline operations and stay ahead of the curve. Whether it's enabling accurate fuel billing, reducing vehicle downtime through predictive maintenance or preventing revenue leakage from unauthorized usage, telematics offers both strategic and practical advantages. For car rental executives focused on high-level decision-making, it presents opportunities to enhance profitability and future-proof the business. At the operational level, it provides tools to address daily challenges with precision while delivering enhanced value to customers.

This whitepaper aims to provide the insights and frameworks you need to understand the transformative potential of telematics within the car rental industry. By adopting these innovations, businesses can not only mitigate cost drivers and inefficiencies but also position themselves as leaders in a highly competitive market and improve customer satisfaction.

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01 The vital role of telematics in fleet management

The car rental industry is navigating a period of significant transformation. A blend of shifting customer expectations, mounting market competition and operational complexities is challenging businesses to rethink traditional approaches. For rental companies, effectively managing vehicle fleets while maintaining profitability requires solutions that go beyond conventional methods. The stakes are high, with even small inefficiencies in operations or overlooked costs cutting deeply into margins and hindering long-term growth.

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A chassis for data-driven insights

The competitive landscape of fleet management necessitates a data-first approach to enable operational efficiency and adaptability.

Telematics serves as the framework for extracting actionable insights from vast data sets, enabling businesses to identify inefficiencies, predict maintenance needs and reduce downtime. Real-time visibility into fleet movements is crucial for logistical coordination and plays a significant role in encouraging safer driving practices and adherence to safety protocols, even when driver behavior is beyond direct control. By leveraging these insights, companies can enhance productivity, achieve cost savings and deliver superior service to their end customers.



Key components of telematics

Telematics is powered by several key technologies and systems that work in synergy.



Global positioning system (GPS)

At the heart of telematics lies GPS technology, enabling precise vehicle tracking and navigation. This allows fleet managers to monitor vehicle locations in real-time and plan optimal routes.



Internet of things (IoT)

IoT technologies facilitate seamless communication between on-vehicle sensors and back-end systems. Through IoT devices, telematics captures critical data like engine performance, fuel consumption and environmental conditions.



Real-time tracking and alerts

A hallmark feature of telematics is real-time tracking, helping fleet managers respond to on-road challenges instantly. Customizable alerts, such as geofencing and collision detection, provide proactive management capabilities.



Cloud-based data storage

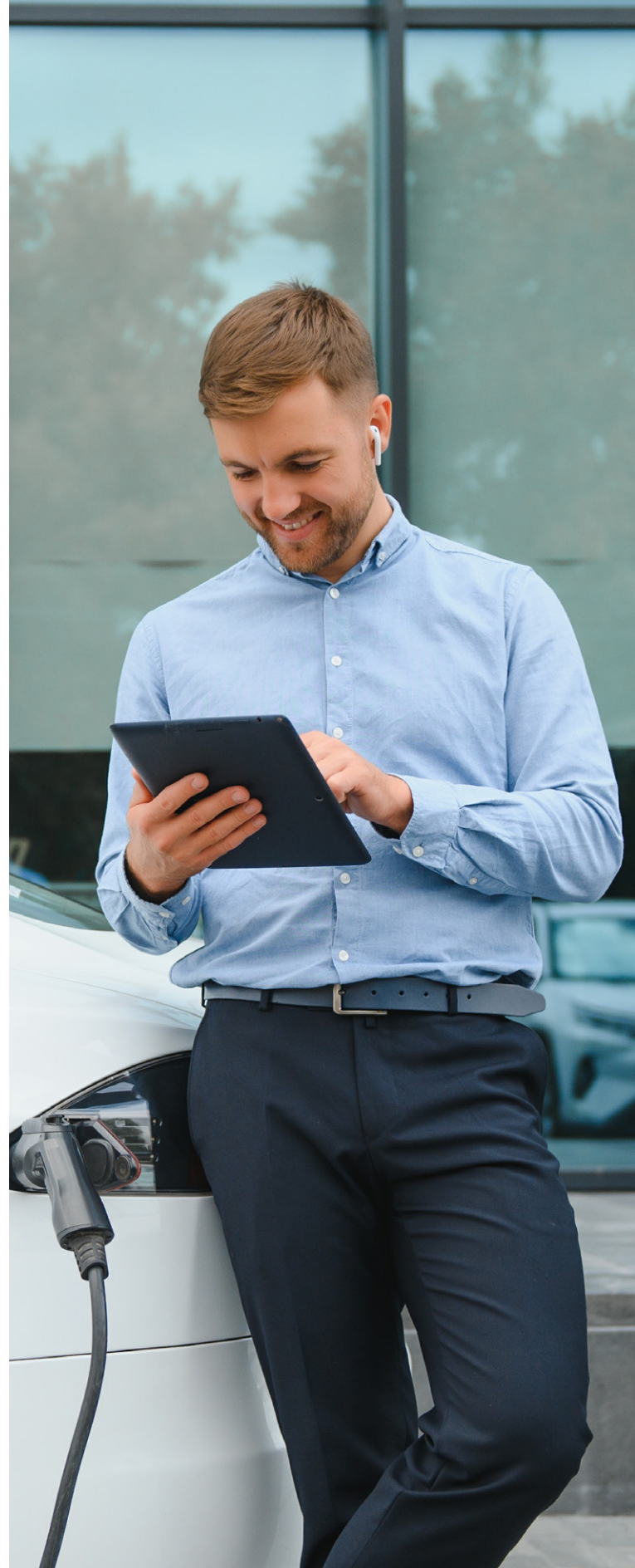
Collected data is stored securely in the cloud, enabling fleet managers to access historical and real-time information from anywhere. This scalability supports advanced analytics and reporting.



