

2020 Tech Trends and Challenges in Trucking

Does Your Fleet Tech Stack Meet Your Evolving Industry Challenges?



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Why did we conduct this research?

FreightWaves has teamed up with Vector to conduct the first of what will become an annual global survey of the trucking technology landscape. The purpose of this report is to determine where the industry is headed and to better understand the latest emerging trends in all things trucking technology. This report incorporates survey results from 318 respondents. The resulting data—alongside expert analysis—provides a benchmark report that back office teams can measure themselves against each year.

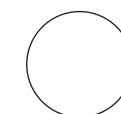


Why should you care about this research?

The survey questions were designed to promote analyses that enable you to:

- Gain a better understanding of where the trucking industry is headed and act accordingly
- Plan your future technology initiatives
- Engage management in open and clear business and technical discussions
- Upgrade your team's technology knowledge base

In short, we aimed to provide you with key insights that will help you bolster your trucking technology expertise.



Data Summary

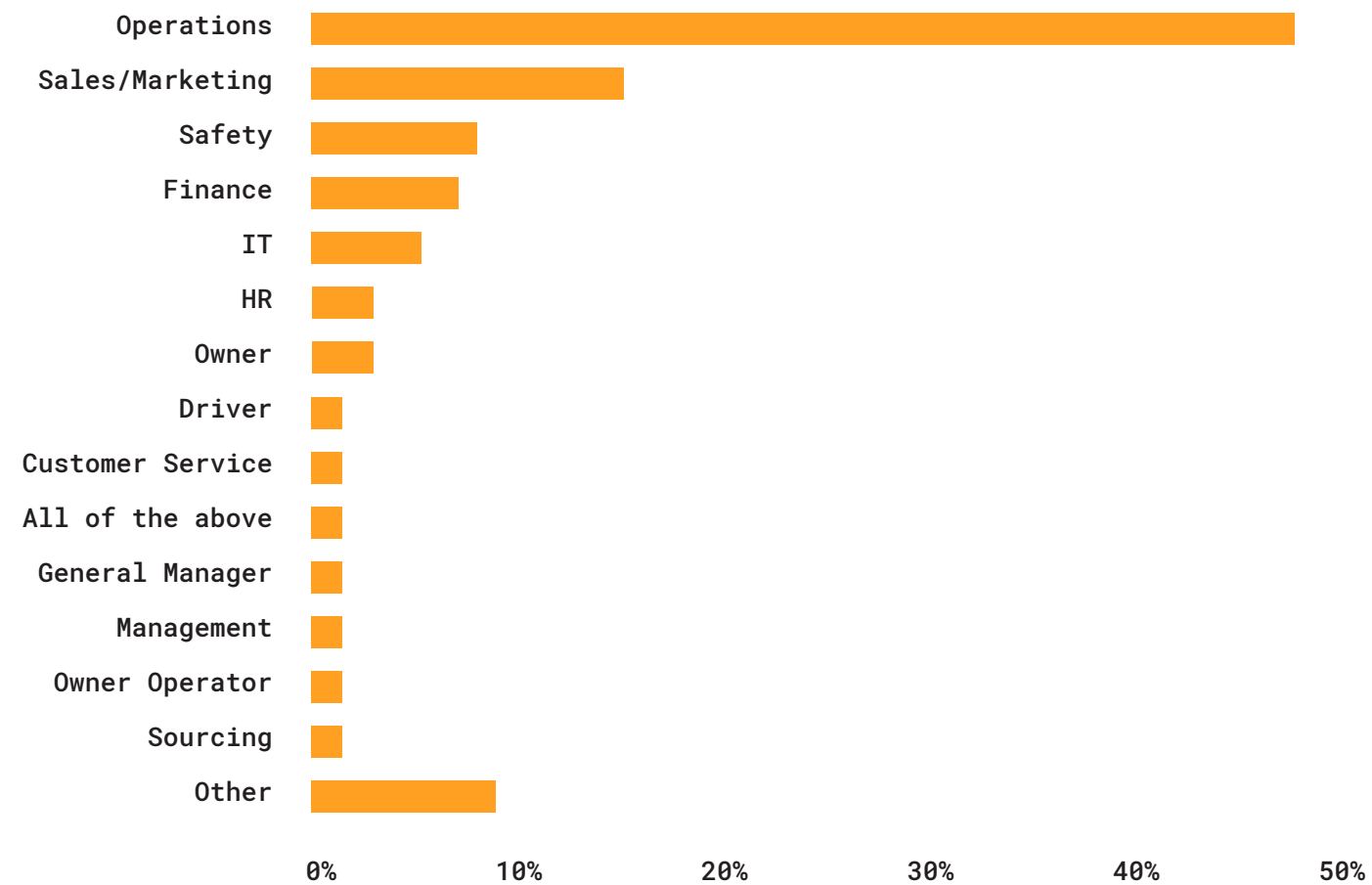
- Survey was conducted between June-August 2020
- 318 back office professionals completed the survey
- Most of the respondents were in operations departments
- Fleets of all sizes—SMB to enterprise—participated
- A wide range of trailer types were represented

While most respondents were in operational roles, we saw a broad dispersion of job titles represented in this survey. It was great to see that teams across the back office understand both the fleet technologies and current business challenges.

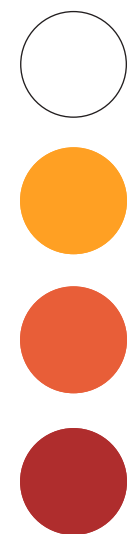
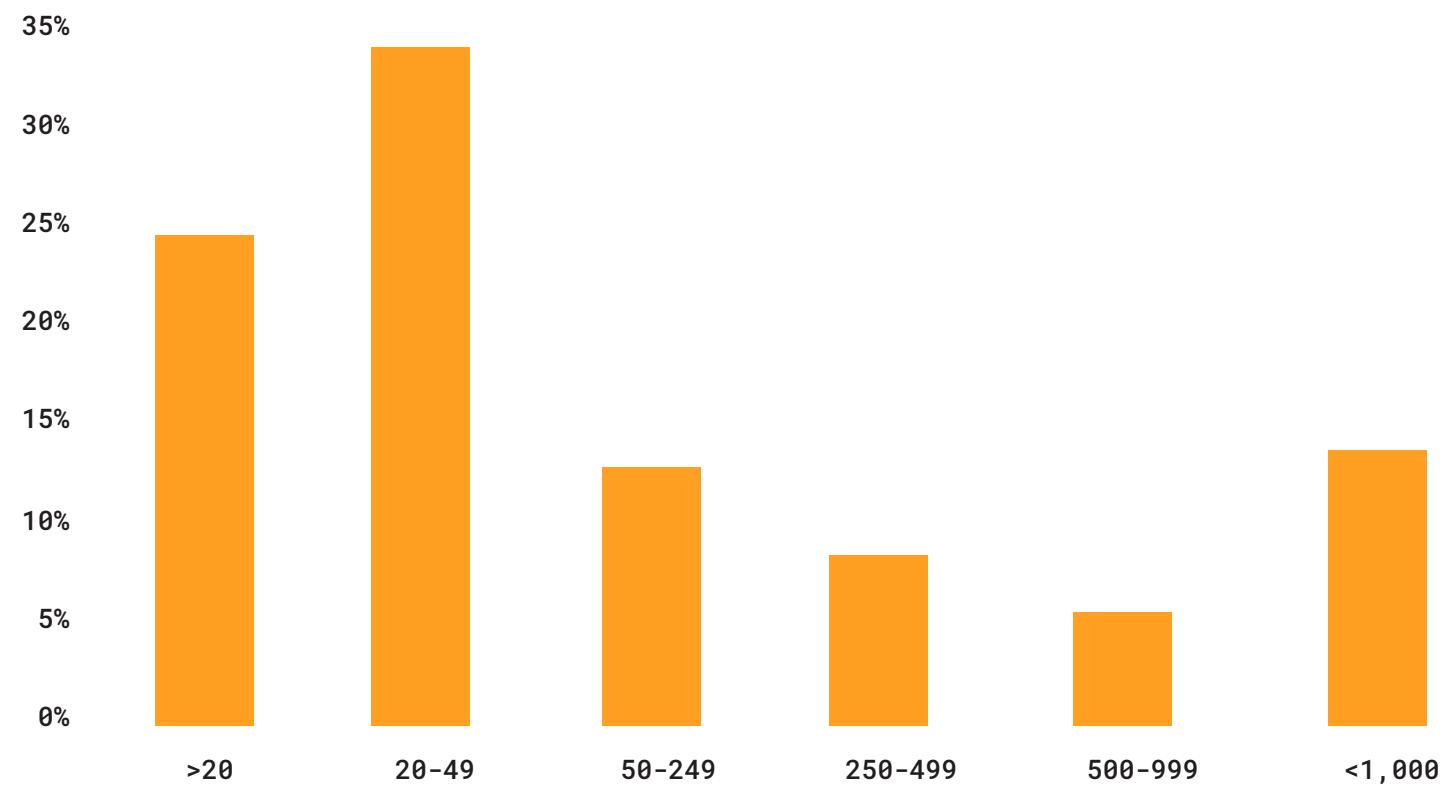
Nearly half of the respondents run dry van, reefer or full truckload, but a wide range of trailer types and operating modes were represented within this survey.



