ENDEAVOR BUSINESS INTELLIGENCE

STATE OF FLEET OPERATIONS

Insights on Delivery Visibility and Cargo Security

FleetOwner FleetMaintenance
Bulk Transporter TRAILER|BODY BUILDERS

DESCARTES

JULY 2026

FleetOwner FleetMaintenance Bulk Transporter TRAILER|BODY BUILDERS

TABLE OF CONTENTS

ENDEAVOR BUSINESS INTELLIGENCE

Executive Summary 3

Overview & Methodology 6

Understanding the Respondent 7

- Company Details 8
- Fleet Assets 9
- Fleet Management Technology Decision-makers 10
- Fleet Management Technology Usage 11
- Delivery Verification Methods 12

Exceptions & Delivery Concerns 13

- Regular Cargo Losses 14
- Monthly Exceptions or Delivery Disputes 15
- Operational Impact of Delivery Disputes 16
- Time and Cost Burden for Delivery Disputes 17
- Delivery Lifecycle Challenges 18
- Delivery Visibility and Theft Prevention Technology 19
- Delivery Disputes Affect Overall Operations 20

Fleet Security Practices & Opinions 21

- Fleet Security Practices 22
- Demand for In-Trailer Visibility to Reduce Theft 23
- Demand for In-Trailer Visibility to Support Investigations and Inspections 24

Open-end & Write-in Responses 25

Fleet Owners Rely on Multiple Technologies for Investigating, Resolving, and Avoiding Delivery Exceptions and Disputes

Most lumber yards, construction equipment rental companies, and other businesses that deliver products to homes, job sites, and other customer locations now use GPS to track their vehicles for a variety of applications, including geofencing and real-time delivery updates. But that location information doesn't tell them whether those deliveries were complete, stolen, or delivered to the right place. Hence the business case for using multiple technologies to help investigate, resolve, and avoid delivery exceptions and disputes.

Those are some key findings from a new survey of 116 people who manage, use, purchase, recommend, or specify fleet management technologies such as location tracking, geofencing, vehicle diagnostics, and cargo monitoring. Conducted June 23 to July 7, 2026, the survey spans seven broad verticals including construction equipment (36% of respondents), retail/wholesale delivery (28%), food/beverage/agriculture (14%), and building materials (10%).

Forty-four percent of respondents have fleets of 51-100 assets, and another 46% have 101-1,000. The most common types are flatbed trucks or trailers (61%), dry box trucks (41%), dump trucks or trailers (40%), dry trailers (38%), and sprint vans (33%).

Using Multiple Technologies across the Chain of Custody

Respondents currently use an average of three technologies to document and verify deliveries. GPS tracking is the most common (63%), followed by customer signatures captured digitally or on paper (55%), scanning bar codes on pallets (44%), and photographs taken by the driver (44%).

The next two most commonly used technologies scan either bar codes (36%) or RFID tags (33%) on individual items, including those on a pallet. These are noteworthy because they directly address theft of partial pallets, which 30% of respondents experience on a regular basis. They also help address another type of problem for 38% of respondents: They don't know whether items were even loaded onto the truck.

For some types of businesses, re-ordering those products isn't as simple as it sounds. Take the example of a pallet of handcrafted floor tiles imported from Italy. If one or two boxes are missing, it can take weeks or even months for replacements to arrive. That delays installation, frustrating the builder and homeowner. The replacements also might not have the same shading, grain, and other attributes as the ones in the original shipment.

And then there's the cost of investigating delivery exceptions and disputes. Twenty-seven percent of respondents spend an average of two hours on each investigation, while 21% average three hours.

Sixteen percent say the value of products lost to delivery exceptions or disputes averages between $500 and $999. For another 14%, it's $3,000-$3,999. That's an additional expense on top of the investigation time: If the business can't determine where and how the loss occurred, it may have to eat the replacement cost, for example, to avoid losing a high-value contractor customer.

The survey suggests that's often the case based on the most common responses to the question, "What are the top three visibility and accountability challenges across your organization's delivery lifecycle?"

- 47% can't identify how the loss occurred (e.g., builder took wrong pallet left at jobsite, warehouse misplaced pallet, porch pirate).

- 43% have no visibility into whether any items were removed from the pallet until the customer complains after delivery.
- 37% are unable to verify delivery because the customer wasn't around to sign.

So, it's no surprise that 58% agreed or strongly agreed that delayed, missing and/or incomplete shipments are significant problems that undermine profits and customer satisfaction. There's also consensus that these costs and challenges are only getting worse. One-third of respondents agreed or strongly agreed that their organization has seen an increase in last-mile delivery exceptions or disputes in the past 12 months.

The bottom line is that fleet owners see a solid business case for using multiple layers of technologies to investigate, resolve, and even avoid delivery exceptions and disputes.

OVERVIEW & METHODOLOGY

OVERVIEW

- Endeavor Business Intelligence conducted this study, including data collection and analysis, on behalf of Descartes.
- The methodology conforms to accepted marketing research methods, practices, and procedures.

METHODOLOGY

- The study was conducted June 23 to July 7, 2026.
- In total, 116 qualified responses from trucking operations management professionals were received.
- With a 95% confidence level, the margin of error is ±9.09%.
- Respondents were screened to ensure:
  - They are involved in telematics and fleet management technologies for their company.
  - Their company's fleet has at least 51 total assets.

RESPONSE MOTIVATION

- The invitations and survey were branded with the *FleetOwner*, *FleetMaintenance*, *Bulk Transporter*, and *Trailer Body Builders* logos to instill respondent trust based on brand affinity.
- Respondents were pulled from the four audiences and received a $30 gift card upon completion to encourage participation.


FleetOwner FleetMaintenance

FleetOwner and *Fleet Maintenance* are conducting a research survey exploring the challenges, priorities, and technologies shaping how today's fleets operate — and we want to hear from you.

All qualified respondents who complete the survey will receive a $30 Amazon gift card!

Click Here to Begin Survey

Thank you in advance for your time and feedback!

Best regards,

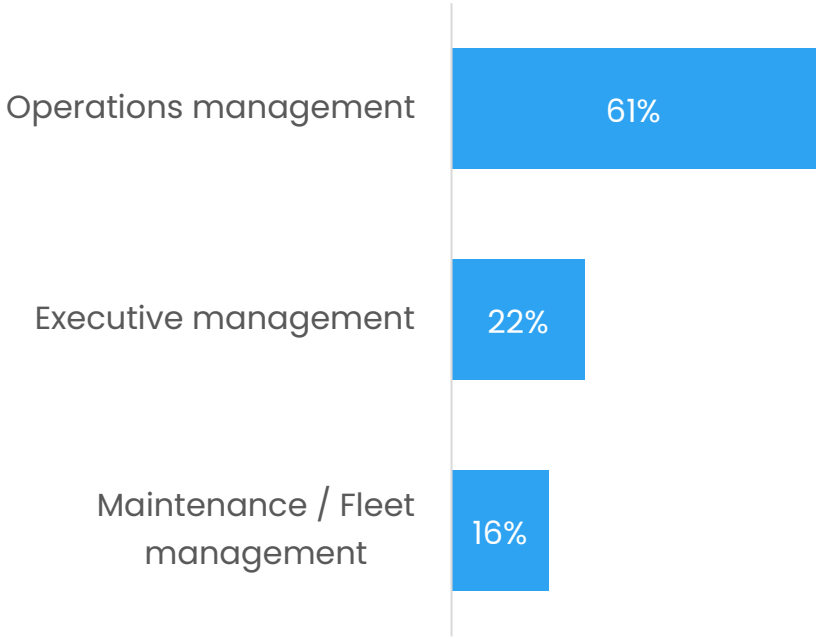
The *FleetOwner* and *Fleet Maintenance* Research Team

