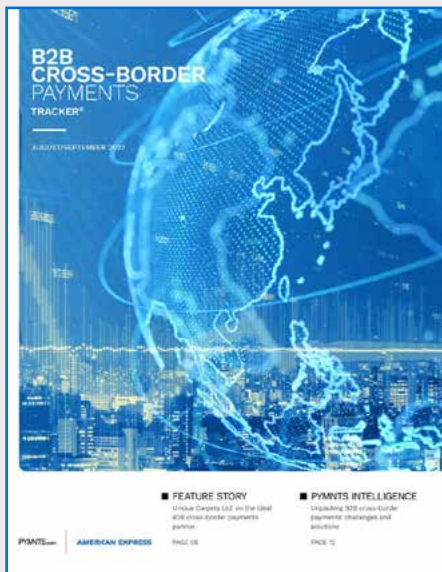




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AUGUST/ SEPTEMBER 2022

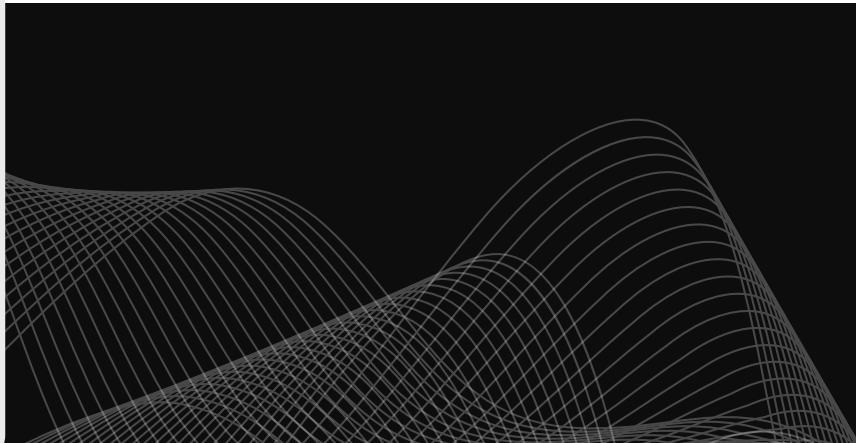
B2B Cross-Border Payments Tracker®

October 2022

Reshaping Global Business With Connected Vehicles

B2B And Digital Payments Tracker® Series

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- Connected Fleets Offer Rapid ROI **P. 14**
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Acknowledgment

The B2B And Digital Payments Tracker® Series is produced in collaboration with American Express, and PYMNTS is grateful for the company's support and insight. PYMNTS retains full editorial control over the following findings, methodology and data analysis.

Need To Know

Operators Seek Improved Technology For Growing Fleets

As businesses and consumers explore the possibilities of connected vehicles, multiple related segments are on the rise. The global automotive software market, which covers everything from telematics to in-vehicle entertainment systems, is [expected](#) to have a compound annual growth rate (CAGR) of 15% between now and 2030, shifting from a \$19.1 billion valuation in 2021 to \$57 billion by 2030.

The pandemic's onset [hampered](#) the global connected truck market with disruptions to the supply chain, parts shortages and sales declines. The market did see a resurgence as pandemic-related restrictions eased, however, leading to an overall expansion of the global market. Currently, the global connected truck market has a projected CAGR of 16% through 2031.



\$22.2B

Estimated value of the global connected truck market in 2021.



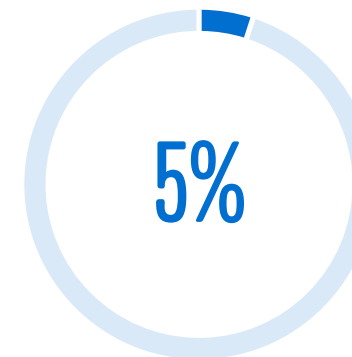
\$97.4B

Estimated value of the global connected truck market in 2031.

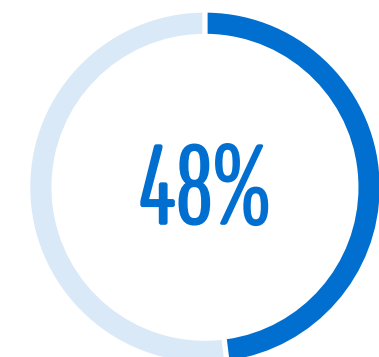
Need To Know

Corporate fleets are still being connected

The corporate fleet space is ripe for innovation, [offering](#) a combination of low penetration of connected vehicles coupled with high interest in transitioning to connected fleets within the next few years. With less than 5% of their fleets connected, companies offering connected solutions have ample opportunity to get a foot in the door and present a comprehensive solution that can enable fleetwide integration.