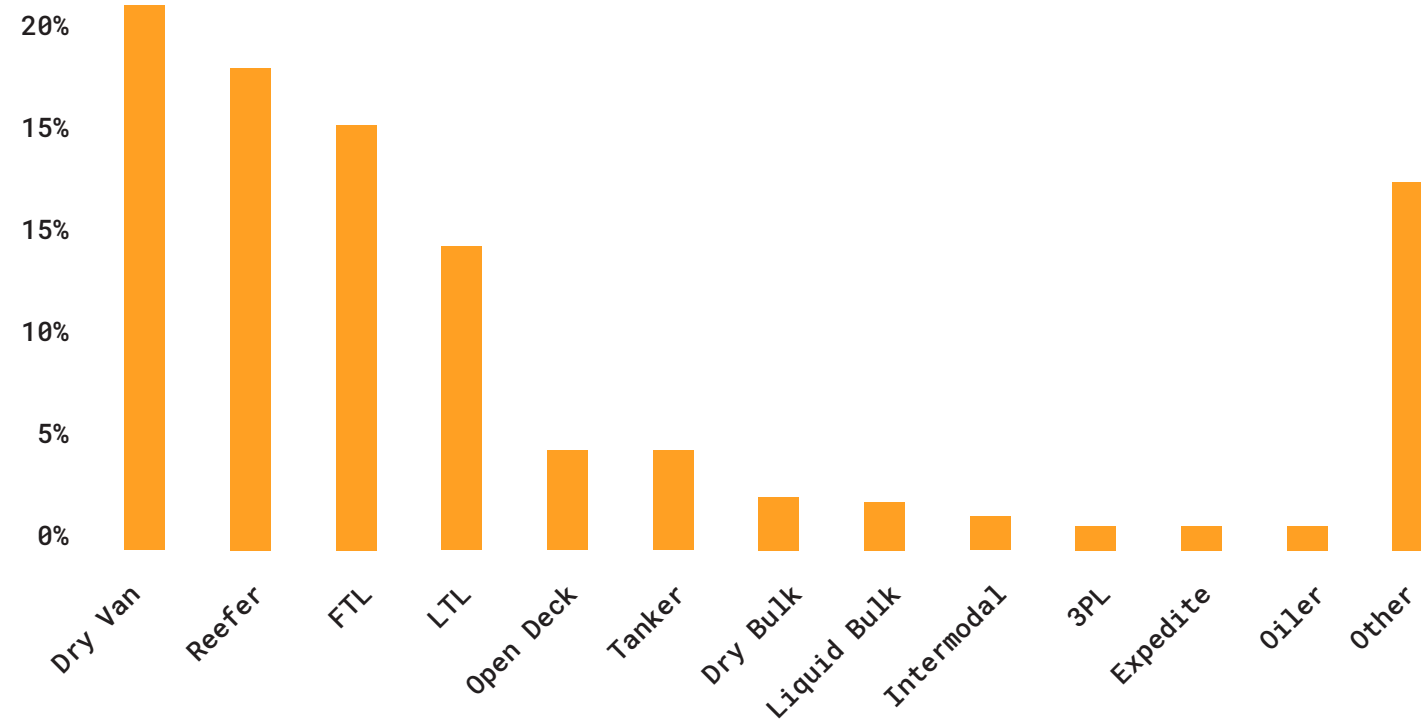
Survey Respondents by Job Title



Survey Respondents by Fleet Size



Survey Respondents by Trailer Type/Mode





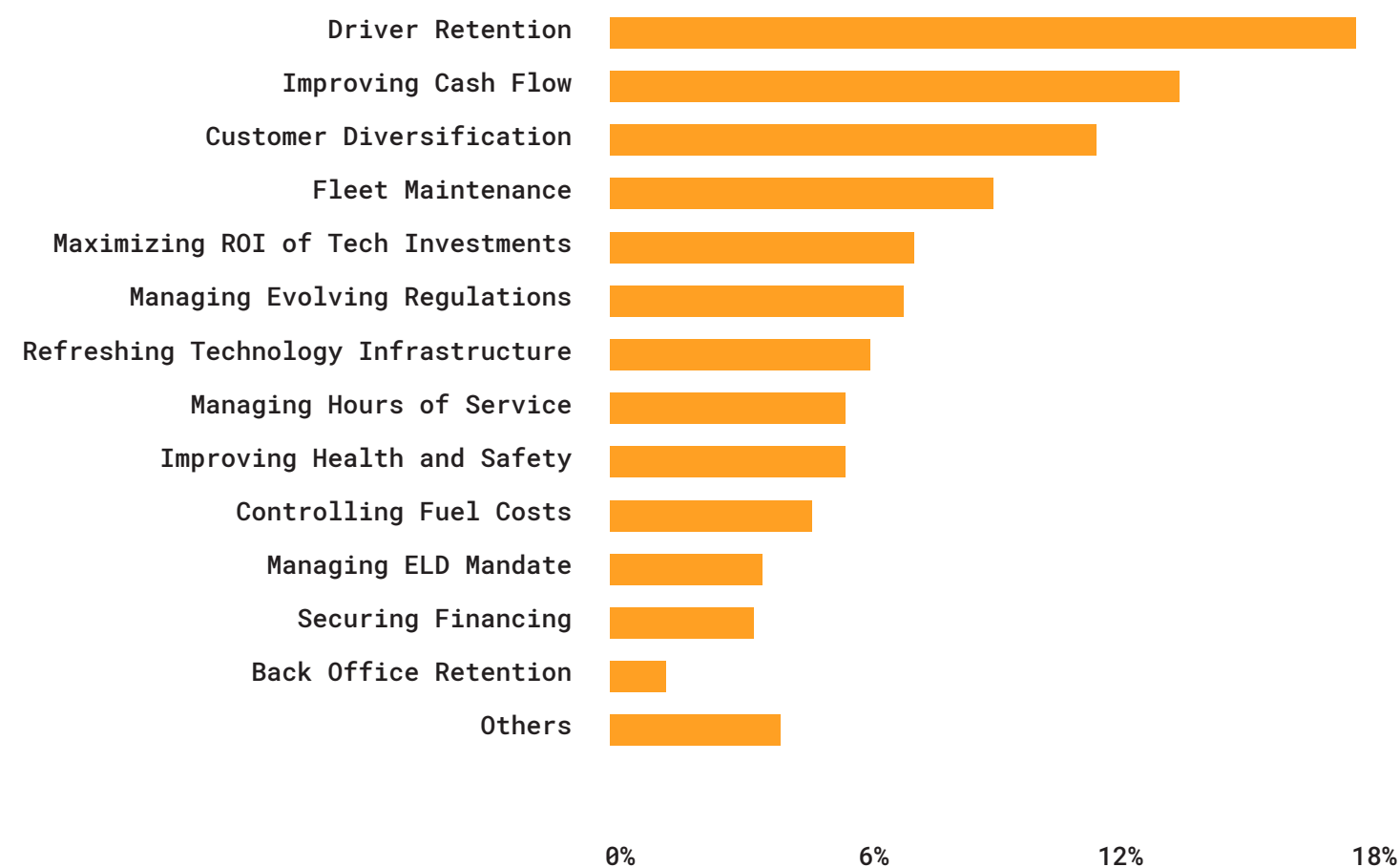
Industry Challenges

This freight season will be remembered for many years to come, with 2020 potentially representing the most volatile year that the freight markets have ever seen. The market has experienced wild demand swings and abrupt supply disruptions over the past eight months. In addition, individual companies have had to learn to operate in a completely new environment and come up with innovative ways to ensure their employees' safety.