Analytics and reporting tools

Telematics platforms often include built-in tools to visualize data trends and generate detailed reports, offering insights that drive informed decision-making.

With these components seamlessly integrated, telematics solutions empower fleet operators to take control of their operations, promoting long-term sustainability and success. As businesses continue to adapt to evolving demands, telematics will remain a key enabler in driving innovation and maintaining a competitive edge.





Growing adoption of telematics in the car rental industry

Allied Market Research values the global automotive telematics market at \$50.4 billion USD in 2018 and estimates it will reach \$320 billion USD by 2026. This growth is driven by the increasing demand for real-time data, regulatory compliance and the rise of connected vehicles. In the **car rental industry**, telematics is becoming a standard tool for improving operational efficiency and meeting customer expectations for digital and keyless solutions. The **telematics penetration rate** in the total population of rental vehicles in North America and Europe and North America was about 42.8 percent and 37.2 percent respectively at year-end 2023.

At the forefront of technology and innovation, North America is an advanced market with a high penetration rate and installed base of telematics systems in the car rental industry. This is only expected to grow in the coming years.

Region	Revenue 2023	Total Rental Vehicles	Telematics Systems 2023	Market Penetration	Systems Forecast 2028	Market Penetration Forecast
North America	\$63.7B USD	2,440,000	1,050,000	42.8%	2,190,000	79.7%
Europe		1,950,000	72,000	37.2%	1,510,000	68.8%

Source: **Telematics for Rental and Leasing Fleets Report 2024** 3rd edition, Berg Insight, Sweden, December 2024

02 Market hurdles pave the way for differentiation

The car rental industry is big business. Annual car rental revenues reached approximately **\$63.7 billion USD in 2023** in North America and Europe and the total average fleet managed by car rental companies was about 4.4 million cars. Influenced by a complex interplay of market forces and evolving customer needs, the industry faces significant challenges as well as ample opportunities. Technological advancements are at the forefront, enabling more seamless, data-driven customer experiences and operational processes. Digitalization has now set a benchmark, with consumers demanding intuitive app-based interactions, real-time updates and streamlined booking services. These advances are not optional; they are fast becoming industry standards that every car rental company must meet to stay competitive.

Simultaneously, regulatory landscapes are shifting. Governments and policymakers are promoting stricter environmental compliance and safety protocols, compelling companies to integrate more fuel-efficient or electric vehicles into their fleets while providing advanced monitoring capabilities. These regulatory demands, though challenging, present opportunities for companies to modernize their fleets and demonstrate environmental leadership.

The rise of alternative mobility solutions, such as ride-sharing and car-sharing platforms, adds another layer of industry disruption. These services appeal to a growing segment of customers seeking flexible, affordable and tech-savvy transportation options. This shift is reshaping customer expectations, emphasizing convenience, transparency and tailored options. Traditional rental companies can adapt to these pressures by rethinking their services and leveraging innovative technologies like telematics, which can provide the real-time insights needed to compete effectively.

