Fleet Connections 2018

The Data-Driven Fleet

The impact of fleet management software on driver behavior and operational efficiency in field service businesses

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Introduction

Data is transforming the way businesses of all sizes make decisions that improve efficiency, productivity, customer service and, ultimately, profitability.

For companies that depend on fleets of vehicles and mobile workers, some of the most valuable data comes from fleet management software. This software monitors how vehicles are being operated and provides reports that translate that data into actionable insights. Managers of successful fleets use this technology to identify trends, establish benchmarks, coach behavior and examine changes over time to drive improvements in operational efficiency, risk reduction, profitability and driving behavior.

Putting our data to use

As the world's largest provider of fleet management software, Verizon Connect has unique visibility into the activity of America's commercial vehicles. Every day, billions of data points from millions of connected commercial vehicles move across our network, and we can use this data to gain valuable insights into the ways businesses are driving improvements.

In this report, we will identify the trends that arise from an analysis of report utilization by 720 fleets comprising 27,347 vehicles in the United States. The results show how these businesses are making improvements in driver behavior that can have a direct impact on safety, cost control and operational efficiency.

See page 6 for the full methodology.

Measurement and monitoring improve driver behavior

It's often said in business that you can't manage what you don't measure. Fleet management systems allow business managers and owners to monitor the locations and operating behavior of vehicles, receive alerts when drivers perform unwanted actions, and analyze reports of those events over time to identify trends and coach their workers to improve behavior – behavior that can significantly impact the bottom line.

Analyzing the way Verizon Connect customers use our software, it is clear that companies that actively measure their fleet's performance see improvements in driver behavior that can improve efficiency, profitability and safety – particularly speeding, harsh driving and idling.

Our analysis of a random sample of companies that viewed reports on harsh driving, speeding and idling showed that they experienced the following results in the 30- and 60-day periods following their first report.

Harsh driving: 12% improvement in the first month, and 39% improvement in the second month.[1] (Fig 1)

Speeding: 71% improvement in the first month and 153% improvement in the second month. (Fig 2)

Idling: 29% improvement in the first month, and 55% improvement in the second month.[2] (Fig 3)

Increased reporting correlates with increased improvement

These benefits also continue over time: The more companies measure, the more improvement they see. In almost every case, more frequent reporting leads to significant improvement over time.

These improvements can translate to a positive impact on worker productivity, accountability and on-the-road behavior, which can drive better customer service, cost reductions, vehicle uptime and operational efficiency.

Fig 1: Increase in miles driven without a harsh driving incident alert

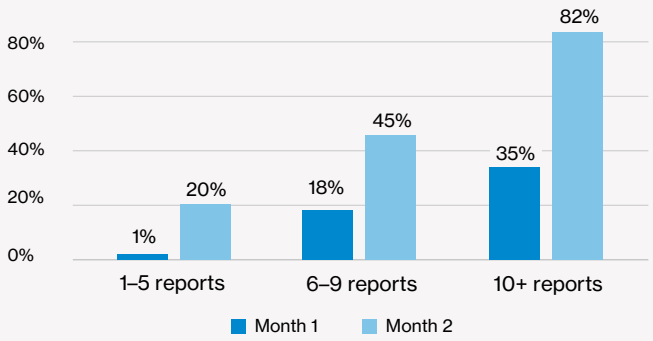


Fig 2: Increase in miles without speeding alert

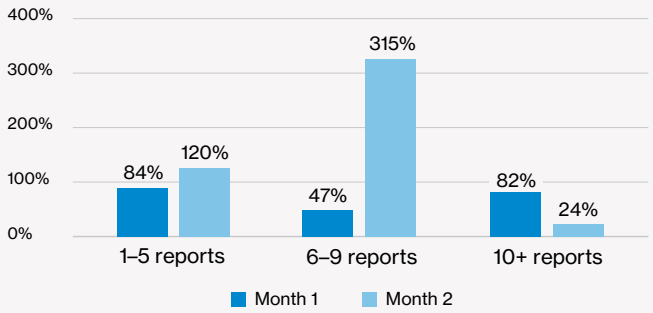
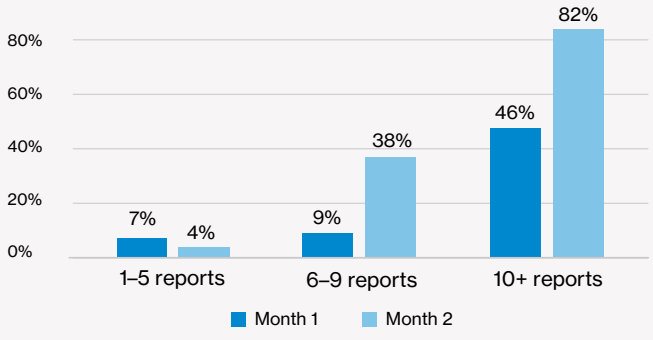


Fig 3: Increase in miles driven without idling



[1]Improvement measured in terms of percentage increase in miles between harsh driving alerts or speeding alerts in the two months immediately following running the initial report. [2]Improvement measured in terms of percentage increase in miles driven between idling alerts in the two months immediately following running the initial report.