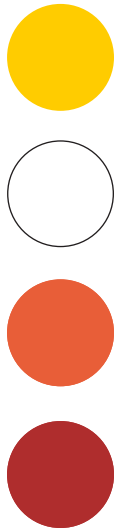
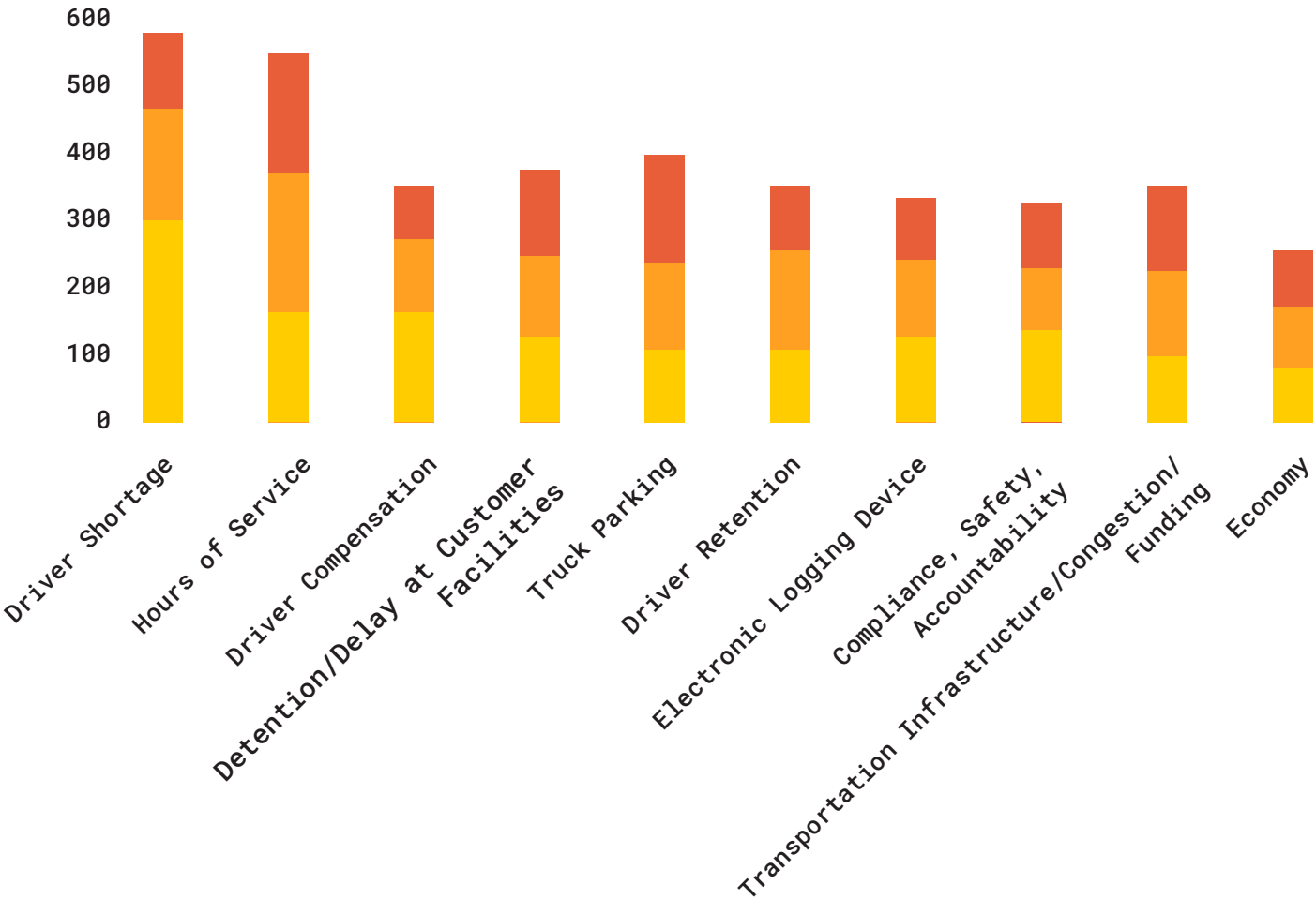
Overall, driver retention and cash flow seemed to be the most prevalent industry challenges on operators' minds. The data is slightly skewed toward smaller carriers, so their biggest concerns—retention, cash flow and customer diversification—top the list. When the data is segmented by fleet size, however, driver retention remains the number one issue.



While it might not have anything to do with your role, what do you believe are your company's three biggest business challenges?



ATRI Critical Issues in the Trucking Industry 2019





Our survey results align with recent findings from the American Transportation Research Institute (ATRI), placing driver-related issues firmly at the top of everyone's minds. Whether it is framed as an actual shortage or a perpetual fight to recruit and retain quality drivers, the famed "driver shortage" or "driver squeeze" has plagued the industry for years. In fact, it has topped ATRI's annual list of concerns for four years running.

While income challenges are not included in the ATRI list, cash is king. It is always a good business practice to grow and diversify your customer base. This has proven especially important during the pandemic. While many nonessential businesses were shut down, others—like packaged goods and food—were outperforming. Small and mid-sized fleets are disproportionately at risk of having non-diversified customer bases, making cash flow a more significant issue.

The largest carriers (500+ trucks) said technology challenges were some of their most prominent concerns, falling just behind driver retention. Nearly half of the large carriers surveyed said refreshing technological infrastructure is among their companies' biggest challenges. Nearly the same amount said they were concerned about maximizing tech ROI. Due to

the geographic and financial scale of national carriers, they are more prone to embrace frequent technological upgrades.

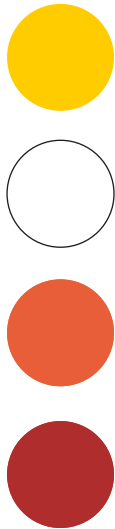
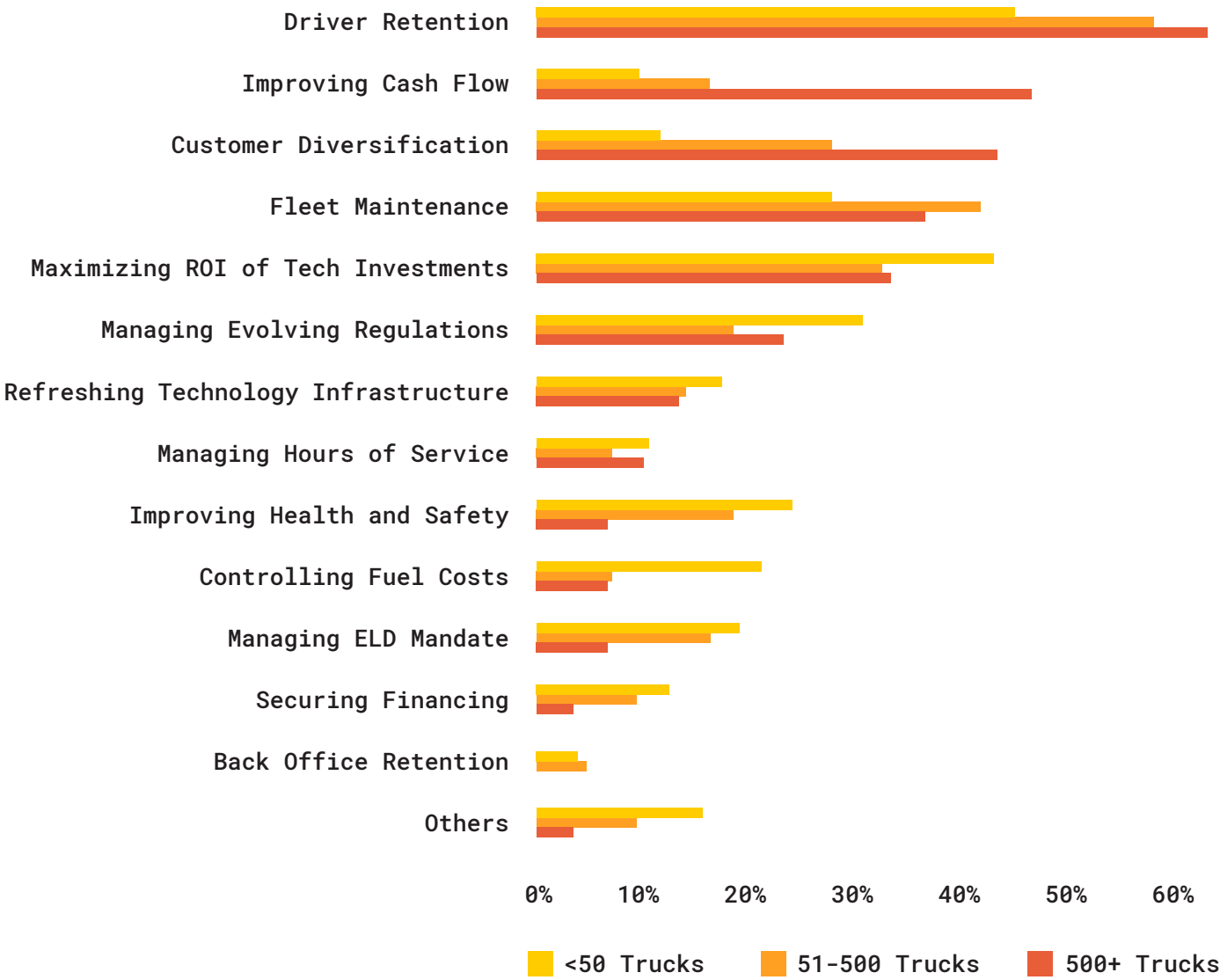
Regardless of size, all respondents shared a common theme: They hate to spend more than they deem necessary on various services. Back offices often house hidden costs that simply do not show up in the budget as line items. Time spent preparing and sending invoices is a significant contributor to these sneaky costs. According to a 2019 study by the Institute of Finance and Management (IOFM), switching to automated systems can reduce the cost to process a single invoice by nearly 40%, drastically reducing cost and improving cash flow.