For car rental businesses, these dynamics represent a dual-edged scenario. On one hand, they create operational and strategic challenges that require substantial adaptation. On the other, they open pathways for differentiation and innovation, enabling companies to not only meet modern expectations but also redefine the standard of service across the industry.

For car rental businesses industry dynamics are opening new avenues for differentiation and innovation.

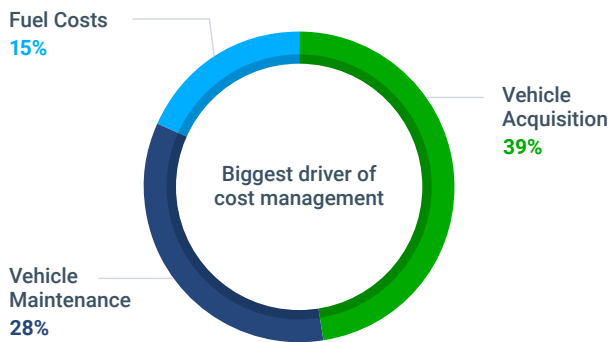


03 Uncover the hidden costs of fleet management


Managing a fleet involves numerous hidden expenses that are often overlooked in traditional accounting but have a significant impact on profitability. According to fleet owners and managers surveyed in 2024, the biggest cost drivers in fleet management are fuel costs, vehicle maintenance and acquisition. Telematics provides the visibility and tools necessary to identify and address these inefficiencies effectively.

Mitigating fleet business costs in 2024


Trusted data intelligence can reduce costs by improving predictive maintenance, optimizing routes, and enhancing fuel efficiency.




Sustainable fleet management survey, 2024, Geotab



39% reported vehicle acquisition as the biggest driver of cost management at their organization.



28% reported vehicle maintenance as the biggest driver of cost management.



15% reported fuel costs as the biggest driver of cost management.

Fuel inefficiencies and revenue leakage

Fuel discrepancies, whether due to inaccurate measurement or unauthorized usage, directly impact revenue. Telematics solutions provide real-time fuel monitoring, helping you get accurate billing upon vehicle return and reducing fuel-related disputes.

Maintenance costs and vehicle downtime

Unexpected breakdowns and poorly scheduled maintenance lead to revenue losses from vehicle downtime. By using telematics to **monitor engine diagnostics and schedule maintenance proactively**, companies can reduce disruptions and extend vehicle lifespan. Predictive maintenance, enabled through telematics insights, can minimize surprise failures and optimize the repair process.



Unaccounted costs from fines and unauthorized usage

Rental companies frequently face fines from unauthorized tolls, regulatory violations or boundary issues. Telematics-based location tracking helps monitor vehicle routes and boundaries. It also alerts management of potential unauthorized usage, enabling proper billing and maximizing fleet efficiency.

Undetected damage and collision costs

Collision-related costs, often exacerbated by undetected damage, represent a major challenge. Telematics systems with real-time collision detection improve response times, reduce insurance claims processing periods, and allow quick damage assessment and resolution. Fleets that incorporate telematics have reported as much as a **40% reduction in collisions**.

Financial and operational benefits of telematics

Telematics not only addresses these hidden costs but also drives significant financial returns for car rental businesses. Studies indicate that businesses can achieve an **average savings of \$137 per vehicle per month** by effectively utilizing telematics solutions. These savings stem from reduced fuel consumption, optimized routing and minimized vehicle downtime. Across a fleet, these reductions can translate into significant monthly and yearly financial gains.

Key benefits that drive efficiency and cost savings



Fuel management

Reporting accurate fuel levels helps operators charge customers the exact amount of fuel used for final billing and avoid disputes or fraud, enhancing customer loyalty and trust.



Location tracking

GPS data aids in tracking vehicle locations in real time, increasing operational efficiency and reducing unauthorized use.



Damage detection and preventative maintenance

Use telematics to monitor vehicle diagnostics and detect maintenance issues early to prevent costly repairs.



Accident reconstruction

Enhance accident reconstruction with precise data on speed, location, braking patterns and impact forces. This helps determine fault, improve safety measures and streamline insurance claims.

Safety and insurance benefits

- Geofencing and GPS tracking **prevent unauthorized use and theft.**
- **Accident reconstruction** can be used to accurately assign fault, ensuring fair resolution of incidents and protecting both business interests and customer trust.

Operational efficiency

- Real-time tracking, odometer readings and fuel monitoring save operators **\$2–\$100 per vehicle per month.**
- Proactive maintenance **cuts repair costs by up to 10%** and minimizes downtime.