Understanding the Respondent

COMPANY DETAILS

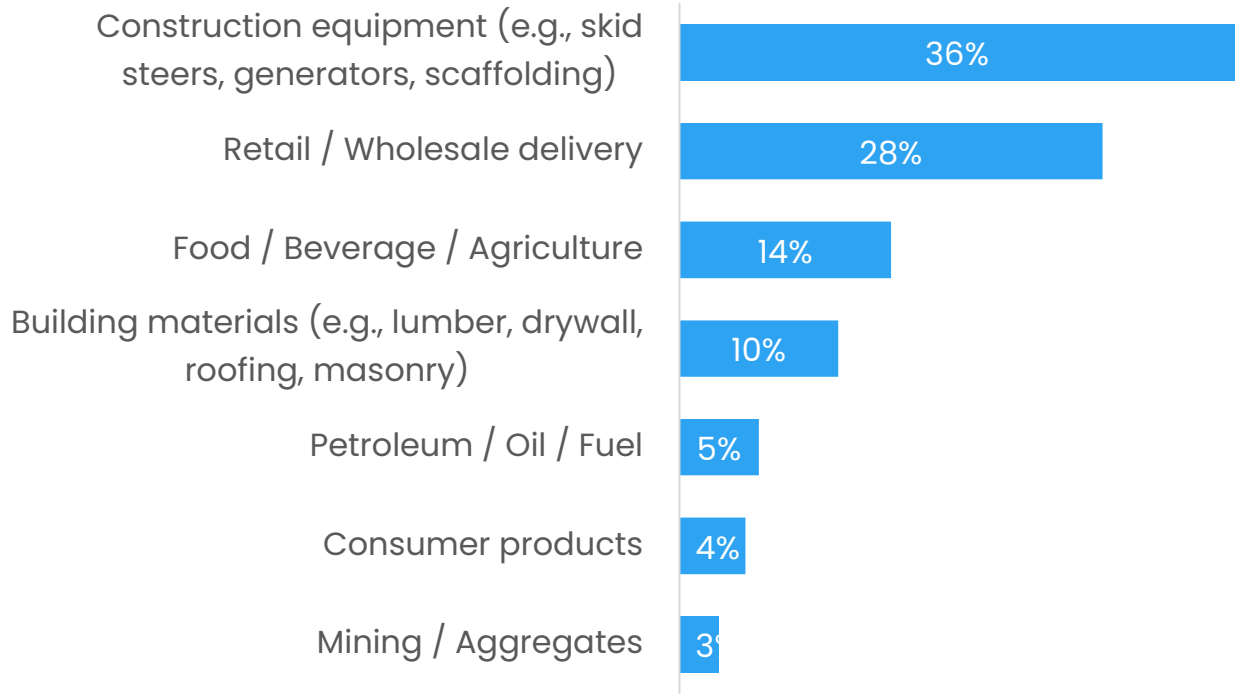
More than **three out of five respondents** (61%) indicate that they work in **operations management roles** within their organization. Nearly **two out of five respondents** (36%) say that their company's business or fleet type is primarily **construction equipment (e.g., skid steers, generators, scaffolding).**

Which of the following best describes your role within your company or organization?



All respondents n=116

Which of the following best describes your company's primary business or fleet type?

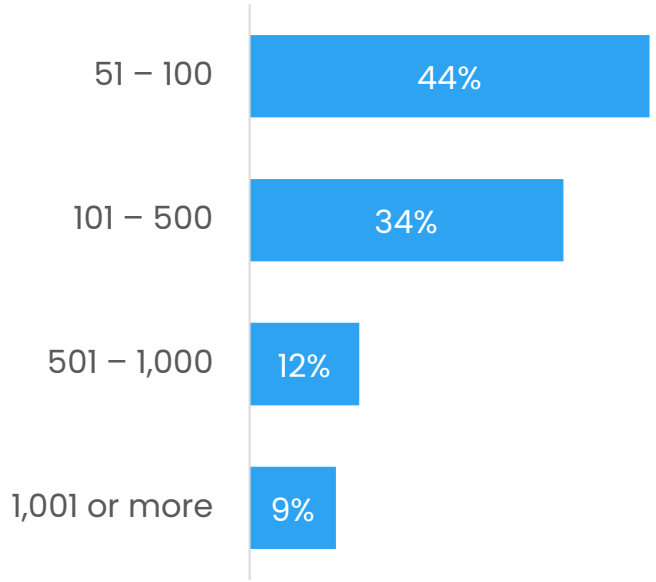


All respondents n=116

FLEET ASSETS

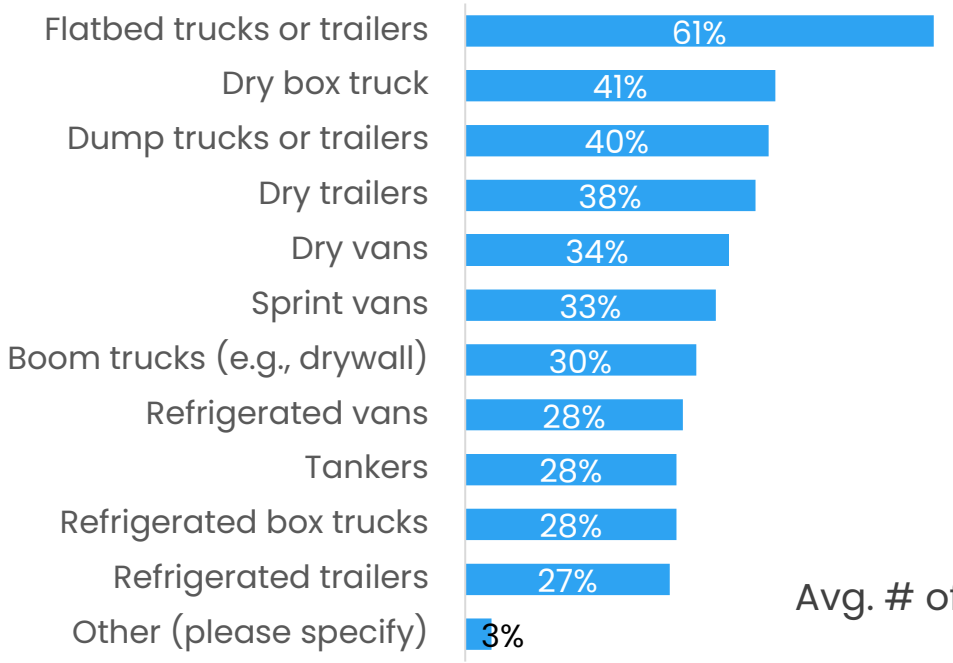
Over **two out of five respondents** (44%) have **51-100** assets within their fleet. Over **three out of five respondents** (61%) own or operate **flatbed trucks or trailers**, followed by **dry box trucks** (41%), **dump trucks or trailers** (40%), and **dry trailers** (38%).

How many total assets (e.g., trucks, trailers, box trucks, sprint vans) are in your fleet?



All respondents n=116

Which of the following vehicle or trailer types does your organization currently own or operate?



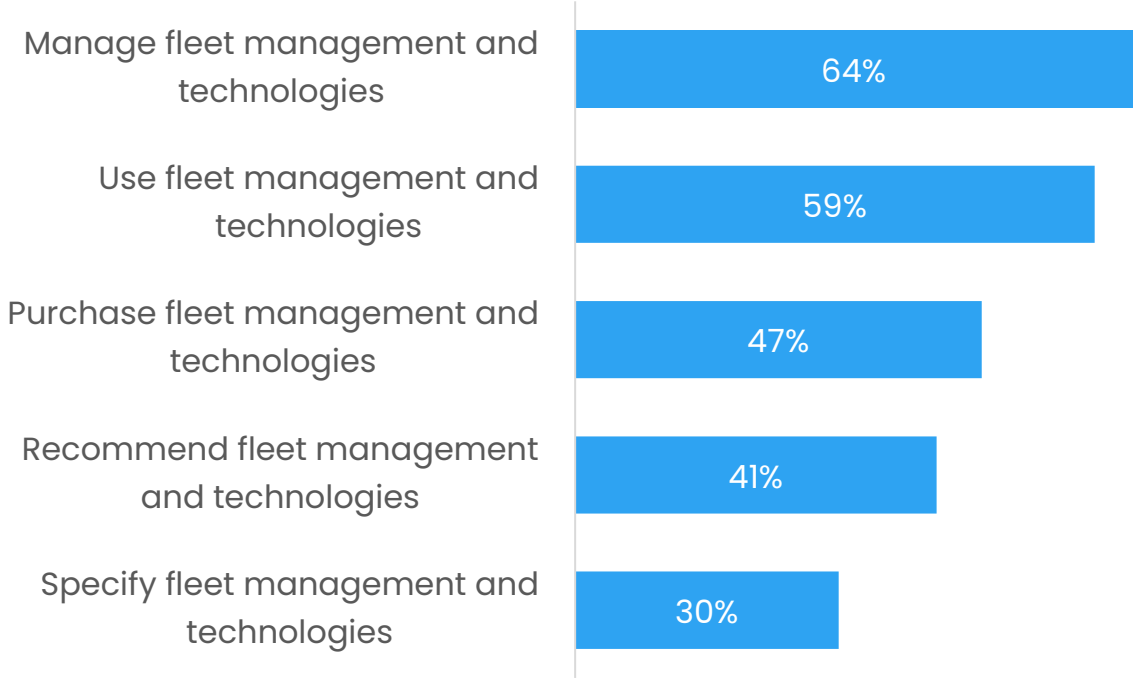
Avg. # of responses = 3.9

All respondents n=116

FLEET MANAGEMENT TECHNOLOGY DECISION-MAKERS

Over **three out of five respondents** (64%) say that they **manage fleet management and technologies** on behalf of their company.

Which of the following describes your involvement with telematics and fleet management technologies?