Overall, the carriers surveyed were fairly confident they could resolve their respective issues in the next six months. Still, respondents showed some trepidation. Mid-sized and large carriers were marginally more confident than their smaller counterparts, but the thing standing in the way of their progress was the same: Not enough resources or room in the budget. Smaller carriers were significantly more likely to note a lack of expertise, as well as resource constraints. With tighter budgets and slimmer staffs, issues like evolving regulations are more difficult to overcome for smaller fleets.

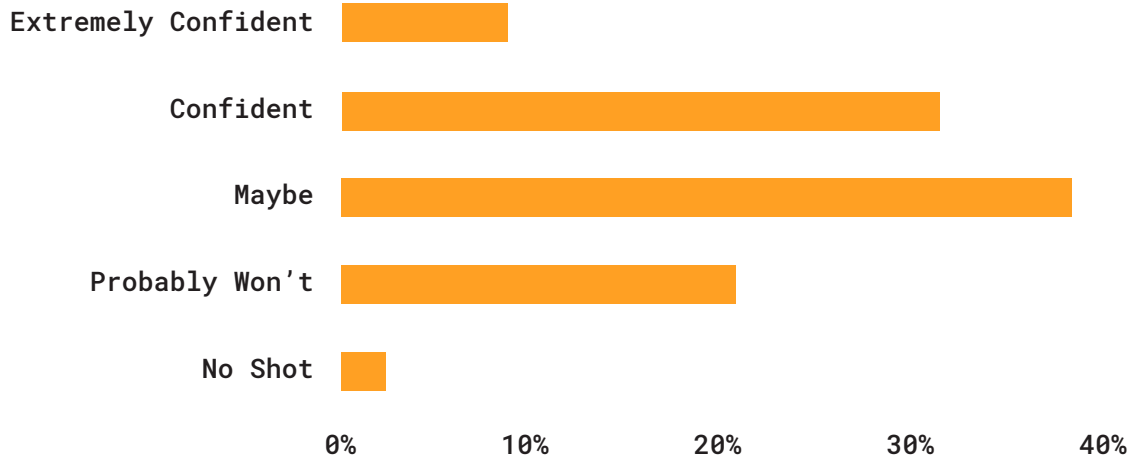


What do you believe are your company’s three biggest business challenges?

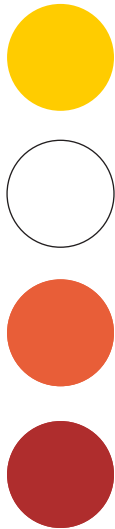
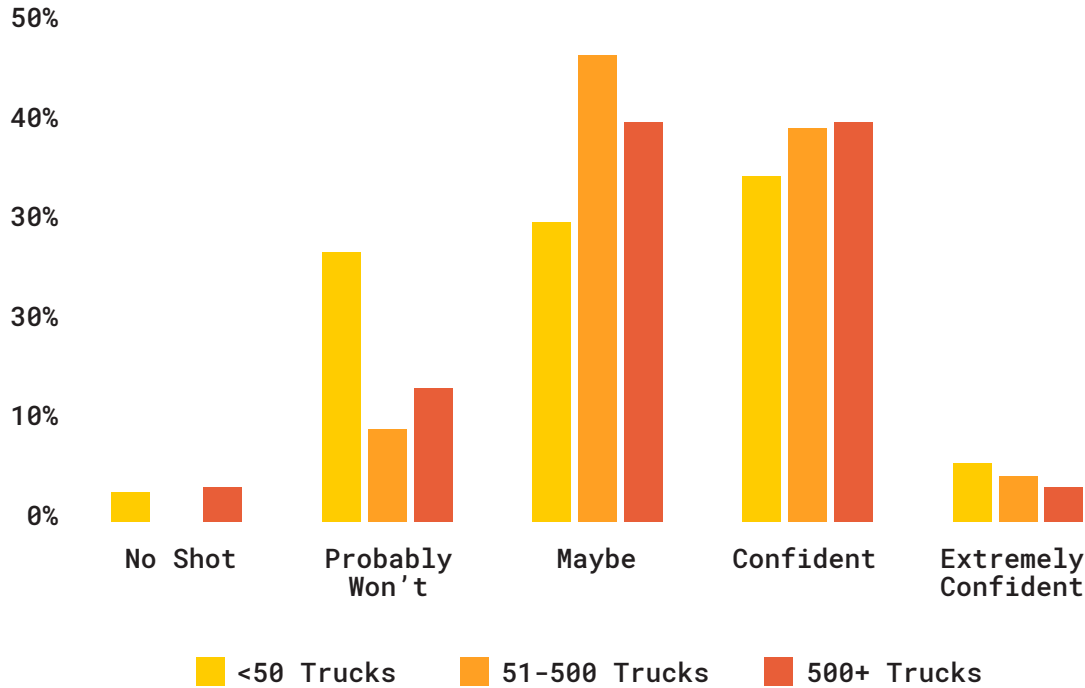
By fleet size >



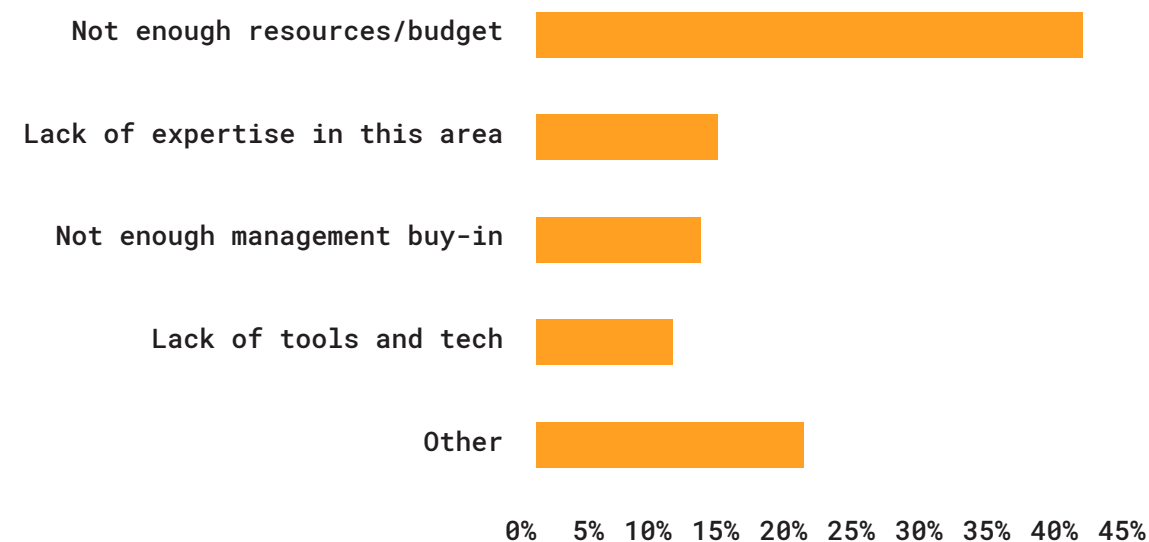
How confident are you that this challenge will get resolved in the next 6 months?



