

## 8 Best Practices for Improving Fleet Management

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As a fleet manager, you have a lot on your plate. From ensuring timely deliveries to coordinating efficient driver schedules, the logistical challenges are extensive. Then there's the surging demand for e-commerce—expected to make up an unprecedented 22% of total retail sales globally in 2023. So, with these pressures quickly piling up, I'd like to point out **8 fleet management best practices** that will help you improve your operational efficiency.

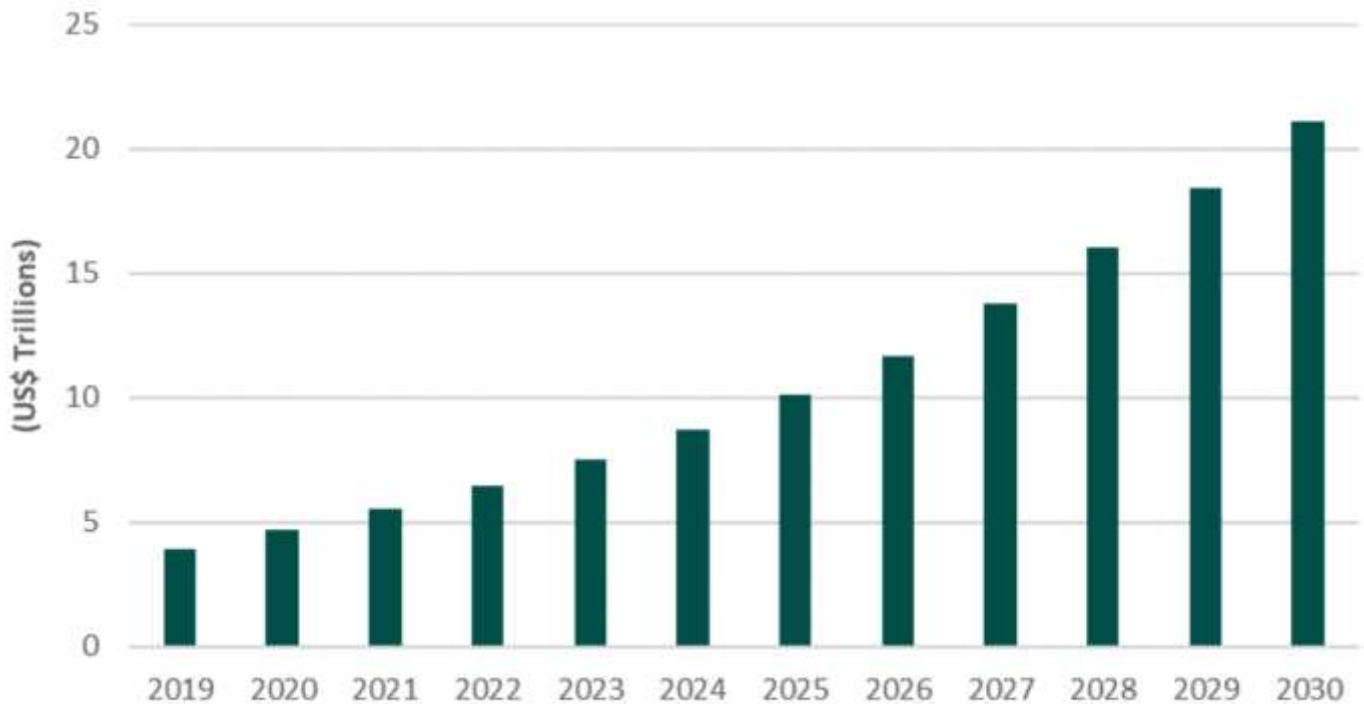
In this blog post, you will learn more about:

- How to improve commercial fleet management performance and make your operations run more effectively.
- Which critical data and you should be analyzing.
- Some of the habits your fleet should adopt in order to eradicate inefficiencies.
- Why driver monitoring technologies such as Artificial Intelligence (AI)-powered dashcams, Driver Monitoring Systems (DMSs), and Advanced Driver-Assistance Systems (ADASs) are so crucial to fleet safety.
- The value of forward-looking fleet management solutions like smart video telematics.