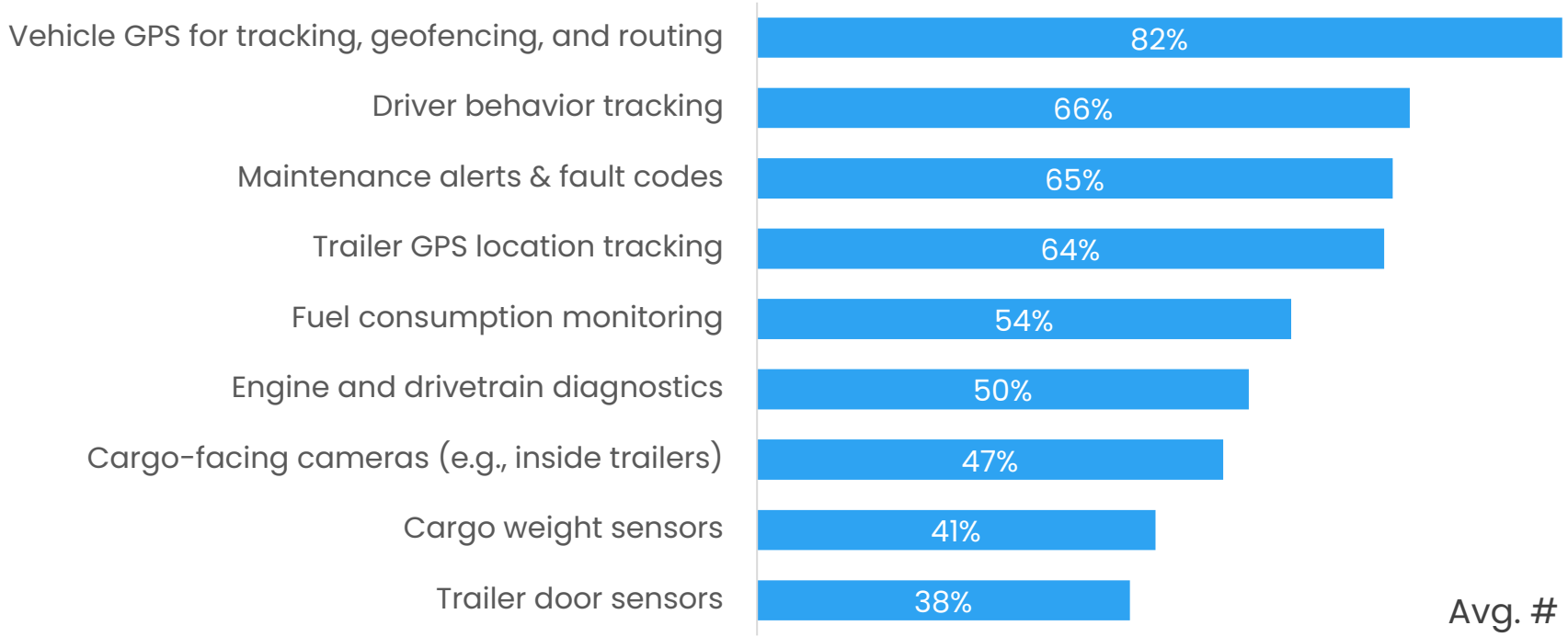
Avg. # of responses = 2.4

All respondents n=116

FLEET MANAGEMENT TECHNOLOGY USAGE

Over **eight out of ten respondents** (82%) use **vehicle GPS for tracking, geofencing, and routing** for vehicles and trailers within their fleet.

Which of the following technologies are actively used across any part of your fleet?



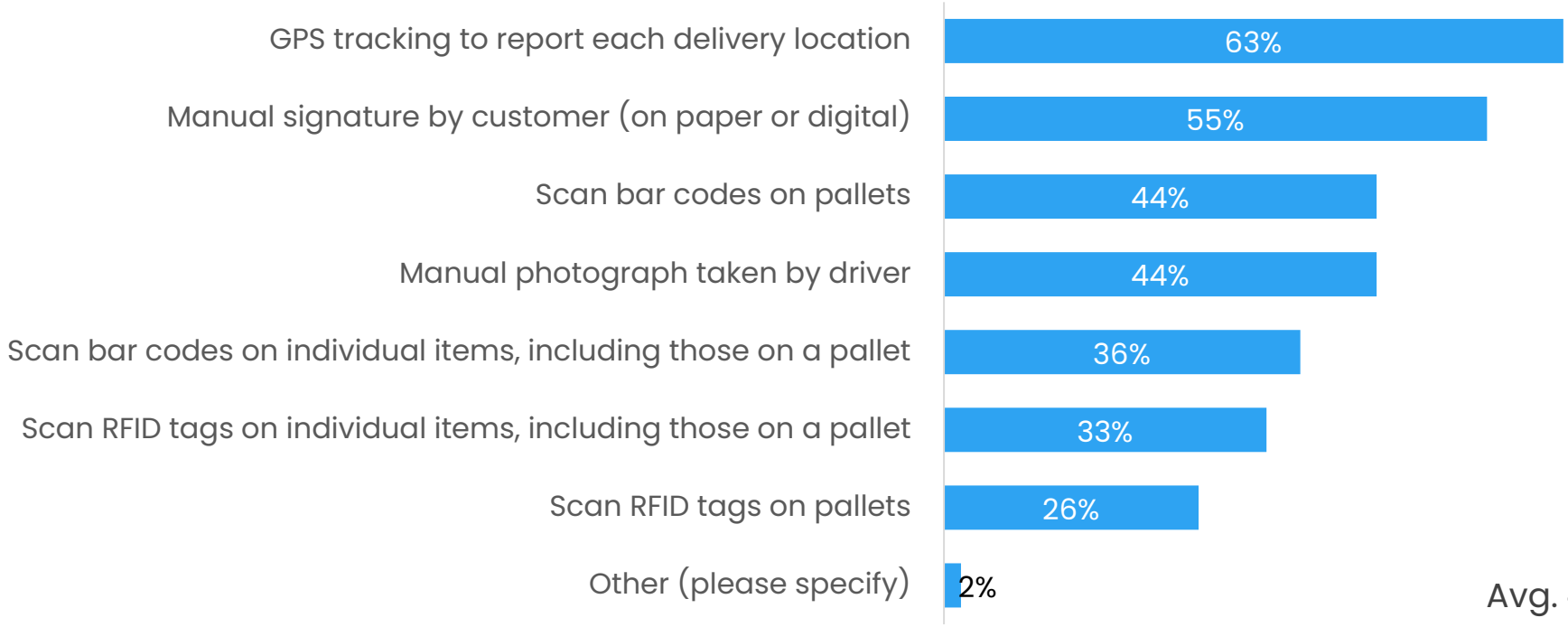
Avg. # of responses = 5.1

All respondents n=116

DELIVERY VERIFICATION METHODS

Over **three out of five respondents** (63%) use **GPS tracking** to document and verify deliveries.

How are your deliveries currently documented and verified?



Avg. # of responses = 3.0

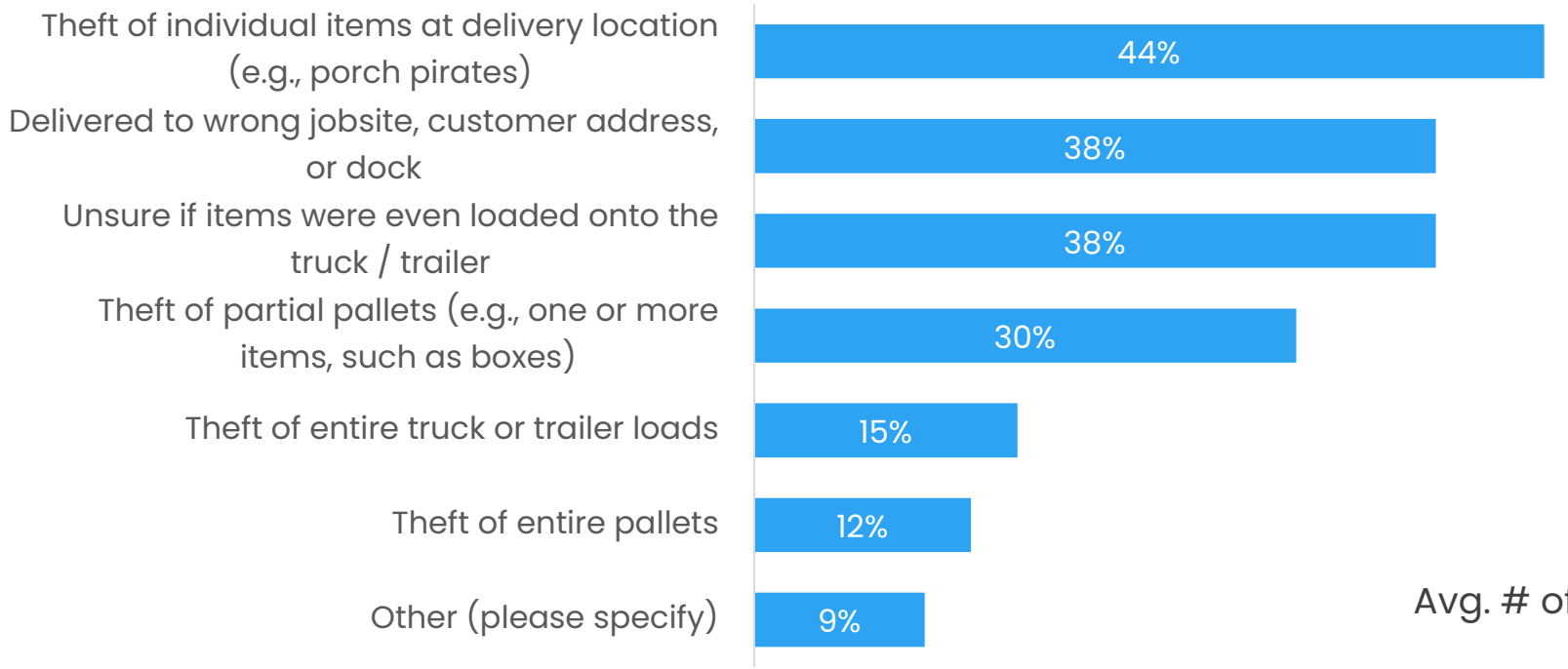
All respondents n=116

Exceptions & Delivery Concerns

REGULAR CARGO LOSSES

Over **two out of five respondents** (44%) say that they experience **theft of individual items at its delivery destination**.