By fleet size >

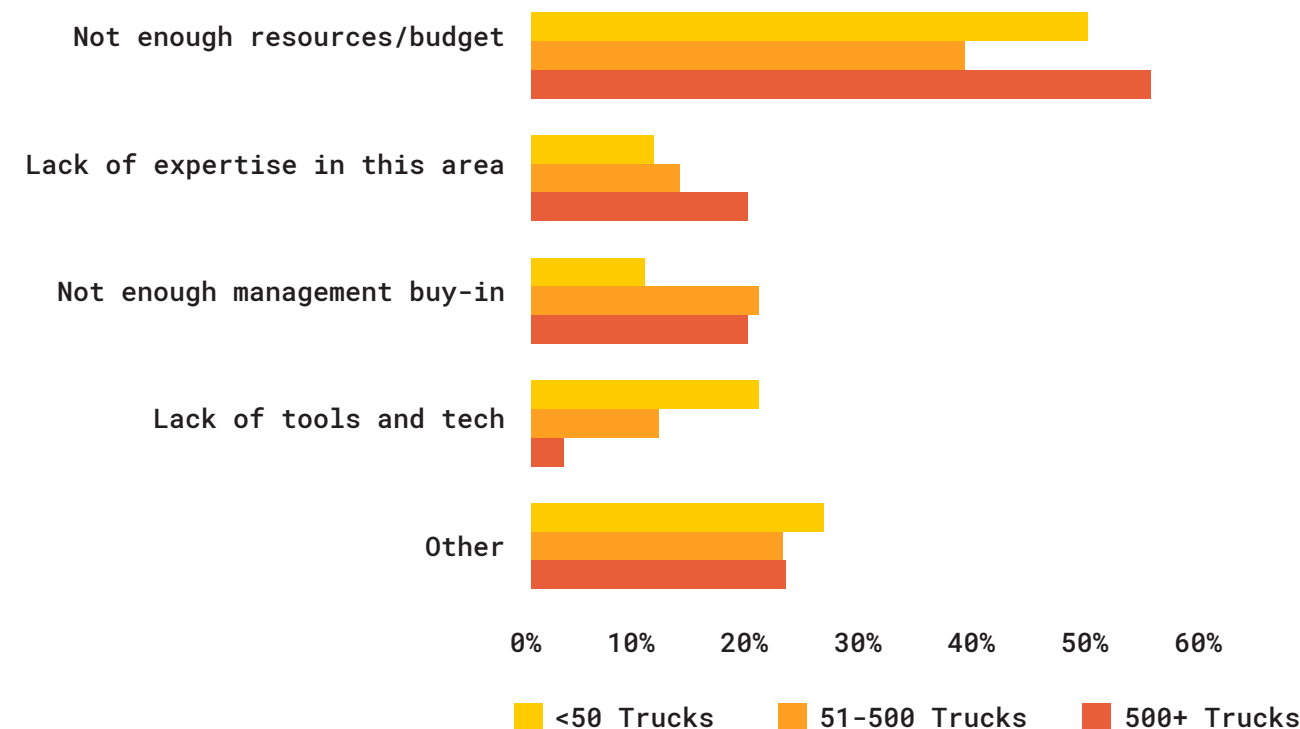


What are the main reasons why your business challenges may not get solved in the next 6 months?



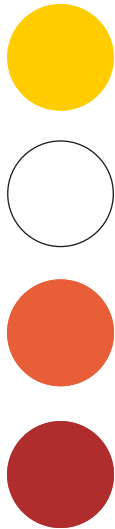
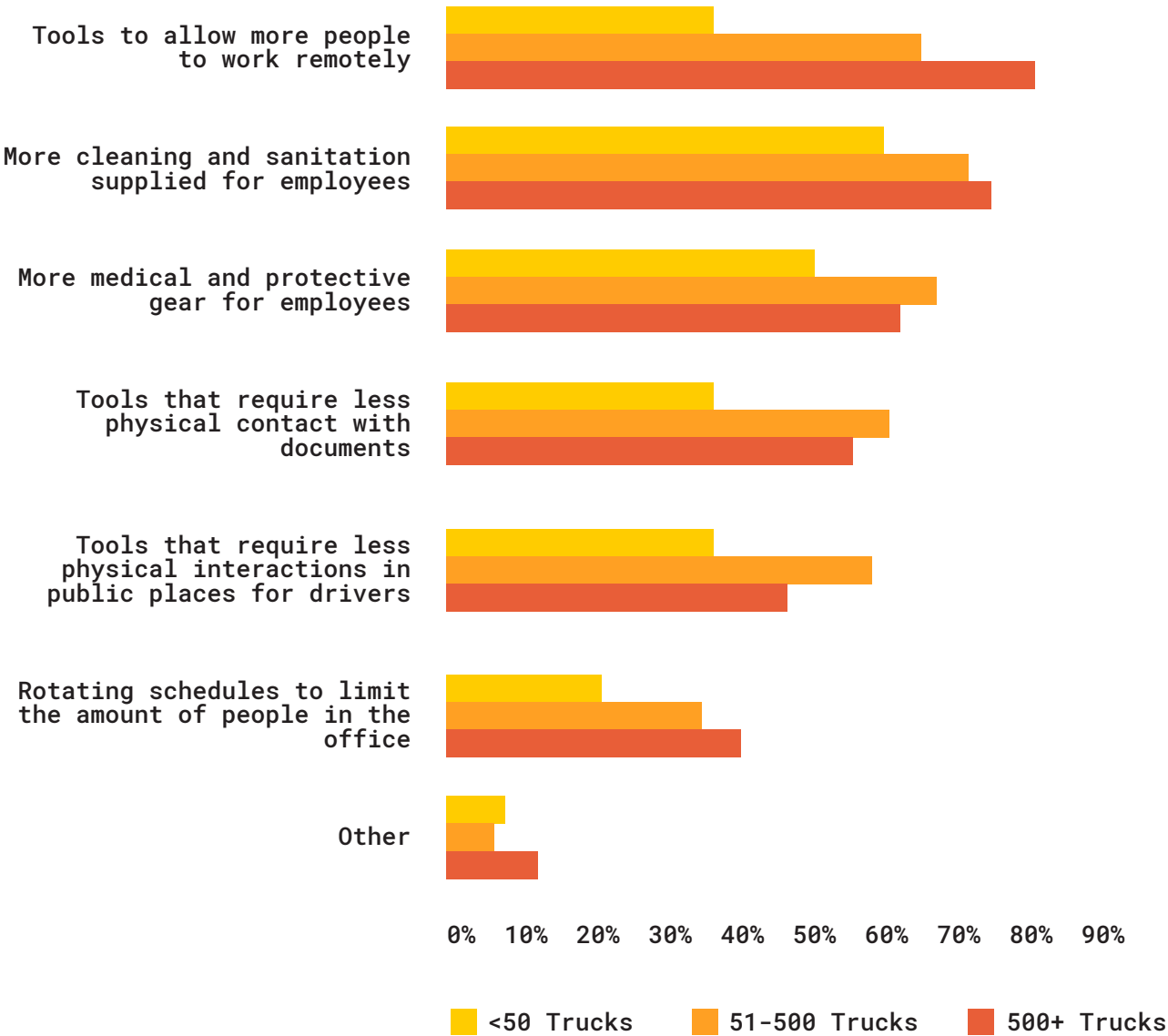
By fleet size >

With respect to COVID-19 initiatives, larger carriers appeared more capable of providing more robust aid to their employees.



Given the current COVID-19 pandemic, what initiatives have you put in place?