Achieving best-in-class operational efficiencies with data

Improving operational efficiency empowers companies to do more with less – or to do much more with a little more. But to see measurable improvements in efficiency requires identifying goals, setting benchmarks, monitoring progress and coaching behavior.

For example, you may recognize a need to reduce wasted time, miles and fuel; increase stops per day; or limit harsh driving that increases risk and maintenance costs. This goal will tell you what to measure. Only after identifying your goals can you execute effective, measurable strategies to create the improvement you want to see.

For field service businesses, vehicle utilization can be a primary source of lost efficiency and a leading indicator of areas of improvement.

A few of the ways vehicle utilization can impact efficiency include:

- **Poor routing** can mean more time in transit and less time performing billable work, as well as increased fuel costs and wear and tear on vehicles.
- **Poor communication** with drivers and field workers can cause missed opportunities, such as emergency calls and additional customers served.
- **Harsh driving** – such as speeding and hard braking – can take a vehicle, and possibly a worker, out of commission, turning revenue-generating assets into profit-draining expenses. It can also lead to accidents, higher insurance rates and increased risk of lawsuits and financial loss.
- **Lack of visibility** into worker location means workers could be wasting time that should be spent on the job.
- **Excessive idling** can steal profits through wasted fuel and unnecessary wear and tear on vehicles.

Benefits of fleet and field service management software

As this report has shown, businesses that use fleet management software to gain actionable insights into driver behavior rapidly see improvement in the behavior they wish to change. Beyond coaching, users of fleet and field service management systems report improvements that can impact their entire business.

According to a July 2017 report by the business research firm Aberdeen, companies using field service and fleet management software have a 33% greater workforce utilization rate compared to companies that do not (Fig 4).[3]

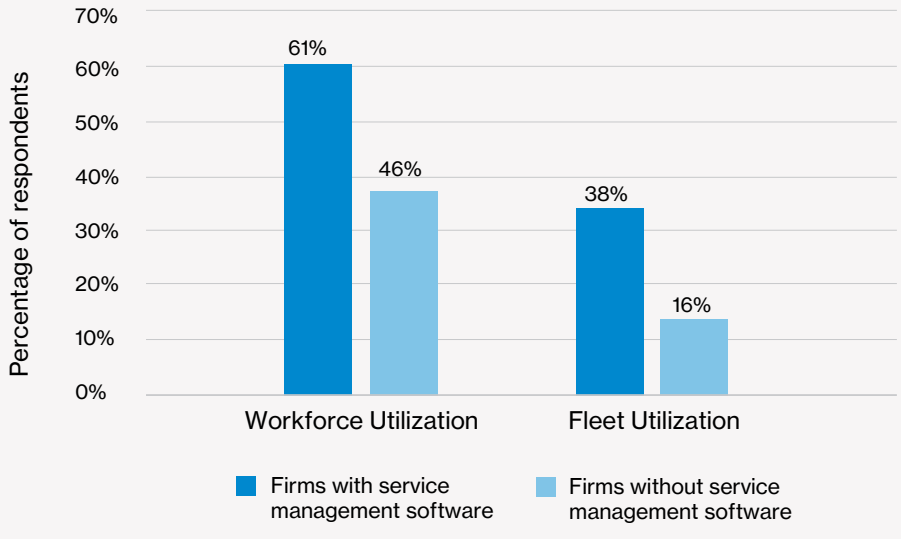
This means that they get one-third more work out of their technicians, a strong competitive advantage in a tight labor force that also leads to better customer service.

Companies that use field service and fleet management software see 33% greater workforce utilization.[4]

According to Aberdeen's findings:

- Field service businesses with field management solutions show a growth of 5.1% versus a decline of 4.9% for those without it, a 10% difference in growth rate.
- Firms using field management solutions show a 5.7% increase in workforce productivity versus a 3.2% reduction in productivity for companies without such solutions. That's an 8.9% difference in productivity.