Which types of cargo losses are you experiencing on a regular basis?



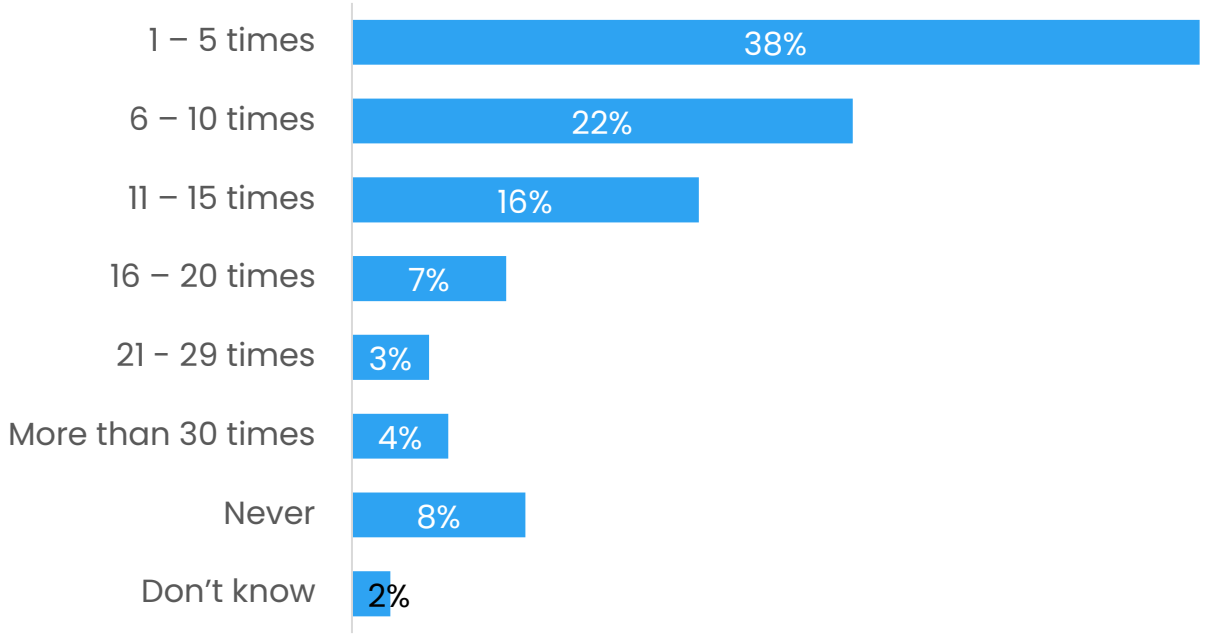
Avg. # of responses = 1.9

All respondents n=116

MONTHLY EXCEPTIONS AND / OR DELIVERY DISPUTES

Over **two out of six respondents** (38%) have **1-5 delivery exceptions or disputes** monthly.

During a typical month, how frequently do delivery exceptions or disputes occur throughout your supply chain?



All respondents n=116

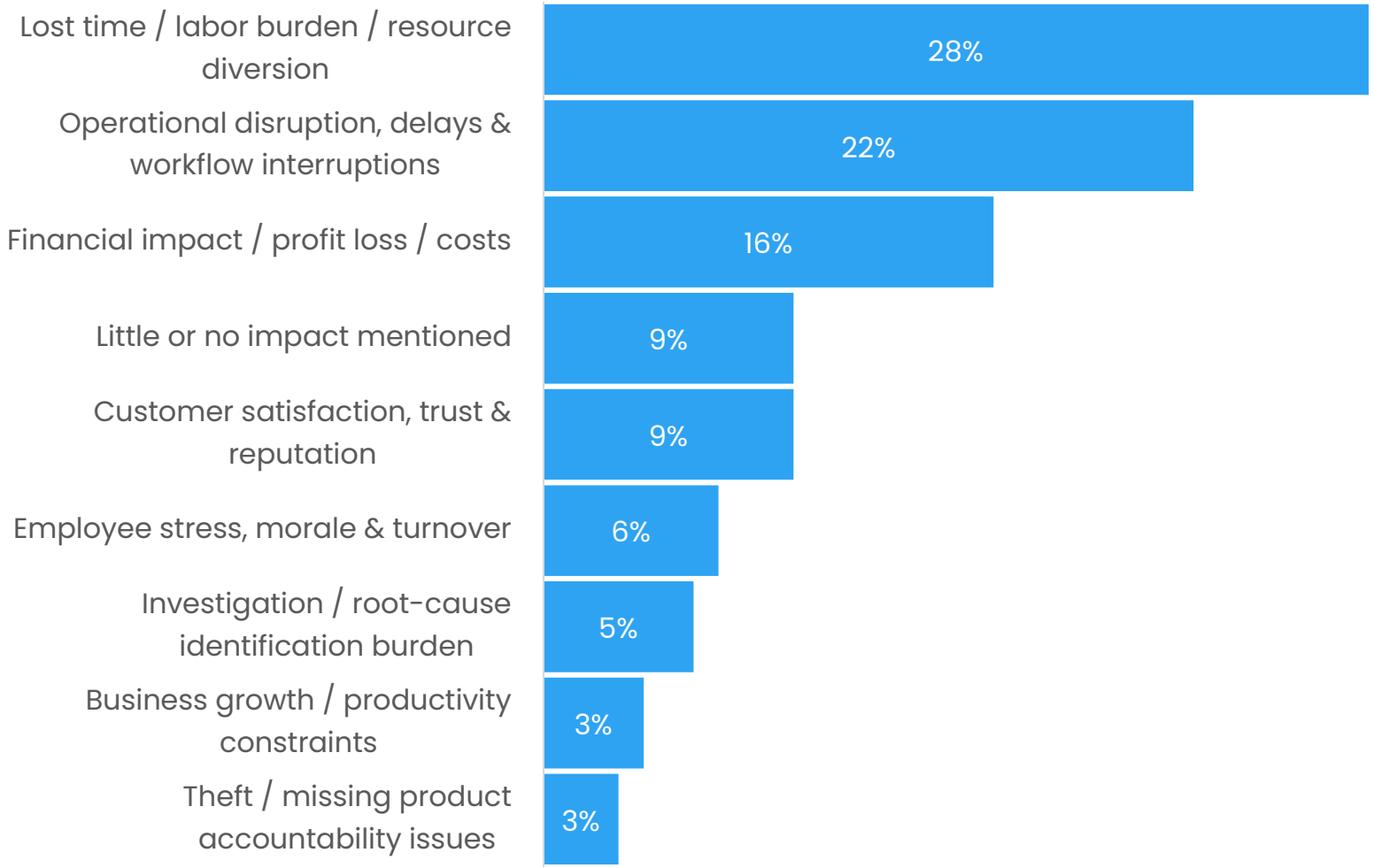
OPERATIONAL IMPACT OF DELIVERY DISPUTES

Please describe how delivery disputes impact your company's day-to-day business.* (Open-End)

When asked how delivery disputes impact your company's day-to-day business, each respondent provided an answer.

The most frequent response is that **delivery disputes contribute to lost time and labor / resource disruptions**.

The second most frequently mentioned outcome is **workflow interruptions and operational delays**.

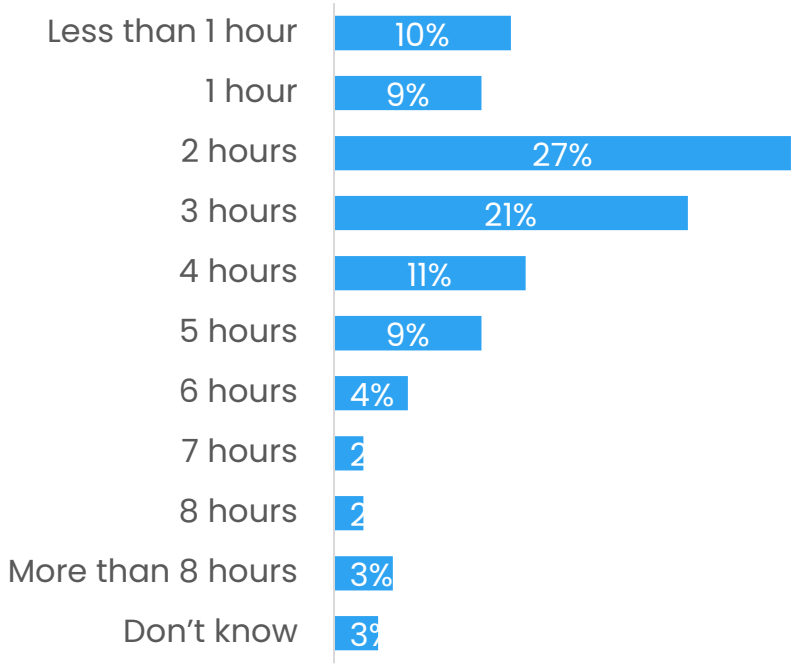


*Copilot was used to help identify and quantify comment themes. Percentages are approximations.