By fleet size >





Fleet Tech Stack

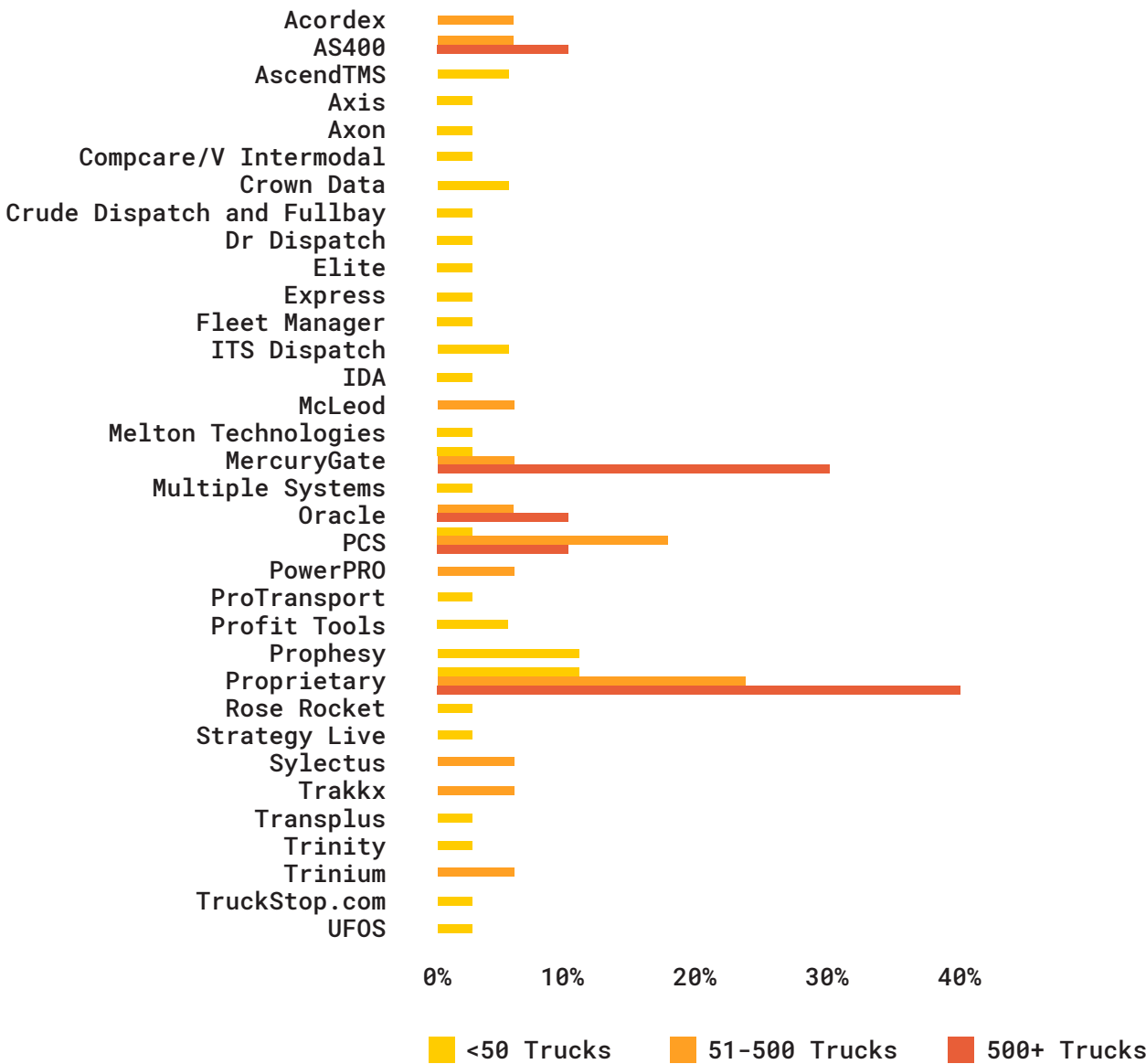
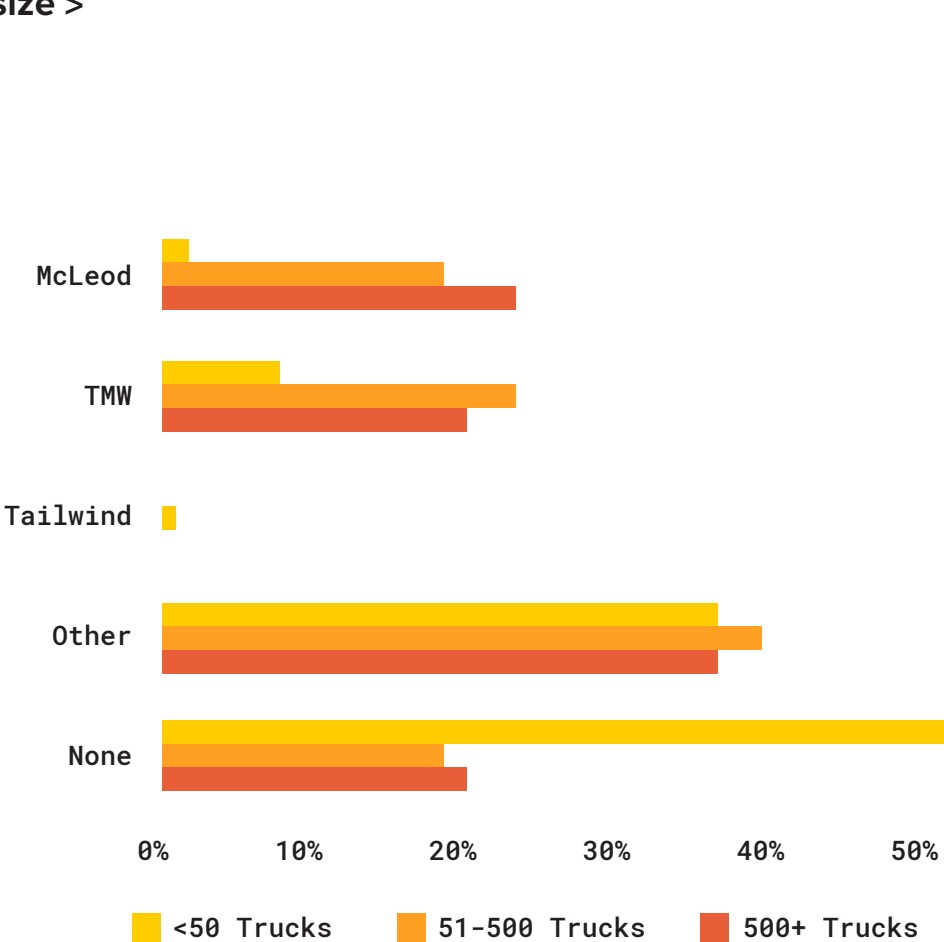
The transportation and logistics industry has no doubt undergone a technological revolution in recent years, but research has shown that a large portion of the industry players have been left behind. Mid-sized and large carriers have benefited from the increased productivity that accompanies technological innovation, while small carriers have struggled to keep up with the changing landscape. With small carriers making up most of the capacity on the road, their inefficiencies can be felt across the entire industry.

Our survey results made it clear that carriers with fewer than 50 trucks are not readily embracing technology. Less than 50% of small carriers surveyed were operating with a TMS. This number was much smaller—about 20%—among mid-sized and large respondents. Among those that reported using a TMS, about 20% said they were using McLeod or TMW systems. The only other company to break double-digit usage was MercuryGate with 12%. The largest carriers were split between MercuryGate and their own proprietary systems.



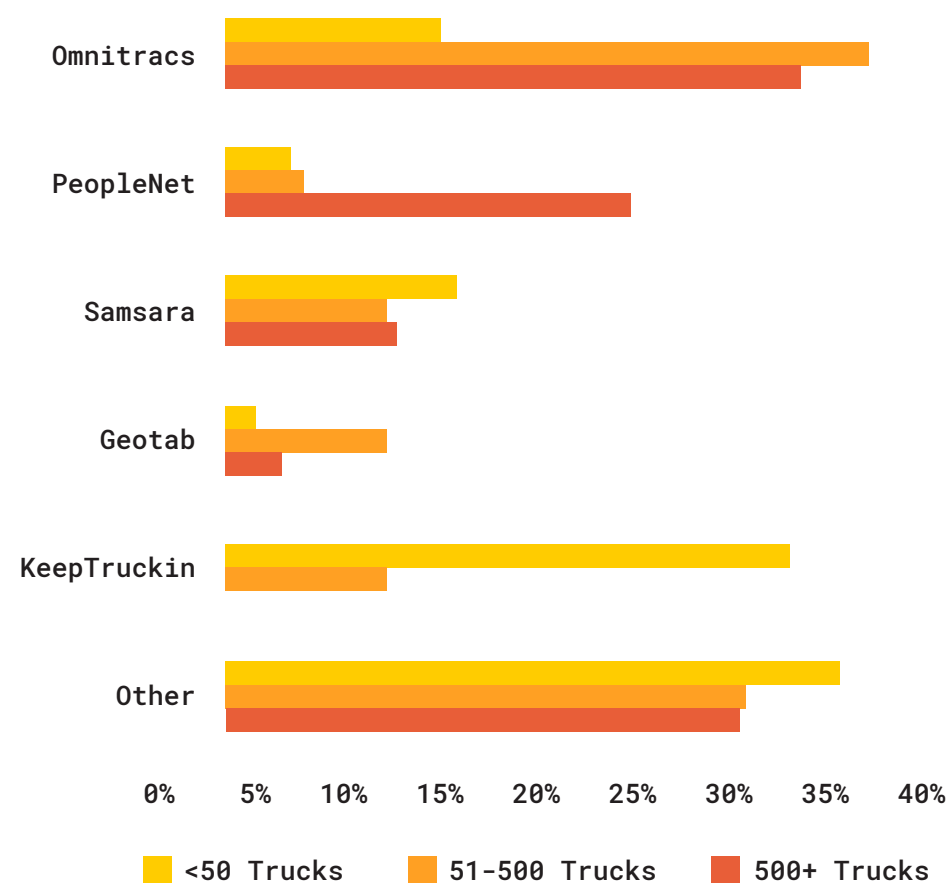
Which TMS (transportation management system) are you using?

By fleet size >



Which ELD device are you using?

By fleet size >



The bigger players have a larger proportion of market share in the electronic logging device (ELD) industry than in the TMS space. Omnitracs and PeopleNet dominate the market for large carrier ELD providers. Omnitracs also scores high among mid-sized carriers.

KeepTruckin has secured the smaller fleets, with over 30% of respondents with fewer than 50 trucks choosing to partner with them. No other single company won even 15%.