Fig 4: Fleet and field service management software drive greater utilization



[3]Service Management Capabilities Propel Best-in-Class Advantage, Bryan Ball, Vice President and Group Director, Aberdeen

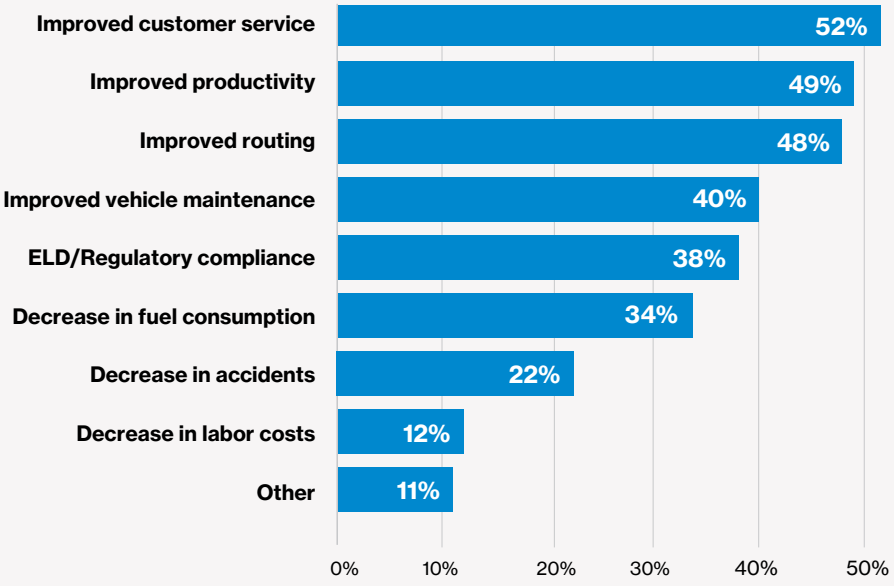
According to a February 2018 survey of 807 U.S. businesses conducted by Verizon Connect and Bobit Business Media, 59% of respondents said they use a fleet tracking system. These companies report improvements in productivity, routing efficiency, vehicle maintenance, cost control and more (Fig 5).

Why now is the time to invest in fleet and field service software

Field service businesses face unique challenges that come with managing a mobile workforce and fleet of vehicles.

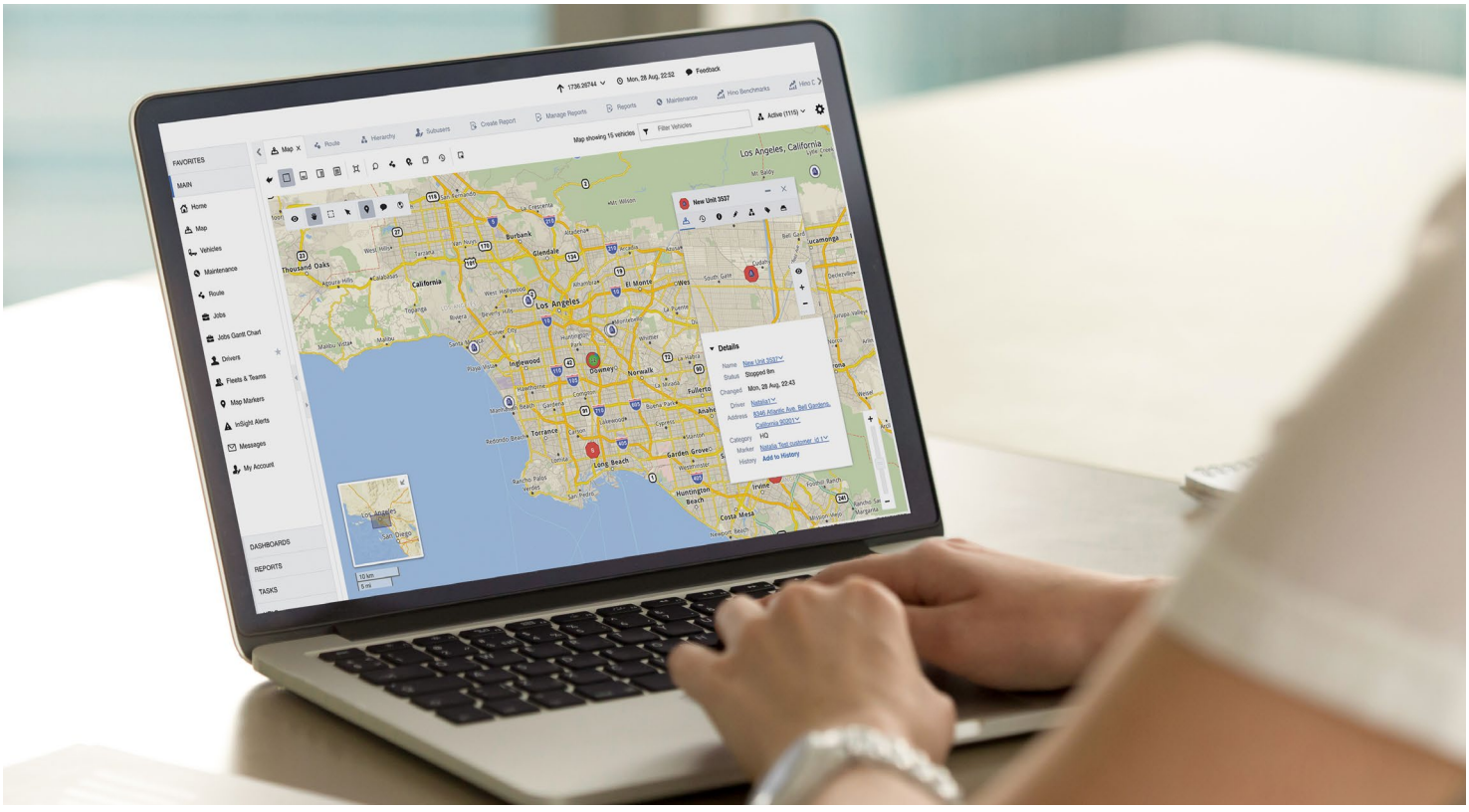
These challenges will become even more complex with accelerated adoption of trends ranging from electric and autonomous vehicles to artificial intelligence and the sharing economy. But there are tools to help meet these challenges and excel within your industry.