TIME AND COST BURDEN FOR DELIVERY DISPUTES

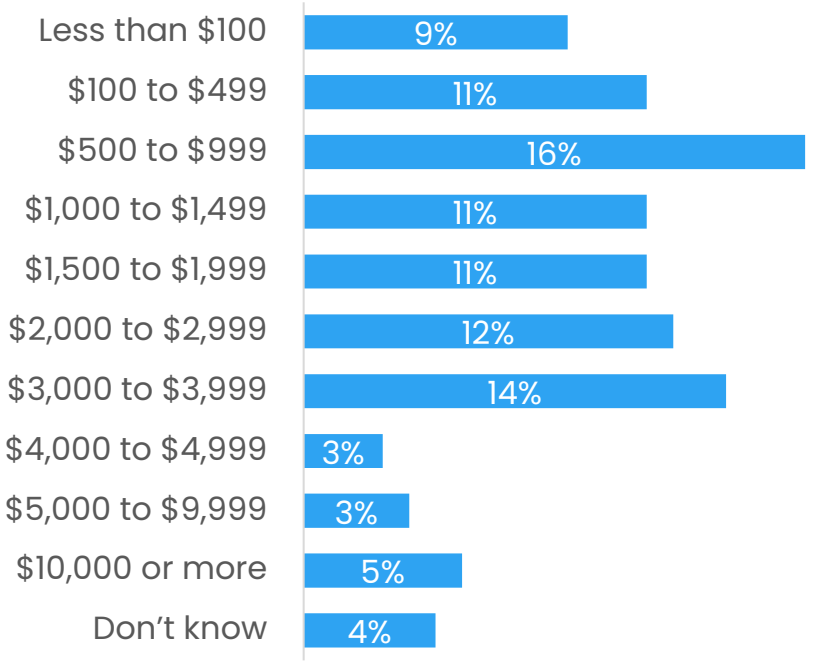
More than **one out of four respondents** (27%) spend an average of **2 hours** investigating each delivery exception or dispute. **One out of six respondents** (16%) say that the average value of product lost to delivery exceptions or disputes are **$500-$999**.

On average, how many labor hours are spent investigating a single delivery exception or dispute?



All respondents n=116

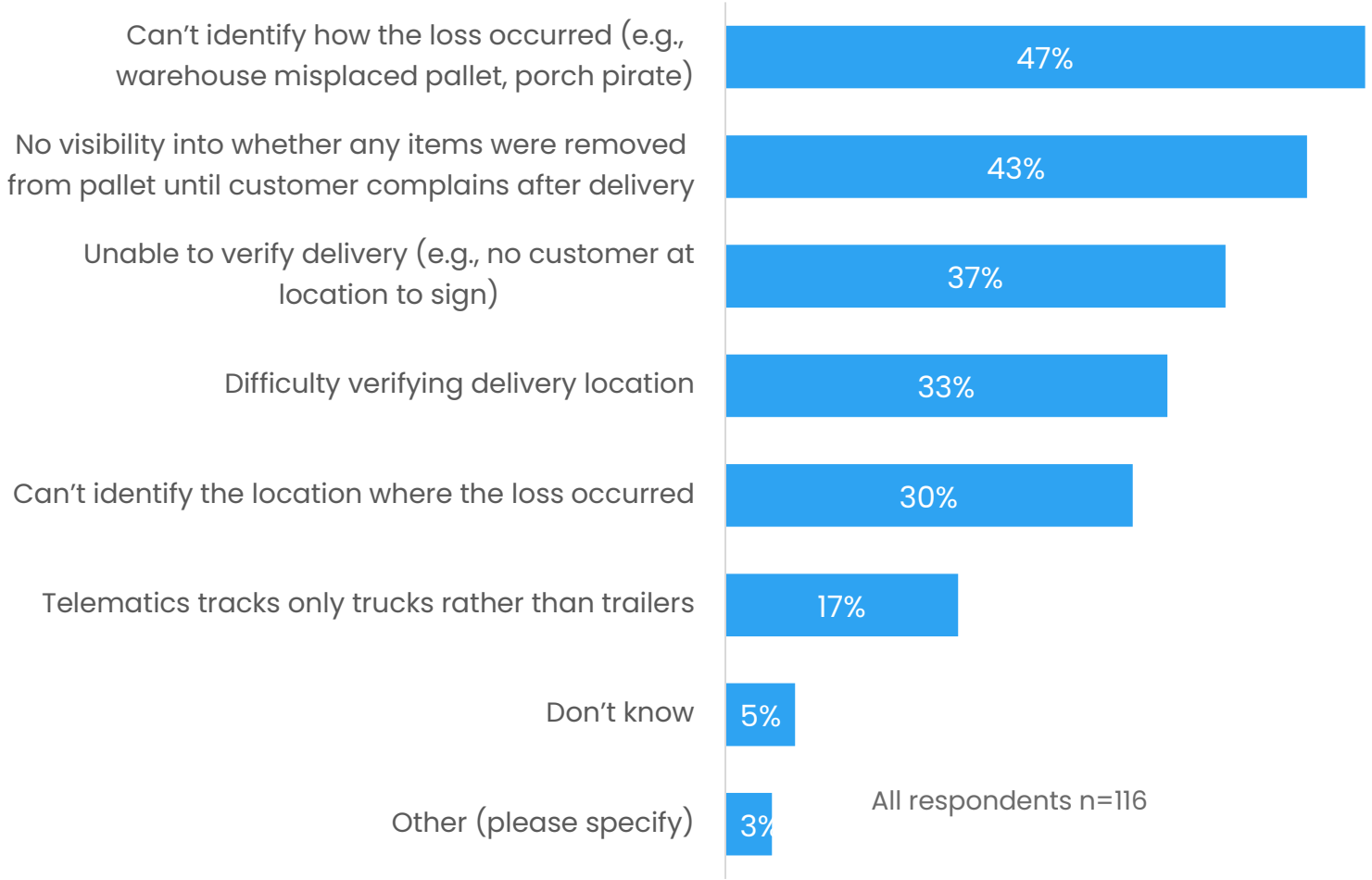
During a typical month, what is the average value of product lost due to delivery exceptions or disputes?



All respondents n=116

DELIVERY LIFECYCLE CHALLENGES

What are the top three visibility and accountability challenges across your organization's delivery lifecycle?



All respondents n=116

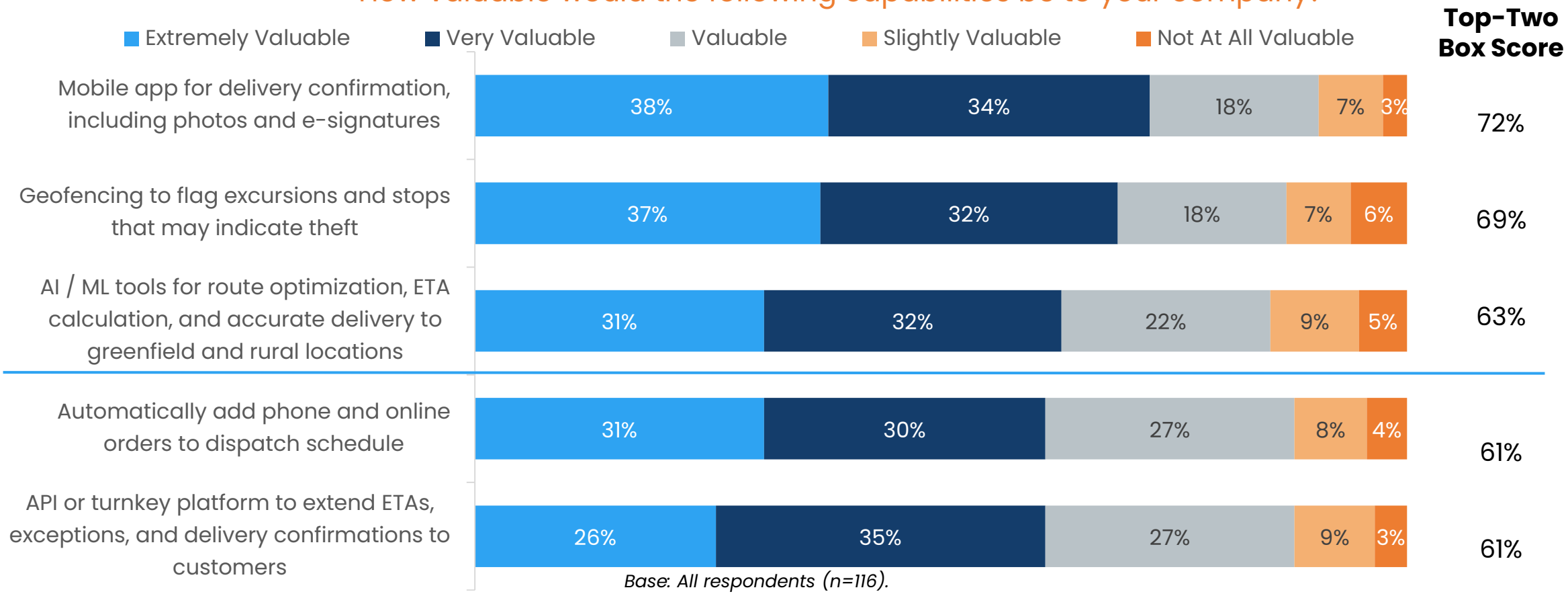
The top three visibility challenges identified by respondents are **determining how a loss occurred** (47%), **having no visibility into whether items were removed from a pallet before delivery** (43%), and **the inability to verify delivery** (37%).