**of the fleets
of one-third
of companies
are connected
vehicles.**

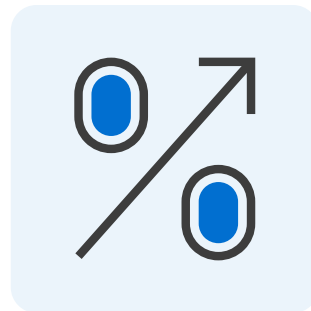


**of corporate
fleets are
expected to
be connected
vehicles by 2025.**

Need To Know

Connected fleets show rapid ROI

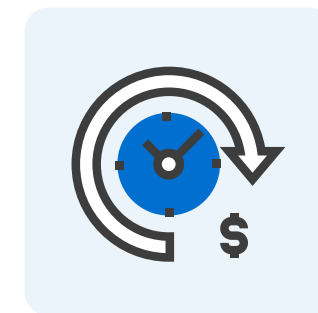
Eighty-six percent of surveyed European connected fleet operators [reported](#) quick returns on investment (ROI) in the technology, with 74% saying that leveraging fleet management technology is very or extremely beneficial to their business. In addition, 56% said that fleet management technology improved their customer service.



86% of connected fleet operators reported ROI within 12 months.



44% of connected fleet operators reported ROI within six months.



52% of connected fleet operators reported lower fuel costs.

News And Trends

Driving Efficiencies With Improved Connectivity

Nearly 92% of fleets operate six or fewer vehicles, and small fleet management solution provider Fleetr recently [partnered](#) with Driver Technologies to bring those fleets improved connectivity tools. The partnership will add to the telematics and other connected vehicle functionalities Fleetr already offers by integrating dash cam technology that can provide safety alerts, distraction warnings, artificial intelligence (AI) analysis and driver coaching to promote better driving habits.



News And Trends

Predictive maintenance has a proven track record in manufacturing

While companies are still testing the value of predictive maintenance in connected vehicle fleets, connected technology and AI are already [saving](#) companies money and improving efficiencies in manufacturing. PepsiCo installed predictive maintenance connectivity on industrial machines at its Frito-Lay plants within the past year. The reduction in unexpected breakdowns, interruptions and incremental costs for replacement parts, among other benefits, is estimated to have added approximately 4,000 hours a year to those plants' manufacturing capacities.

Connected vehicles reduce costs for fleet operators

A recent study [showed](#) the potential of AI-powered automation and data insights provided through connected vehicles to save money for fleet operators of all sizes. In addition, the use of telematics' data-enabled improvements to driver performance even cut down on the time vehicles spent idle. Maintenance also saw improvements, with fleet operators able to focus on preventive maintenance instead of acting after equipment has already broken.



On average, fuel consumption across surveyed fleets was reduced by 13%.



Hard braking by drivers was reduced by 40%.



Vehicle idling time was reduced by 20% on average.

PYMNTS Intelligence

Connected Fleets Are Becoming The New Normal

The history of connected vehicles [began](#) with GM's introduction of OnStar® in 1996, and in 2021, the number of connected vehicles in the United States was estimated to be 74 million. Connectivity does much more now than it did nearly three decades ago, with modern technology able to assist with everything from predictive maintenance to driver coaching and even to detect when drivers need to take a break.



PYMNTS Intelligence

The B2B opportunity in providing fleet connectivity solutions

Seventy-two percent of surveyed fleet operators [said](#) that fleet connectivity is either important or very important. Companies have long recognized the benefits of telematics data for analyzing fleet usage and developing more efficient processes. As connected vehicle technology has evolved, particularly with AI-powered capabilities, improved driver safety sat among the top reasons cited for making connectivity a priority.

There is still a lot of room in this space for innovators to capture new customers, however. While 16% of respondents reported that at least half of their fleets are connected, approximately one-third of corporate fleets have connectivity for 5% or less of their entire fleets. This is expected to change dramatically by 2025, when it is estimated that 48% of all fleets will be connected, with the pandemic speeding up the transition to connected fleets.

Businesses want connected vehicles for a variety of reasons



72%

of respondents said reducing costs makes vehicle connectivity a high priority.



72%

cited improved driver safety and behavior as important factors.



60%

said connectivity is important for vehicle security and locating vehicles.

Connected vehicles offer several advantages for fleet operations. A central dashboard can assist with visualizing fleet operations and tracking driver performance. Vehicle data can be collected to assess fuel usage, provide insights into how vehicles are operating and assist with preventive maintenance. At the same time, many fleet operators see room for improvement in the areas of predictive modeling and application programming interface integration.

PYMNTS Intelligence

Fleet operators already see gains from connected vehicles

A survey of European fleet operators [showed](#) clear ROI for most of those that had invested in connected vehicle technology. Eighty-six percent of respondents reported ROI within a year or less, with 44% seeing a return in less than six months. Fifty-two percent also said they were able to reduce fuel costs, while 43% saw a reduction in accidents. Since the pandemic began, 47% of respondents reported investing in new systems for tracking vehicle data. Among those who invested in integrated video technology, 57% reported reduced costs associated with accidents, and 47% were able to obtain reductions in their vehicle insurance costs.