Environmental and EV adoption

- Telematics **supports the transition to electric vehicles** by analyzing fleet data to recommend suitable EV models and calculate potential savings.



Revenue boost

- Collision detection and reporting save **\$25 per vehicle per month** by curbing unreported damages.

Enhanced asset utilization

- **Predictive maintenance** enables higher availability and customer satisfaction via reduced downtime.

Fuel savings

- Accurate fuel reporting recovers additional fuel costs, adding **\$8 per vehicle monthly.**

04 A future that's powered by innovation

The evolution of telematics is poised to revolutionize fleet management, particularly within the car rental industry. By integrating advanced technologies such as real-time data analytics, keyless entry solutions, artificial intelligence and **IoT systems**, telematics is rapidly transforming traditional fleet operations into efficient, data-driven ecosystems. This chapter explores the emerging trends in telematics, the growing importance of sustainability and the critical role these innovations play in advancing long-term industry competitiveness.

Keyless entry drives efficiency and convenience

Keyless entry solutions are revolutionizing the car rental industry by enhancing both operational efficiency and customer satisfaction. This technology eliminates the need for physical keys, allowing customers to unlock and start vehicles through mobile apps or digital platforms, streamlining the rental process. For operators, keyless entry minimizes logistical challenges like key losses or exchanges, significantly reducing associated costs and administrative burdens. Additionally, these systems enable remote access management, giving operators greater flexibility to address customer needs in real time. By adopting keyless technology, car rental companies can provide a seamless, modern experience that meets the rising demand for convenience and strengthens their position in an increasingly competitive market.

The impact of AI and predictive analytics

Telematics is no longer confined to basic GPS tracking and vehicle diagnostics; it is now becoming a crucial tool for predictive analytics and enhanced customer experience. By leveraging AI, car rental companies can analyze driving behaviors, predict maintenance needs and optimize fleet utilization with remarkable precision. For example, AI-enabled predictive analytics can identify patterns to prevent vehicle breakdowns, reducing downtime and repair costs. Advanced AI algorithms also enable dynamic pricing models, offering personalized pricing strategies to match fluctuations in demand or customer preferences.





Sustainability and environmental benefits

Sustainability is increasingly crucial for car rental operators, not just as a global responsibility but as a way to drive tangible business benefits. By leveraging telematics, operators can more effectively transition toward fuel-efficient or electric vehicles (EVs), reducing operating costs and aligning with customer preferences for eco-friendly travel options. Telematics enables operators to track vehicle emissions and support fleet-wide sustainability goals, helping to meet stricter regulatory standards while cutting expenses tied to fuel and maintenance. These steps not only enhance operational efficiency but also strengthen customer loyalty and provide a competitive edge in a market where environmental accountability is becoming a key differentiator.

Connected cars and customer experience

It is projected that by 2025, there will be **over 400 million connected cars in operation**, up from 237 million in 2021. The United States is the biggest market for connected vehicles. Connected cars are considered safer, more fuel-efficient, and environmentally friendly, with enhanced navigation capabilities that help avoid traffic jams and busy streets, ultimately reducing urban congestion. Moreover, connected car technology allows for better diagnostics, maintenance and fleet management of vehicles, making carpooling and car-hailing services more efficient.

The competitive imperative of integrating telematics

The integration of telematics technology has become a strategic imperative for businesses aiming to remain competitive in the rapidly evolving fleet management landscape. Early adopters of telematics gain a distinct advantage in cost savings, operational transparency and customer satisfaction. Furthermore, the ability to provide value-added services such as real-time vehicle updates, seamless scheduling and enhanced safety features can help set companies apart in a crowded market. With consumer expectations shifting toward digitally optimized services, telematics will define the future standard of operational excellence.

While the potential of telematics is vast, its ultimate success depends on how effectively it is harnessed. Companies that proactively adopt and continually innovate with telematics will position themselves as leaders in fleet management, reaping both economic and environmental rewards.

05 Real-life lessons from industry leaders

Europcar Mobility Group

Europcar partnered with Geotab to develop a connected vehicle program aimed at improving operations and customer experiences while advancing sustainability goals. By integrating Geotab's **real-time vehicle tracking technology** and the MyGeotab platform, Europcar gained access to real-time data on vehicle location, fuel levels, odometer readings and more. Key benefits include:



Stolen vehicle recovery

Real-time location tracking significantly improved recovery rates.