Avg. # of responses = 2.2

DELIVERY VISIBILITY AND THEFT PREVENTION

Nearly **three out of four respondents** (72%) believe that **mobile apps that support delivery confirmation would be very valuable to their company** (Extremely Valuable + Very Valuable). More than **two out of three respondents** (69%) believe that **geofencing technology** helping to prevent thefts would also be valuable to their company.

How valuable would the following capabilities be to your company?

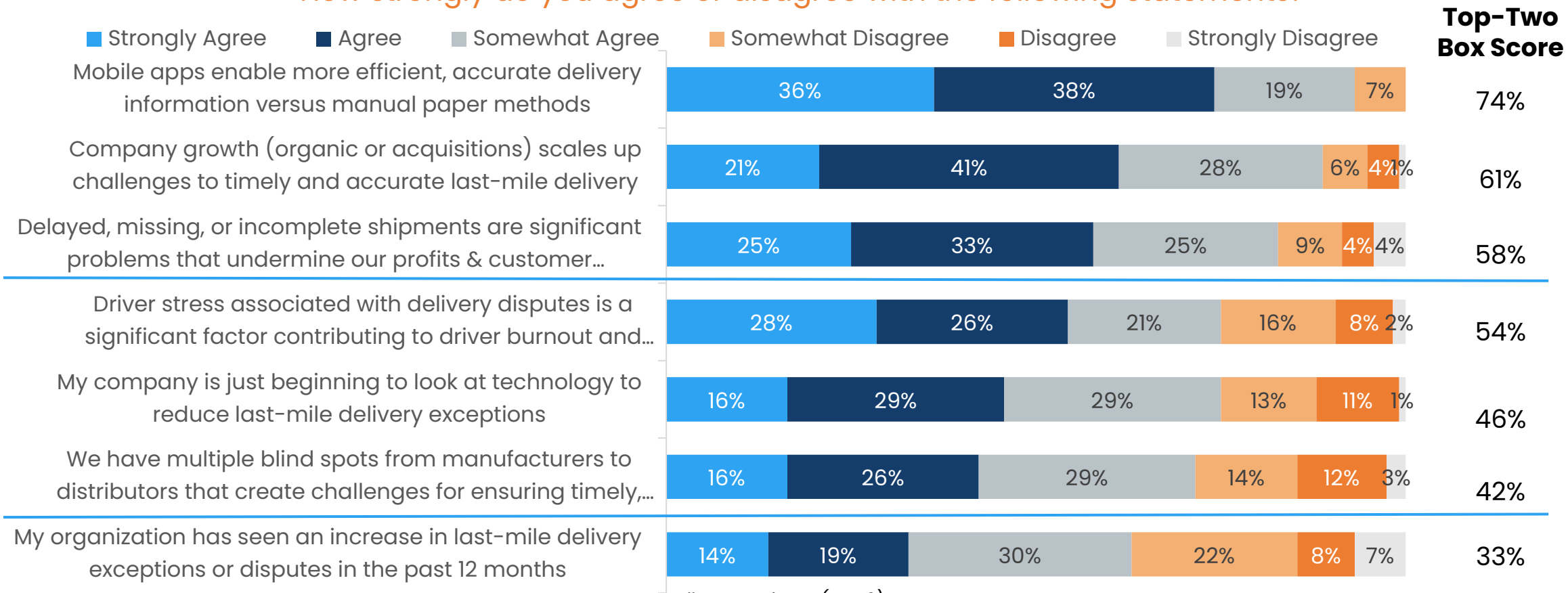


Base: All respondents (n=116).

DELIVERY DISPUTES AFFECT OVERALL OPERATIONS

Nearly **three out of four respondents** (74%) agree that **mobile apps enable more efficient and accurate delivery information versus manual paper methods** (Strongly Agree + Agree). Over **three out of five respondents** (61%) agree **that company growth scale up challenges to timely and accurate last-mile delivery**.

How strongly do you agree or disagree with the following statements?



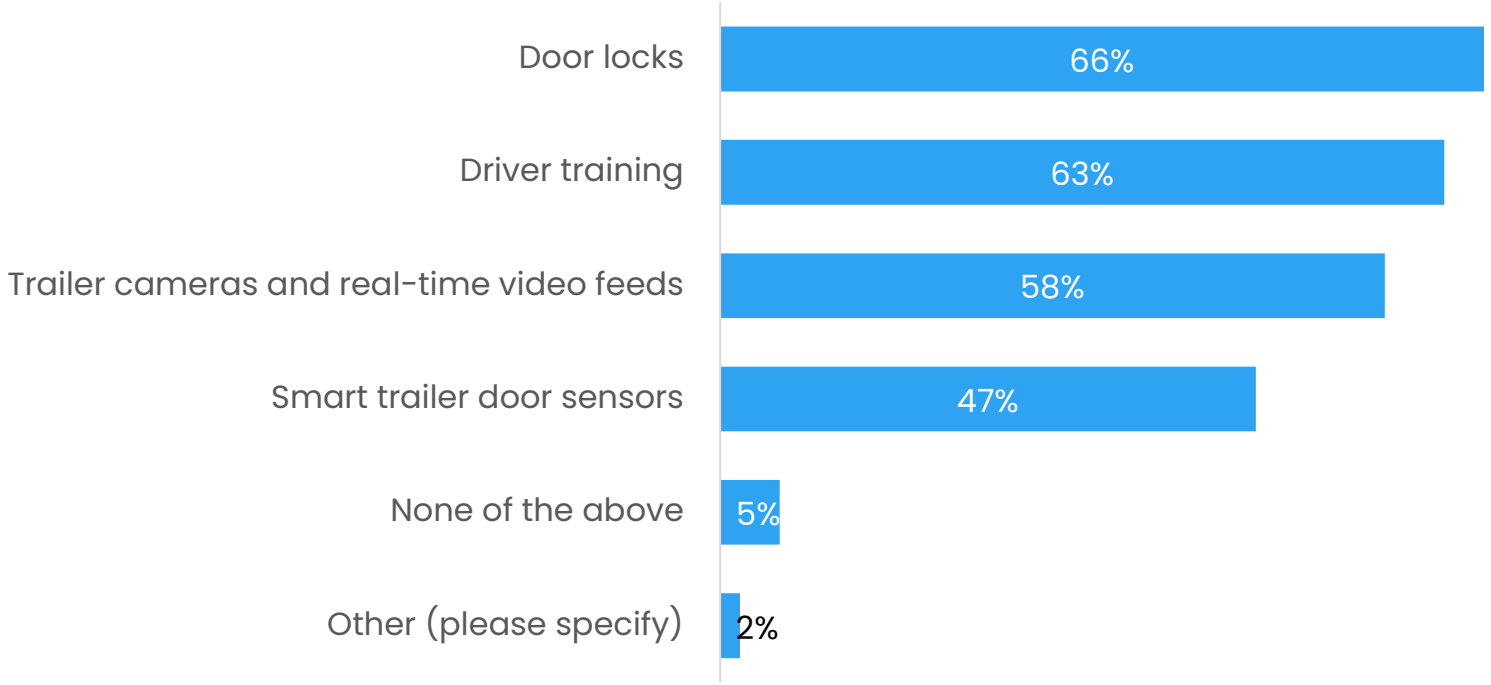
Base: All respondents (n=116).

Fleet Security Practices & Opinions

FLEET SECURITY PRACTICES

Roughly **two out of three respondents** (66%) say that they use **door locks** to secure the doors among their fleet.

Which of the following does your company use to secure doors and / or monitor door events, like loading / unloading activity?