### Chart 1: Global E-Commerce Revenue

World Markets: 2020 to 2027

(Source: ABI Research)



## Why Fleet Management Software Is a Must

A [recent survey report](#) from Verizon Business, in collaboration with ABI Research and Bobit, found that restricted budgets and limited resources are making it tough for many fleets to maintain and improve their operations. For example, rising costs, such as soaring energy prices, increased cost of living, and inflation, are negatively affecting 73% of fleets.

Turning to fleet management software has been seen as a highly beneficial addition for enterprises, with 85% of survey respondents stating these solutions are effective at helping them. Fleet management software gives companies the following advantages:

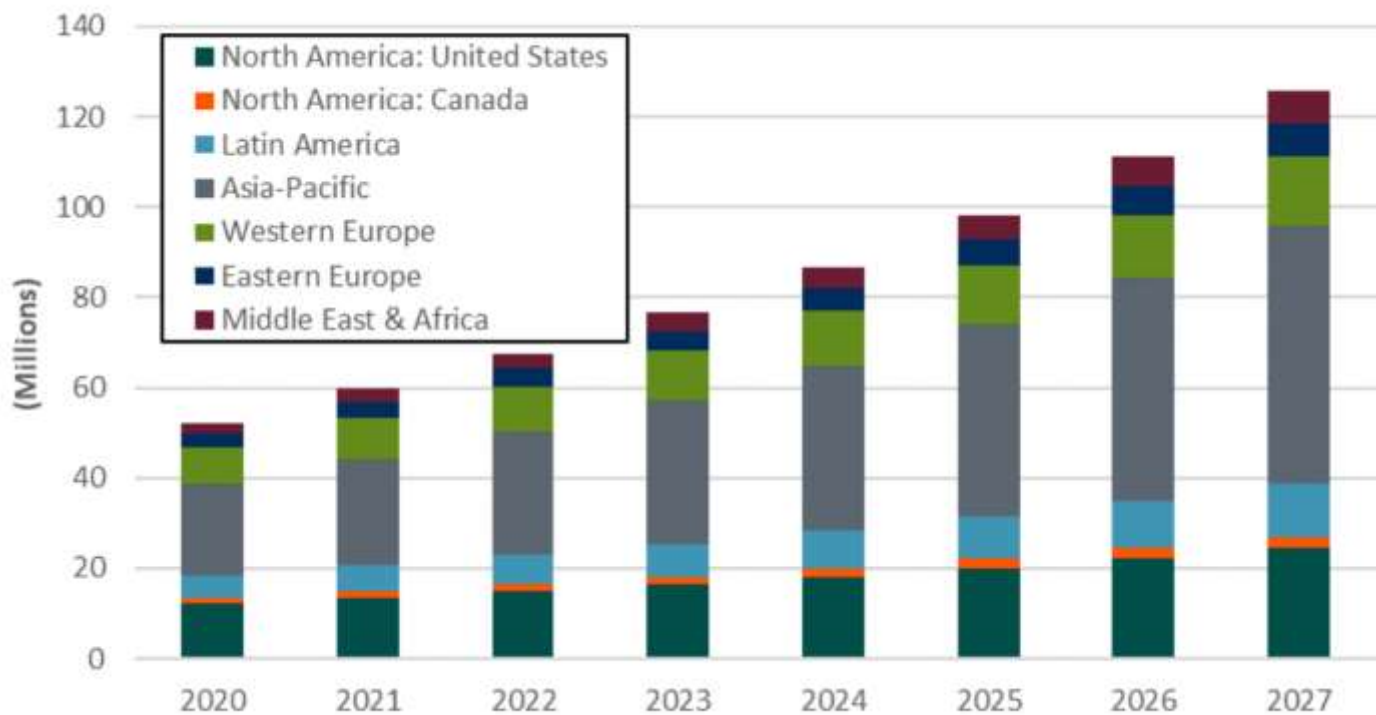
- More efficient fuel usage
- Reduction in overall operating costs
- Fewer vehicular accidents
- Lower labor costs
- Greater asset tracking transparency
- Improved supply chain resilience

These benefits go to show that adopting new technologies like a [telematics subscription](#) should be the first step to improving fleet management performance and meeting your performance goals. In fact, it's a prerequisite for several fleet management best practices on this list.