Collision detection

Real-time alerts enabled swift response to potential accidents.



Proactive maintenance

Remote diagnostics helped reduce unplanned breakdowns.



Accident reconstruction

Data-driven recommendations promoted greener driving behaviors.



Enhanced customer service

Business clients were offered fleet optimization tools for efficiency, safety, and sustainability.

Europcar's connected program spans across Europe with plans to expand to Australia and the U.S., and set an ambitious goal for 100% connectivity by the end of 2026.

Both Europcar and Wanacars demonstrate how telematics can revolutionize the car rental industry by enhancing operational efficiency, reducing costs and improving customer satisfaction while addressing sustainability challenges.

Wanacars

Wanacars, a Spanish car rental company, utilized Geotab's telematics and **digital key solution** to create an environmentally friendly and smart brand. By equipping its fleet with Geotab's devices and integrating them with their mobile app, Wanacars streamlined operations and enhanced customer experiences. Key outcomes included:



Fuel efficiency

A remarkable 20% reduction in fuel costs by minimizing unnecessary driving between rental offices.



Remote door unlocking

Keyless access allowed customers to reserve, locate and unlock vehicles via a mobile app, even in areas without cellular coverage.



Fleet optimization

Real-time telematics data provided valuable insights for informed decision-making and error detection.

These solutions helped Wanacars become a more sustainable, cost-effective operation, supporting its expansion goals.

06 Top 10 tips – a quick checklist to boost productivity in your car rental business

Boost productivity and customer satisfaction by integrating these 10 smart strategies into your car rental company's daily operations.

01 Speed up turnarounds

Check fuel, odometer, cleanliness and damage quickly with automated tools to prep vehicles faster with the [Geotab GO tracking device](#).

03 Stay on top of maintenance

[Schedule and track maintenance](#) using telematics, minimizing downtime and repair costs.

05 Enable billing accuracy

Automate billing for fuel, mileage and [tolls](#) to avoid errors and improve transparency.

07 Set geofence alerts

Use [geofencing](#) to prevent unauthorized vehicle use and improve asset control.

09 Optimize workflows

Pre-schedule tasks like fueling and cleaning with checklists to cut downtime.

02 Use live tracking

Monitor fleet in real-time with GPS through Geotab GO for better allocation, theft prevention and efficiency.

04 Maximize fleet usage

[Analyze usage data](#) to verify that vehicles are optimally assigned or retired when underused.

06 Streamline damage checks

[Automate damage detection](#) with photo evidence for faster inspections and fewer disputes.

08 Handle collisions efficiently

Get [instant collision alerts](#), speed up claims and refine safety practices post-incident.

10 Deliver great service

Simplify billing, reward loyalty and use feedback to deliver an exceptional customer experience.



07 Start your telematics-driven journey today

The car rental industry stands at a crossroads, driven by market evolution, heightened customer expectations and competitive pressures. Telematics offers a solid foundation for addressing these challenges and positioning your business for sustained growth.

For executives, telematics helps uncover hidden costs, optimize operations and plan strategically, while operational teams benefit from tools that streamline daily tasks and improve fleet performance. Whether it is through real-time data analysis, predictive maintenance or innovative customer solutions like digital keys, telematics paves the way for a more efficient and profitable future.

By adopting telematics, car rental companies can future-proof their businesses, exceed customer expectations and establish themselves as forward-thinking leaders in a dynamic market. Now is the time to invest in innovation and elevate fleet management to new heights.

Throughout this whitepaper, we've explored the critical advantages telematics brings to the table, from optimizing routes and reducing fuel consumption to enhancing driver safety and streamlining maintenance processes. By leveraging telematics effectively, businesses can significantly reduce costs, mitigate risks and position themselves competitively in an increasingly digital landscape.

At Geotab, we understand that adopting telematics technology is only the beginning. What sets us apart is our commitment to continuous innovation and our dedication to being your trusted partner on this transformative journey. Our cutting-edge fleet management solutions are built to adapt to your unique operations, helping you maximize the potential of telematics. Whether you manage a small fleet or a complex operation, our tools and expertise empower you to make data-driven decisions with confidence, enhance overall performance and stay ahead in fast-evolving markets.

Discover how Geotab can help you unlock the full potential of telematics for your fleet. Sign up today for a free consultation or [book a personalized demo](#) to see our solutions in action. Together, we'll drive your business forward with smarter, more innovative fleet management strategies.

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