As was the case for TMS, small carriers use a swath of different ELD providers, fourteen of which were not used by any mid- or large-sized fleets. Big Road and Transflo both stand out among mid-sized carriers.





Back-office solutions can rapidly reduce costs and save time, especially in smaller offices where fewer people are tasked with doing more. With the smallest carriers still using manual processes, the idea of switching to an automated process may initially come across as too expensive or time-consuming. The potential long-term gains, however, remain impressive.

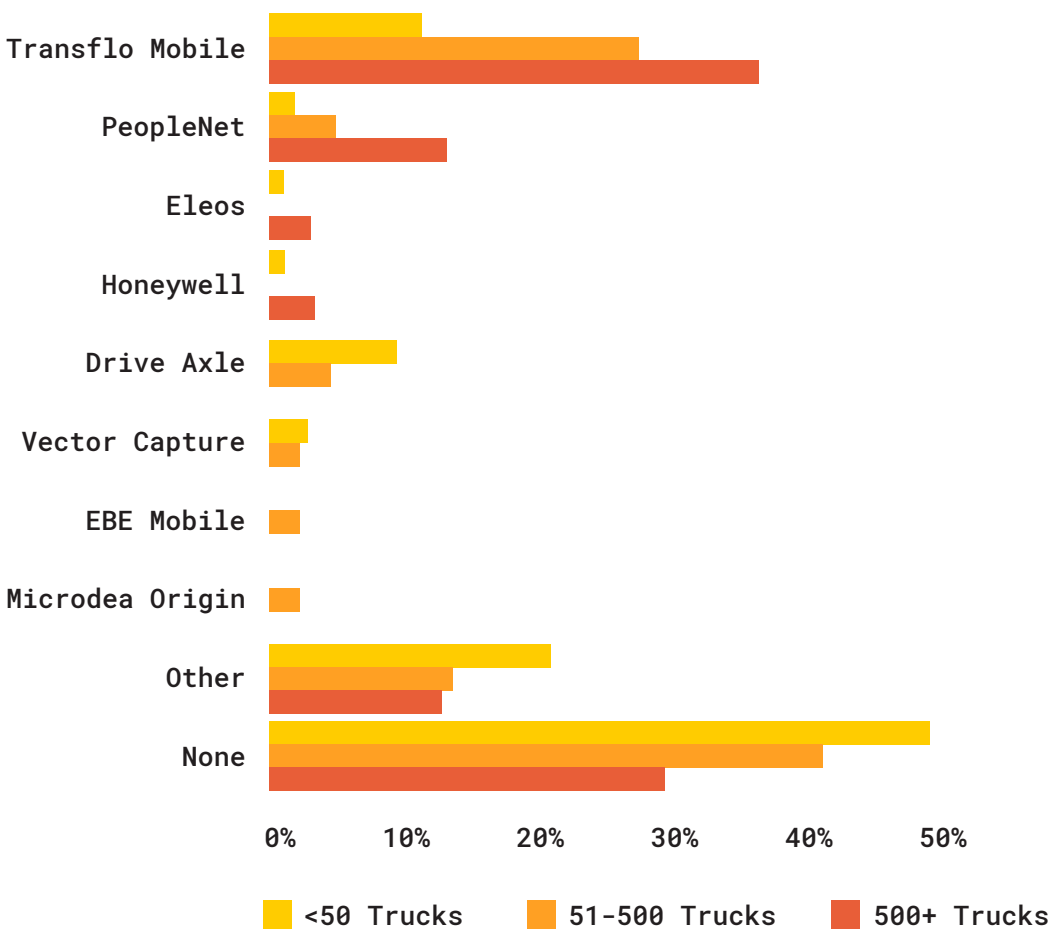
PricewaterhouseCoopers (PwC) released a report on trends that define the transportation and logistics segment in 2019, citing technology as the most significant factor determining the health of businesses in the space.

COVID-19 has only exacerbated the need for technology, as fleets must find ways to perform their duties while remaining socially distant. Many manual processes are no longer feasible in this new contact-less environment. One of these processes include proof-of-delivery forms or bills-of-lading, yet mobile scanning solutions nor automated billing have not yet become industry standards. Most small and mid-sized carriers surveyed do not use a mobile scanning solution, and only two-thirds of large carriers said they do. Of those that do, Transflo Mobile and Peoplenet stand out. Of the carriers that responded “other,” CamScanner was the most commonly mentioned solution.



Which mobile document scanning solution are you using?

By fleet size >



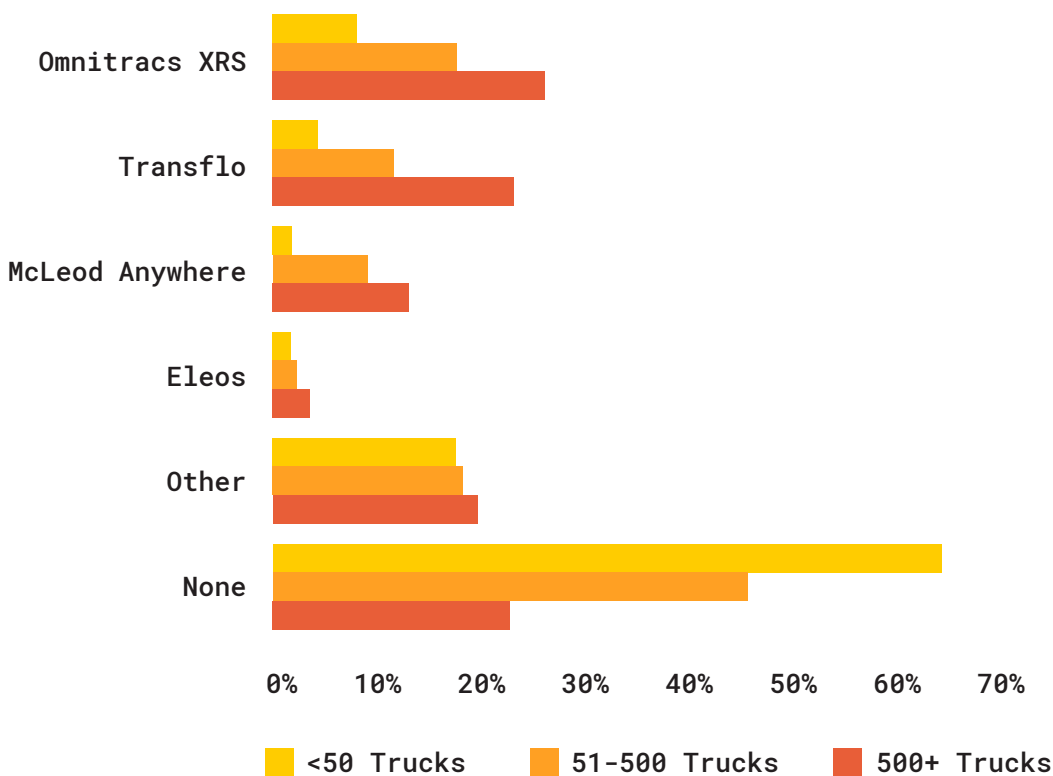
Mobile dispatch applications are most popular among large carriers. Only about half of the mid-sized carriers surveyed utilized the technology, and it fell even more out of favor with small carriers.

Brand preferences were fragmented among carriers that reported using a mobile scanning solution, with no one company winning more than a third of respondents for any group. Familiar names—Omnitracs, Transflo and McLeod—each garnered multiple mentions.



Which mobile dispatch applications are you using?