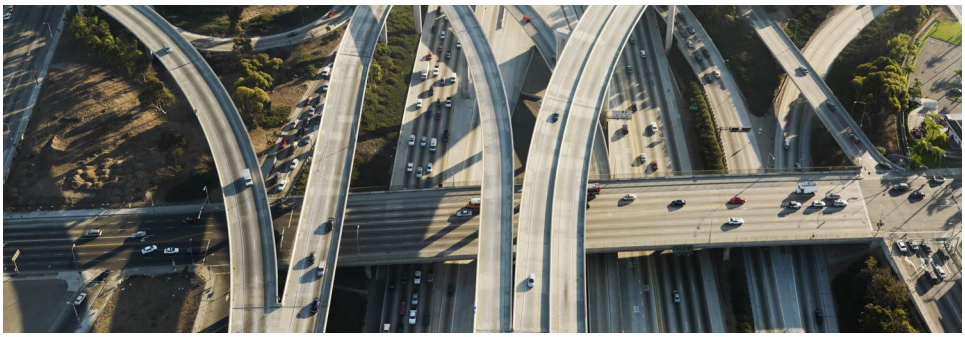
Fig 5: Top goals achieved upon implementation of fleet management software



Businesses that implement fleet tracking solutions report significant improvement in critical KPIs.

Source: 2018 Verizon Connect





As our analysis of customers' report utilization has shown, businesses that have implemented fleet management solutions have access to near real-time and historical data that can help provide critical insights to guide better operational decisions.

This data – based on the actual behavior of millions of vehicles in the Verizon Connect ecosystem – show these businesses achieve concrete improvement in efficiency, productivity and improved driving behavior that can lead to safety improvements and cost reductions that can help drive sustainable growth in a competitive landscape.

Our analysis is supported by survey research by Verizon Connect, Bobit Business Media and Aberdeen that shows companies with fleet and field service management solutions see improvements in core KPIs and significantly improved worker and fleet utilization.

As the mobile resource management landscape continues to evolve through rapid developments in sensor technology, the Internet of Things, artificial intelligence, 5G connectivity and more, businesses will have even more power to turn fleet and field service data into actionable insights to drive ongoing success.

As your business considers implementing mobile resource management solutions, it is critical to think about your needs today and in the future. This emphasizes the need to work with a provider like Verizon Connect that has the resources and reputation for innovation and reliability to deliver the best solutions today while also driving the technology that will guide your business tomorrow.

Learn more about Verizon Connect fleet, asset and mobile workforce solutions at verizonconnect.com or call 866.844.2235

Methodology

Our analysis of customers' report utilization is based on a random sample of 719 fleets with a total of 27,347 vehicles that use Verizon Connect tracking devices and software. For each data point under analysis, an individual metric for each fleet and each time period was derived and a measurement was made of the percentage change between the control month and the following 0-to-29 day period and following 30-to-59 day period. These percentage changes for all fleets under examination across each time period were then averaged to give an average percentage change across all fleets in the sample as a result of running a report.

To measure a fleet-wide single representation for a data point it is important to control for both increasing and decreasing total distances traveled per time period along with fleets increasing and decreasing in size throughout time periods. To manage this, the total number of times within each time period a given event was experienced by any vehicle within that fleet was captured. Following a second value, the total distance all vehicles within that same fleet traveled was captured. Dividing the total distance traveled by the number of occurrences of a given event would provide an event-per-miles metric that could be easily compared to other time periods of the same length.

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Verizon Connect is guiding a connected world on the go by automating, optimizing and revolutionizing the way people, vehicles and things move through the world. Our full suite of industry-defining solutions and services put innovation, automation and connected data to work for customers and help them be safer, more efficient and more productive.