Interest in expanding fleets is still on the rise, and along with it are opportunities for connected vehicle solutions as operators seek to update fleets. August 2022 [saw](#) year-over-year growth in fleet sales, with a 37% increase in commercial fleet sales and a 28% increase in government fleet sales. Among fleet executives surveyed, 44% [said](#) new purchases are motivated by the improving fuel economy, and 64% cited costs associated with maintenance and repairs.



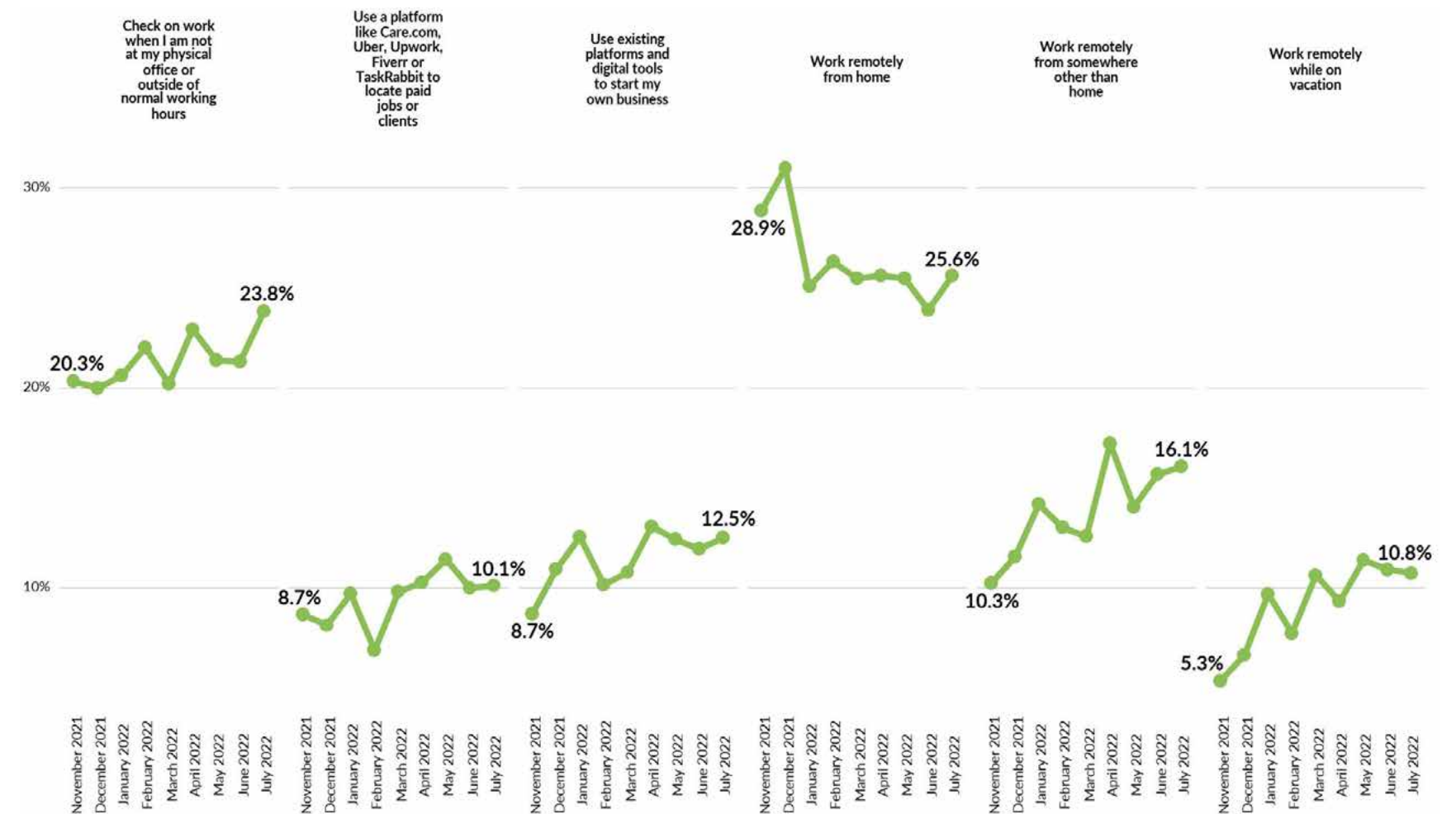
Chart Of The Month

Modern Lives Are Connected Lives

Many workers already use enhanced connectivity for work, and that trend is manifesting in the use of connected vehicles.