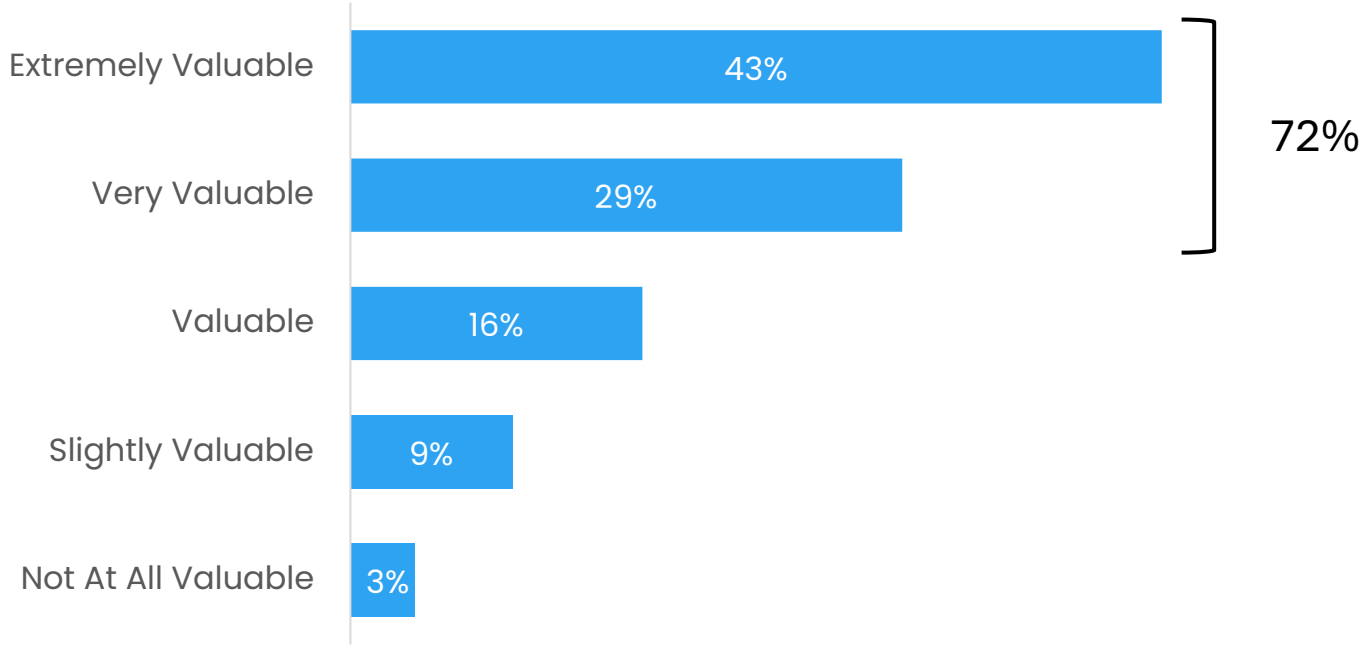
Avg. # of responses = 2.4

All respondents n=116

DEMAND FOR IN-TRAILER VISIBILITY TO REDUCE THEFT

Over **seven out of ten respondents** (72%) say that **in-trailer camera footage would be extremely valuable as a theft deterrent** (Extremely Valuable + Very Valuable). **Only 3%** say that in-trailer camera footage would not be valuable at all as a theft deterrent method.

How valuable do you think in-trailer camera footage (e.g. to verify cargo securement, door events, load shift) would be to deter theft?

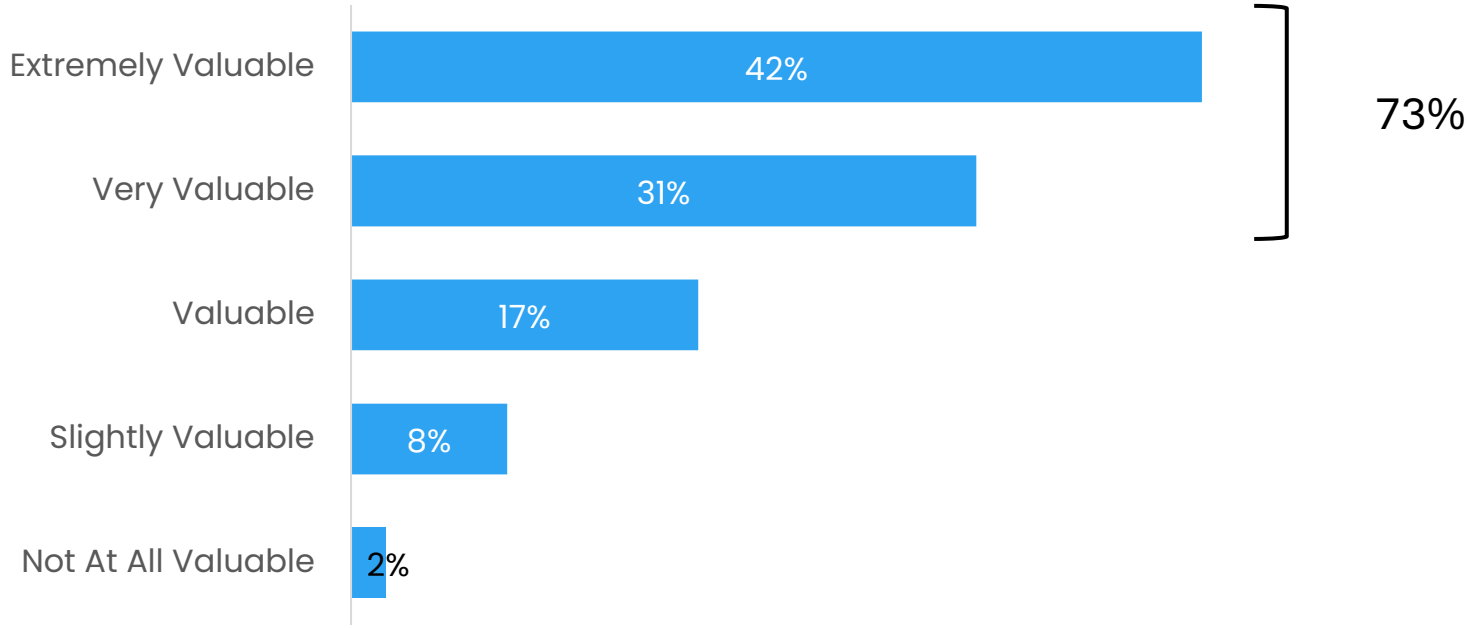


All respondents n=116

DEMAND FOR IN-TRAILER VISIBILITY TO SUPPORT INVESTIGATIONS AND INSPECTIONS

Over **seven out of ten respondents** (73%) say that **in-trailer camera footage would be extremely valuable for internal claims investigations and inspections** (Extremely Valuable + Very Valuable). **Only 2%** say that in-trailer camera footage would not be valuable at all as a theft deterrent method.

How valuable do you think in-trailer camera footage (e.g. to verify cargo securement, door events, load shift) would be to support internal claims investigations or inspections?



All respondents n=116

Open-End & Write-In Responses

OPEN-END & WRITE-IN RESPONSES

WHICH OF THE FOLLOWING VEHICLE OR TRAILER TYPES DOES YOUR ORGANIZATION CURRENTLY OWN OR OPERATE? (WRITE-IN RESPONSE)

- Aerial bucket trucks
- Cement mixers
- Hopper bottom/bulk
- Lowboys

HOW ARE YOUR DELIVERIES CURRENTLY DOCUMENTED AND VERIFIED? (WRITE-IN RESPONSE)

- Drivers daily log
- Tickets

WHICH TYPES OF CARGO LOSSES ARE YOU EXPERIENCING ON A REGULAR BASIS? (WRITE-IN RESPONSE)

- Internal theft, loading more than what is documented.
- Load shift / cargo damage
- No losses
- No theft as deliver liquid
- None / No Losses (7)
- Rejection due to errors

OPEN-END & WRITE-IN RESPONSES

WHAT ARE THE TOP THREE VISIBILITY AND ACCOUNTABILITY CHALLENGES ACROSS YOUR ORGANIZATION'S DELIVERY LIFECYCLE? (WRITE-IN RESPONSE)

- None
- Private fleet delivering to our own job sites
- Employees hiding theft.
- drivers not allowed on dock so they can't verify the unload.

WHICH OF THE FOLLOWING DOES YOUR COMPANY USE TO SECURE DOORS AND / OR MONITOR DOOR EVENTS, LIKE LOADING / UNLOADING ACTIVITY? (WRITE-IN RESPONSE)

- Seals (2)

PLEASE DESCRIBE HOW DELIVERY DISPUTES IMPACT YOUR COMPANY'S DAY-TO-DAY BUSINESS. (WRITE-IN RESPONSE)

- By taking time away from making use of the time better in any aspect of the company for production
- By using camera footage from the vehicle to see what really happened during disputes from theft or porch pirates
- Causes an exception based need that requires immediate far reaching attention that disrupts flow.
- Creates driver turnover and inefficiency
- delaying the entire production chain
- Deliveries needing to be rescheduled. Dealing with returned product.
- Delivery companies impact us because if they aren't on time, then our deliveries aren't on time
- Delivery dispute, impact my companies, day-to-day business due to the fact that delivery may be delayed if the disputes are not resolved in an accurate time
- Delivery disputes can undermine the customer's satisfaction and trust in our company.
- Delivery disputes directly impact day-to-day business operations by increasing operational costs, reducing efficiency, and harming customer relationships. Financial Strain
- Delivery disputes have a negative impact on the day-to-day business. They use important labor hours and cause our bottom line to bottom out.
- Delivery disputes impact my company day to day business because if the stuff gets delivered to the wrong address or if the package gets stolen the person on that job gets fired.