By fleet size >



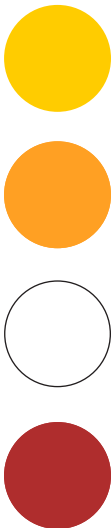
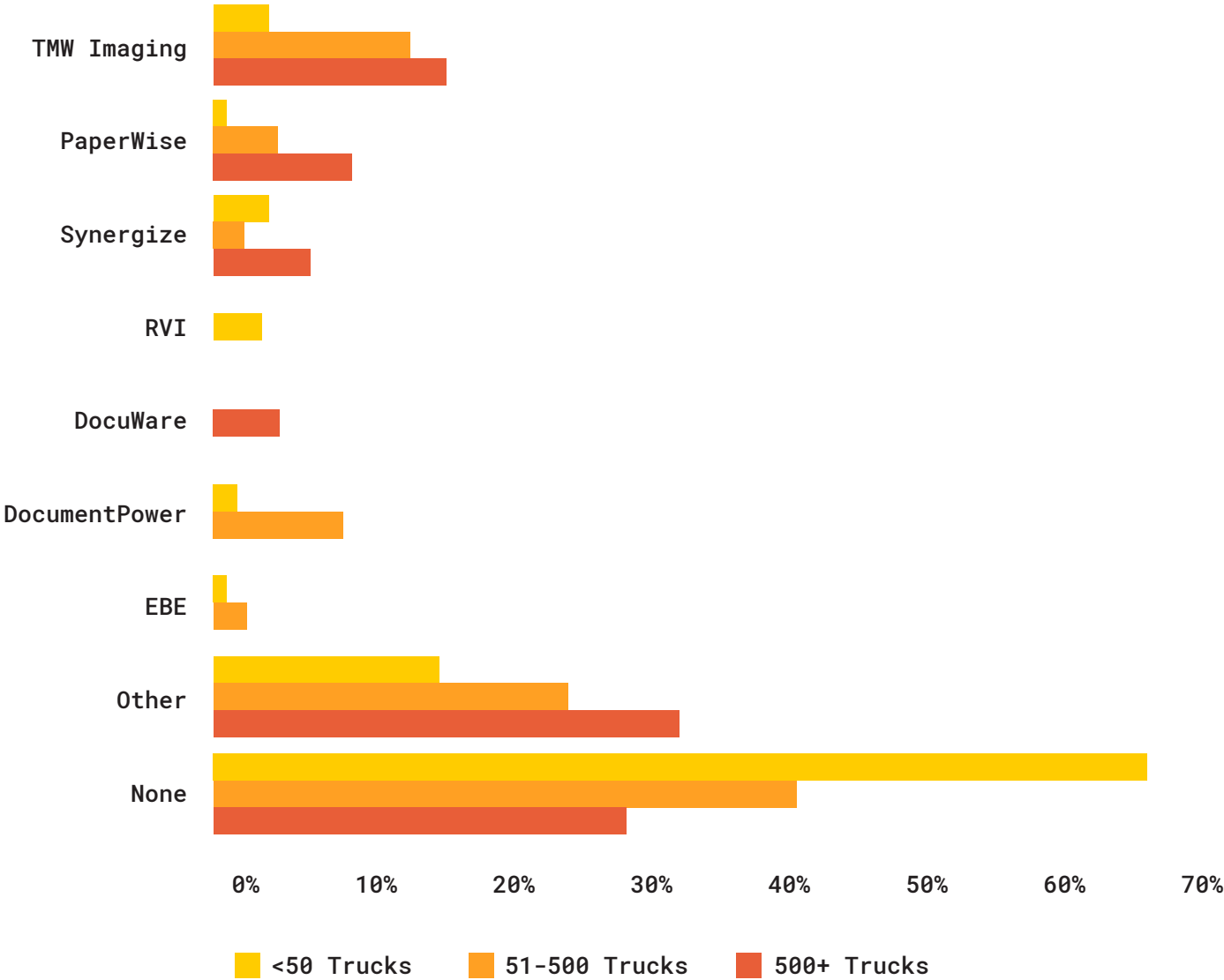
As with most of the other technologies evaluated, less than a third of small carriers surveyed said they utilize back office imaging. Over half of the mid-sized respondents and almost 70% of the large respondents reported using back office imaging services.

This segment was also fragmented among users, with no company claiming more than 20% of any one group. Overall, TMW Imaging came away with the most sizable advantage.



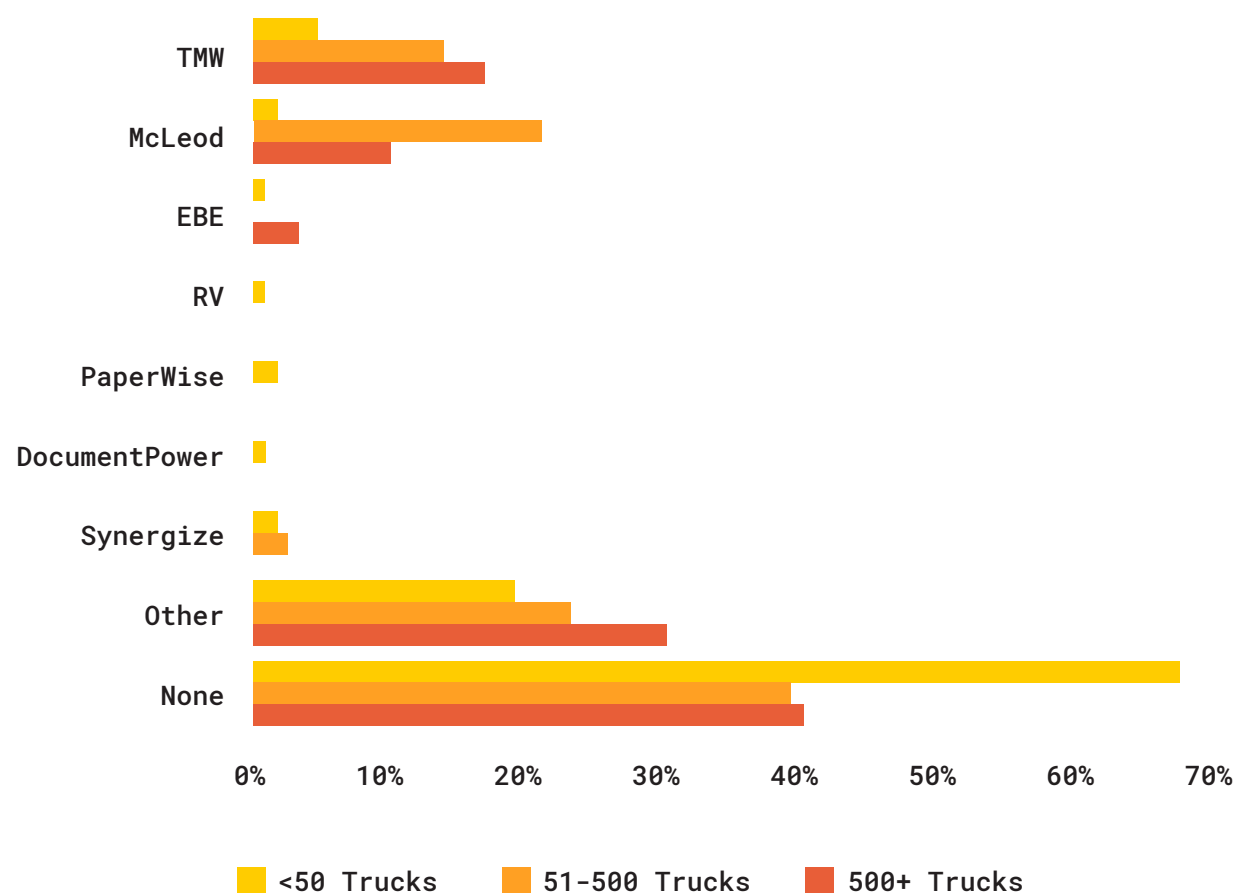
What back office imaging system do you use?

By fleet size >



What are you using for automated billing?

By fleet size >



Technological innovation gives fleets a clear advantage. Automation of redundant processes frees up employees to focus on more complex tasks and reduces time and money wasted on the most mundane work.

Billing provides a perfect grounds for automation. IOFM found that accounts payable was the most time-consuming and paper-intensive administrative function in most offices. [The Association for Image and Information Management \(AIIM\)](#) determined that, on average, it costs \$12.90 to process each invoice, with a median cost of \$7.90. This finding was consistent across small and large companies alike.

More than half of the mid-sized and large carriers surveyed used automated billing software. Only about a third of the small fleets surveyed reported using this software, widening the potential productivity gap between small and large carriers and putting the smallest carriers at risk for cash constraints.



Conclusion

Technology adoption for carriers in general is still in its early stages. The most basic technological need of a carrier—a TMS—is only used by 45% of small carriers. That is the highest rate of adoption for any of the technologies questioned in the survey for fleets with fewer than 50 trucks. The only exception is one that is federally mandated in ELDs.

This hectic and unpredictable freight season has created a unique opportunity for carriers to reevaluate their technology stacks. The elevated demand has stressed fleets and offices alike, but strong rates are improving the balance sheets. Carriers around the country have had to adjust to work-from-home or hybrid schedules, and companies have been forced to adopt new technologies to keep the trucks running. There has been a demand-induced increase in technological needs due to the historically high freight demand. With some additional income in the cards for 2020, this may be the most opportune time to invest in new technologies in recent history.

Technology providers have been able to prove their ROI, allowing for rapid growth. Carriers need to assess the capabilities of their current tech stack, paying attention to redundancies and shortcomings. This will allow them to identify recurring manual tasks that could be automated or streamlined to increase operational efficiency.

Technology solutions are plentiful, but adoption is lagging. To come roaring out of a recession, companies must improve operational efficiency while making comprehensive investments into the future. Both can be accomplished with the right technology partner.