## Chart 2: Commercial Fleet Telematics Systems Subscriptions by Region

World Markets: 2020 to 2027

(Source: ABI Research)



### 1. Use Data to Make Better Decisions

Collecting data that can be turned into actionable insight is critical to effective fleet management. By tracking the right data, managers can improve the utilization of fleet resources and make well-informed decisions about technological adoption.

Although there will always be some data or metrics that are specific to your industry, there are plenty of fleet management data that will benefit any commercial fleet.

- **Fuel Tracking:** This metric means you should track fueling dates and locations, as well as fuel type, fuel quantity, and fuel cost.
- **Maintenance:** Scheduled maintenance support and unscheduled repairs for fleet vehicles. Also involves data about the work needed, the date of maintenance, parts required, the cost of parts, and labor costs.
- **Purchasing and Leasing:** This metric refers to the details of a contract and warranty for a purchased fleet vehicle.
- **Utilization:** Record who is signing out vehicles and the time, date, and mileage of a driver's trips. Monitoring odometer readings is also important.

- **Driver Licensing:** What are the issuance and expiration dates for driver's licenses and trucking certifications?
- **Driver Performance:** Record essential data pertaining to accidents, such as time, location, and nature of the incident. **Driver Monitoring Systems (DMSs)** and outward-facing cameras are technologies that can help piece together the sequence of events leading to a vehicular accident. Doing so can exonerate fleet drivers from liability and reduce insurance claims. Moreover, monitoring technologies enable fleet managers to gain insight into how a driver can work safer.

## 2. Leverage Driver Logs

Some fleet managers may be tempted to track every vehicle as it comes and goes from the facility. However, this isn't necessary to improve fleet management. Rather, managers should focus on tracking key transactions, as well as give drivers a required logging checklist when their shift is over.

Conversely, managers can make it an official policy to complete an inspection checklist before they are provided with the keys to a truck. Driver logs improve commercial fleet tracking and reduce vehicle maintenance costs. Furthermore, this best practice encourages better accountability.

## 3. Digitalize Your Dispatching System

Effective commercial fleet dispatching can be challenging. If done manually, the dispatching process can easily result in errors. Besides that, it can also be very time-consuming and the process requires coordination with various stakeholders. This is why it's crucial for fleet dispatching management to be more digitalized.

A digitalized dispatch system brings you the benefit of more centralization, greater organization, and closer collaboration. The end result? Improved communication channels across the supply chain that keep everyone in the know.

At the same time, a digitalized approach automates some of the repetitive tasks and workflows that dispatchers often deal with, such as scheduling or sending updates to drivers in the field. Moreover, an automated dispatching system makes it unnecessary to sort through orders, assignments, and invoices by hand.

## 4. Prioritize Preventative Maintenance

The days of waiting until a vehicle experiences major failure to bring it to a mechanic shop are over. The next fleet management best practice is for managers to take advantage of the advancements in telematics capabilities on offer from vendors. These technologies allow fleet

managers to act more proactively, as opposed to reactively. Additionally, some devices, such as environmental sensors, can monitor the condition of goods in transport.

Internet of Things (IoT)-enabled telematics solutions are capable of capturing a wide range of fleet data, including:

- Speed
- Location (via a Global Positioning System (GPS))
- Acceleration
- Fuel usage
- Fault codes
- Barometric pressure
- Engine condition
- Temperature
- Humidity

By being able to monitor the condition of your commercial fleet and the goods being transported, you gain the benefit of being able to get out in front of issues before they exacerbate. While preventative maintenance requires upfront costs, the long-term payoff is worth it because your fleet will be spared expensive repairs.

One forward-looking fleet management platform is the [\*\*Ridecell Fleet Automation and Mobility service\*\*](#). This cloud-based platform enables fleet managers to program the platform to listen to internal systems and vehicle status. The benefit is that the software can convert these key insights into automated fleet operations. Leveraging the fleet data, the fleet management platform can automatically alter the state of a vehicle, such as remotely preventing a driver from powering it on, despite having keys. Additionally, Ridecell's platform can detect and ascertain fleet issues and automatically pull vehicles out of service.