Table 1: Daily digital engagement in work activities

Share of respondents engaging in activities related to the work pillar daily



Source: PYMNTS

[The ConnectedEconomy™ Monthly Report: The Work-From- Anywhere Summer](#), September 2022

N = 2,736: Complete responses, fielded July 8, 2022 – July 14, 2022

Insider POV

The Changing Relationship Between Customers And Vehicles



“There is a great opportunity that sits in front of us, as an industry, to help car buyers be better at buying cars.”

ALAIN NANA-SINKAM
Senior vice president
Business development

TrueCar®

An interview with [Alain Nana-Sinkam](#), senior vice president of business development at [TrueCar](#)

Manufacturing the vehicles customers want

When Tesla recently announced features it was dropping from its latest batch of Model 3s, the company revealed that vehicle log data had shown consumers were not using these features. Such data will clearly alter how manufacturers match what consumers are looking for with the cars they build, according to Nana-Sinkam. In the past, companies tried to solve this problem by providing a complicated set of options and customizations for consumers ordering vehicles.

Now manufacturers can see which features customers find most attractive in real time and not waste time and money adding features that will go unused. Manufacturers could also provide customers the option of unlocking features they want long after purchasing the vehicle.

Insider POV

Personalizing vehicles through software

Particularly in urban environments, connectivity has aided vehicle mobility services that permit consumers to access vehicles when needed. Fleet operators can better serve consumers' specific needs by providing customization options that were not previously available. Consumers could order not only the vehicle they want but also adjust settings such as favorite radio stations or environmental control preferences before they even reach the vehicle.

In addition, fleet operators can use connectivity to deploy resources more intelligently, from anticipating the times of day and even year when demand will emerge to the types of vehicles to deploy in different areas.

“Here is Alain’s media that he likes to listen to, and we’re going to move the seat back because he’s a little taller, and he likes it to be 71 degrees — the vehicle itself becomes less important because you’re really just carrying your experience from vehicle to vehicle, and the technology is there to support that kind of thing.”

ALAIN NANA-SINKAM
Senior vice president
Business development

Removing complexity for the customer

Car buying can be complicated, and it is growing even more so with the emergence of electric vehicles. One of the biggest opportunities will be developing platforms that translate customers' needs into features they may not fully understand. Nana-Sinkam believes that, in the future, the options on a dealer's site, such as SUV versus convertible, color options or even mileage, will be replaced with systems that narrow down the search based on criteria such as preapproved credit and daily commute. The emphasis will be on personalization and making the experience as seamless as possible.

Insider POV

Fueling innovation with connected car technology



TATIA ADAMS FOX
Vice president &
general manager
Travel & Entertainment
National Client Group

**Insights from
Tatia Adams Fox
at American Express
on what's next
in connected
vehicle technology**

**AMERICAN
EXPRESS**

“We spend a considerable amount of time in our automobiles, and as a result, the capabilities of connected vehicles are constantly and rapidly evolving to fit the demands of everyday life experiences.

Through innovative touch points like windshield screen text messages, news, weather updates or voice-activated commands to unlock doors and check fuel levels, the impact and evolution of connected vehicles will change the way we engage and interact with the world — all from the insulated comforts of our vehicles.

Connected cars will drive the transformation of global wireless data networks to more sophisticated personalized and customized experiences. They will also drive B2B and B2C businesses to aggressively invest in innovative connected vehicle technologies as well as market and consumer data that inevitably create new revenue streams.”

Companies To Watch

Innovators In The Connected Vehicle Space



OVO Automotive [enables](#) car importers and large fleet managers to stream applications from the cloud to vehicles' interactive screens, making such applications vehicle-agnostic. The company, which is also developing an app store, recently [raised](#) \$3.5 million from investors.



John Deere [estimates](#) that software fees for its connected vehicles will account for 10% of the company's profits by 2030. The control such connectivity gives the company raised concerns, however, and [led](#) to efforts to circumvent the software.



Paccar, which [manufactures](#) light- to heavy-duty trucks, [expects](#) a future in which 18-wheelers are rolling computers. Paccar plans to include hardware and software in its trucks to provide insights into overall operations and assist with predictive maintenance.



\$5.5M

raised from investors



10%

of the company's 2030 expected profits will be from software fees.



18-wheelers

will be rolling computers in the near future.

What's Next

Navigating Component Shortages And High Vehicle Prices

Vehicle prices and inventories are pushing some fleet operators to change how they buy trucks.

Despite growing acceptance and desire for connected vehicle technology, chip shortages could still [drive](#) high vehicle prices. The automotive industry has struggled with automotive semiconductor shortages since 2020, and this issue could continue through 2023. Inventory challenges thus have 41% of fleet executives changing how they procure new trucks. Seventeen percent are even considering holding onto existing trucks longer. Leasing has also become more common, with 31% of executives leasing trucks, compared to 14% a year ago.



About

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