PLEASE DESCRIBE HOW DELIVERY DISPUTES IMPACT YOUR COMPANY'S DAY-TO-DAY BUSINESS. (WRITE-IN RESPONSE) (CONTINUED)

- Delivery disputes impact my company's day to day business at a moderate level it's stressful but it doesn't really ruin my business we just have to keep adapting until there is no room for this level of activity to even be considered anymore
- Delivery disputes impact my company's day to day business. Because I have lot of deliveries that have not been on time to my customers resulting in refund
- Delivery disputes impact our company's day-to-day business because then we have to go back we have to restock that delivery of what items are missing get there in a timely manner and then still do the single roster on that day schedule
- Delivery disputes impact our day to day business schedule because it causes lots of interruptions
- Delivery disputes impact the company's day to day in many ways. It makes our day go slower. Takes our resources away from more important things. And just overall adds stress to everyone.
- Delivery disputes just take time away from other important tasks that need to get done. It disrupts production and we would just like to avoid it as much as we can.
- Delivery disputes slow down operations because we have to stop and verify paperwork, contact customers, and resolve mismatches. It pulls staff away from regular tasks, delays schedules, and creates extra administrative work that disrupts the daily workflow.

PLEASE DESCRIBE HOW DELIVERY DISPUTES IMPACT YOUR COMPANY'S DAY-TO-DAY BUSINESS. (WRITE-IN RESPONSE) (CONTINUED)

- Delivery disputes, slow down overall production and cost us valuable time and assets. With disputes comes delay and inevitably hinders efficiency.
- Delivery loss has been an on going issue for years now we can never land the plane and find out where the mistake is. Everyone just points the finger at the other and nothing gets done
- Disputes by theft from delivery
- Disputes cause backlogs for our back office because they have to tend the customer. This creates extra work because it takes them from their work
- Disputes impact making company because we lose money whenever loads or something. Don't get accepted
- Don't redispute, take extra time and resources away from general production
- First and foremost the time spent listening to the compliant as well as looking for said product Anda then getting the customer their docs in a timely fashion
- If I have no materials or supply's my guys can't work
- It can lead to a delay in the transportation of the products to the consumers which would result in a loss of revenue and clients
- It cause time to be wasted when it should've not happened in the first place
- It causes a cost in loss prevention and labor
- It causes lost time of tracking if the product was shipped, left at the wrong location or shipped wrong. Multiple people in various departments have to get involved.

PLEASE DESCRIBE HOW DELIVERY DISPUTES IMPACT YOUR COMPANY'S DAY-TO-DAY BUSINESS. (WRITE-IN RESPONSE) (CONTINUED)

- It definitely slows down business growth and customer service and satisfaction and hurts trust with are partners but thankfully we are quick to resolve any issues or concerns
- It delays other deliveries because we have to focus on what is wrong with the order.
- It directly affects cost and man hours investigating each dispute. It's a hassle and needs to be cut down drastically
- It disrupts the flow a business and the integrity of our company
- It doesn't just that everything has to done right
- it doesn't
- It effects the whole company because we are a small business.
- it gives negative impact to the rating and reputation
- It halts the process severely because we need to find where the money is going, so we need to investigate look to see where the packaged or the items went figure out what went wrong and what we could do to prevent it in the future
- It has effect on profit
- IT holds up progress to the jobs
- It honestly doesn't happen that often anymore
- It impacts our profit
- It interrupts regular operations when it occurs and about 2 hours of labor
- It is a huge monetary cost that is the main issue in that area
- It leads to customer dissatisfaction and distrust of our services. It directly impacts our profits.
- It make it hard on drive when we do have them most time I deal with them
- It makes it harder on the business

PLEASE DESCRIBE HOW DELIVERY DISPUTES IMPACT YOUR COMPANY'S DAY-TO-DAY BUSINESS. (WRITE-IN RESPONSE) (CONTINUED)

- It makes the business run very slow
- It may cause a delay on new deliveries
- It puts a strain on every aspect of daily business. Everything from ensuring accountability to employee honestly.
- It puts additional stress on consumers, the company and management
- It really stresses the drivers and delivery crews, because they feel at fault.
- It sets us behind and makes the owners angry
- It slows down everything and makes me feel like it doesn't work out
- It slows down productivity
- It sometimes makes it hard to get inventory stocked also hard to get to scheduled locations.
- It stops the department from what they are working on to figure out the dispute and what has happened
- It takes away from money with the company. But not as much money as you'd think, by the time the dispute come through we'd have another order replacing the money we have lost. It is a big lost because we end up having to pay the company back ourselves
- It takes team members to resolve the issues which takes time money and sometimes slow down the delivery process.
- It takes time away from me to deal with other pressing issues and delays my responses
- It takes time out of our day trying to research the causes of these disputes and also what actions to take on them.

PLEASE DESCRIBE HOW DELIVERY DISPUTES IMPACT YOUR COMPANY'S DAY-TO-DAY BUSINESS. (WRITE-IN RESPONSE) (CONTINUED)

- It's a huge hindrance to growth in our company and has caused a lot of problems which is why we are investing in fixing the problem so heavily.
- It's 50 percent of the day and it's taken seriously
- It's more time wasted on non-productive nonsense when we could be out and delivering on time.
- It's time consuming and affects driver's moods.
- Like any other business the cut to profit mainly.
- Loosing time and money
- Lost proficiency and productivity also cost effectiveness
- Lost time
- lost time gathering information needed to adders the problems
- Lost time and man hours
- Majority of disputes I've witnessed have been last minute disputes typically about a missing product for something that wasn't in our logs or in small business a few try to swindle us to reduce cost.
- Minimally
- Most of our disputes are for just a few cases which we document and move on. Larger disputes if needed will have a claim against the carrier or customer after we verify the product shipped.
- None (3)
- Our company hasn't experienced this yet we take all precautions
- our schedules get interfered and food gets delayed
- Primarily have no issues.
- Put stress on the content of The cinc
- Slows down productivity
- Someone has to stop their job to follow the trail and investigate

PLEASE DESCRIBE HOW DELIVERY DISPUTES IMPACT YOUR COMPANY'S DAY-TO-DAY BUSINESS. (WRITE-IN RESPONSE) (CONTINUED)

- Sometimes delivery can take a very long time which makes it harder for me to make money
- takes away resources that need to be able to focus on other things
- Takes labor hours away from day to day operations
- Takes time out of the day confirming if a shipment has been delivered.
- That it creates a time unrealistic timeline for all the drivers creating stress and possible crash
- The time it takes to dispute these claims takes to many man hours
- These delivery disputes impact day to day business operations by resulting in increased complexity, stress, downtime, revenue loss, and friction between staff and clients.
- They affect us because we then have to backlog trucks we hadn't intended on using for these reasons which often sets back delivery times.
- They can be a hassle as well as time consuming. It also causes a net loss for our profit.
- They cost us time and money which are both a negative for a successfully businesses
- They create a poor customer experience, leading to loss revenue. They cause employee friction, leading to attrition.
- They make or break our day if the items are not correctly delivered because we have to 86 certain items if they're wrong which plummets our sales
- They make things harder stress on company driver and customer

PLEASE DESCRIBE HOW DELIVERY DISPUTES IMPACT YOUR COMPANY'S DAY-TO-DAY BUSINESS. (WRITE-IN RESPONSE) (CONTINUED)

- They not only impact our bottom line but it makes a bad experience for our customer. We also lose money dedicating labor to investigating the loss.
- They take time away from production and cause the company to invest resources into trying to investigate disputes
- They take up our time where we could be planning for other business needs
- Time is taken away from setting up better routes and/or preventative measures to cut loss
- time on site
- Time spent on trying to settle disputes takes away productive time from our company
- Unnecessary time loss due to investigation and conclusion. Customer relations strain due to order shortage and disputes.
- Use of technology for everyone would definitely benefit from day to day
- Verbal communication. Very slow and time consuming
- Very rarely
- Very stressful on company
- Waste of man hours , theft costs time and money, customer not happy
- We can't get product our and it affects our sales drastically
- We don't have that many, honestly.
- We don't really see any delivery disputes in our company.
- We go through our database

PLEASE DESCRIBE HOW DELIVERY DISPUTES IMPACT YOUR COMPANY'S DAY-TO-DAY BUSINESS. (WRITE-IN RESPONSE) (CONTINUED)

- We have to switch our focus from in warehouse work to calling drivers to find out about missing items.
- With a wet, time-sensitive load of concrete, disputes have to be resolved the majority of the time. Internal theft is our largest problem, and we cannot get a handle on it.