## 5. Optimize Fleet Size and Usage

For those of you dealing with small to mid-sized commercial fleets, striking a capacity balance is essential to effective fleet management. If your company possesses more vehicles than you need, it can be financially costly. On the flip side, having too few vehicles in your fleet will undoubtedly lead to vehicle downtime and driver burnout (longer shifts).

And for larger fleets, inefficiencies are even more likely due to the massive scale of operations. With so much logistical activity, bottlenecks are bound to materialize and meeting your goals will be far more difficult.

For these reasons, it's paramount that fleet managers always look for ways to improve the optimization of fleet size and vehicle usage. Some key actions to take to cut back on fleet

inefficiencies include performing periodic audits, adopting **advanced route optimization** tools with GPS, educating drivers, and consistently communicating with stakeholders.

## 6. Monitor Driver Behavior to Foster Safety

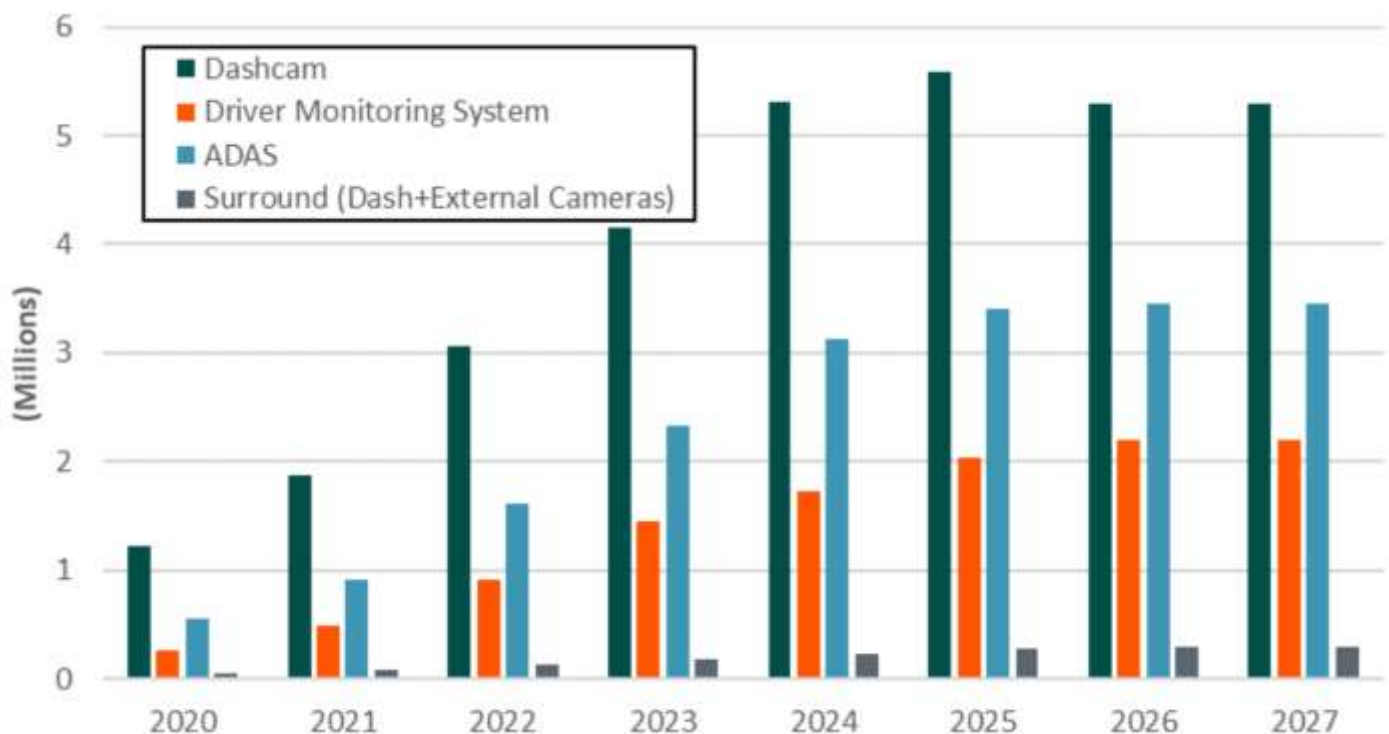
Enhancing driver safety should be a primary goal for fleet managers. A non-fatal accident within your fleet can cost your company up to **US\$75,000 per accident**. And if the accident is fatal, you're dealing with a tragedy that nobody wants to see happen. Therefore, there is a growing need for the following fleet technologies:

- Driver Monitoring Systems (DMSs)
- Dashcams
- External cameras
- Smart video telematics with Advanced Driver-Assistance Systems (ADASs) features and real-time event-based alerts

### Chart 3: Video Telematics Shipments by Type

World Markets: 2020 to 2027

(Source: ABI Research)



As an example of this fleet management best practice, some smart video telematics solutions trigger live voice/visual notifications, seat vibrations, or a tightening seatbelt to notify fleet

drivers when to correct their behavior in real time. This is done through speeding/braking monitoring capabilities or facial recognition technologies (e.g., computer vision-enabled dashcams) that detect risky driver behavior. Moreover, research from KeepTruckin **has shown** that fleets that use Artificial Intelligence (AI)-powered dashcams can reduce their accident frequency by 22% and unsafe driving incidents by 56%. ADAS, another safety-improving fleet management technology, can let users monitor tailgating and detect pedestrians and cyclists near the vehicle.

It should be noted that because many DMS technologies, such as computer vision, are in their infancy, the solutions may still require human manual assistance. Still, these solutions are integral to effective driver coaching, as they validate unsafe driving behavior.

## 7. Combine the Value of Multiple Fleet Management Solutions

If you can effectively blend productivity technologies with the right combination of other fleet management technologies, you can better meet your Return on Investment (ROI) goals. To illustrate, on its own, software that tracks the location data of vehicles is very useful for improving fleet route optimization. But when you combine this solution with a Transportation Management System (TMS) solution and a data aggregation tool, fleets can automate a lot of workflows and streamline Service-Level Agreement (SLA) management.

In this regard, it's crucial for fleet managers to think deeply about how well their future fleet management solutions will mesh with existing solutions. Plus, you should assess in what ways these technologies will benefit operational potential.

## 8. Track Your KPIs

In fleet management, you need to always be measuring success. The best way to do this is by tracking Key Performance Indicators (KPIs). Tracking the **most essential fleet management KPIs** enables you to identify where your competencies lie and where operational shortfalls exist. From there, you can double down on what's working, as well as diagnose—and then fix—bottlenecks.

Below are some of the most important fleet management KPIs that help improve your operational efficiency:

- Vehicle uptime/downtime
- Vehicle utilization rate
- Estimated Times of Arrival (ETAs)
- Fuel costs
- Fuel usage
- Vehicle Total Cost of Ownership (TCO)

## Peel off the Technological Layers of Effective Fleet Management

As these best practices demonstrate, fleet management can be improved with some new habits, such as developing KPIs to measure success and using driver logs. In addition, effective fleet management requires a closer look at numerous technological considerations. These technologies include smart video telematics, autonomous driving, zero-emissions vehicles, system architecture, advanced analytics, open Application Programming Interfaces (APIs), advanced location intelligence, and more.

It's also important to weigh your options by analyzing various fleet management solution providers. To acquire all these insights and develop a better fleet management game plan, download ABI Research's [\*\*\*Road Freight Transportation Technology Trends\*\*\*](#) research report. This report is part of our subscription-based [\*\*\*Supply Chain Management & Logistics Research Service\*\*\*](#)—where you can gain access to all the trends and technological developments in the fleet management industry.

### Additional Resources:

[IoT Market Tracker: Fleet Management](#) [Market Data]

[Fleet Space Raises Capital for Nanosatellite Fleet Expansion](#) [Insight]

[Location Platforms: Shaping the Future of Fleet Management](#) [Whitepaper]