

Future Proofing the Supply Chain Through Real-Time Visibility



project44



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Foreword by Ken Lyon, Ti Advisory Board member

Visibility across and into supply chains has always been essential for optimal performance. The benefits are obvious but achieving anything like complete visibility has been notoriously difficult. Ti, in partnership with project44, recently conducted a research project to assess the critical factors for shippers when evaluating and selecting carriers. The results below continue to illustrate this point. The complexity of modern supply chains has increased the demand for order, inventory, and shipment visibility, while at the same time ensuring it has become more challenging to implement. Paradoxically the advances in technology have reduced the barriers to access and operating costs of the systems necessary for the deployment of a visibility system.

This is because many of the parties who have the required data are holding it within internal legacy systems that were never designed to share information in real time with other parties. This is reflected in the reality that while in the custody of a single carrier or forwarder, the required visibility data is often available and of good quality. But in shipments that involve multiple parties, visibility is sub-optimal.

To emphasize the point, the survey indicates that only 20% of shippers claim visibility across all regions and all modes, while

it also reflects that only 20% of carriers provide visibility into partner operations. This makes it very difficult to balance cost against performance when choosing logistics partners.

The impact of recent geopolitical events and the global pandemic have highlighted the necessity for real-time visibility. Shippers and logistics service providers have struggled to address operational challenges caused by “not knowing where stuff is”. The huge variations in available capacity vs required demand cannot be managed without access to the kind of information a global multi-modal visibility platform should be providing.

As manufacturing models change as a result of new technologies and public policy, related supply chains are also reshaped. Customer demand is increasingly driven by e-commerce operating models, meaning high levels of velocity and variability. Shippers now expect, as a pre-requisite, that their carriers and logistics service partners must provide some form of real-time visibility – at least at the shipment level. It is a poor reflection on the logistics industry as a whole, that this is still considered an exception rather than the norm.

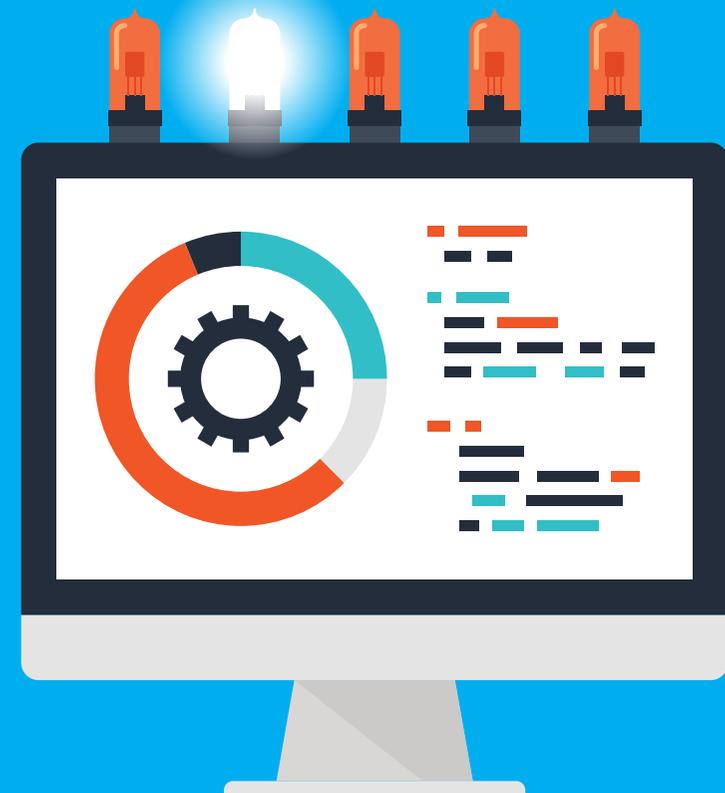
Introduction

Modern supply chains are highly complex and inevitably subject to disruptions. The necessity to deal with these disruptions and vulnerabilities has only become more urgent as we have been faced with an unexpected global health crisis and a resulting global supply chain collapse.

Ti, in partnership with project44, conducted a survey between October and November 2021 to identify the selection criteria that shippers use when choosing their transportation providers. The survey results also demonstrate the level of priority shippers assign to partnerships with carriers that provide real-time visibility (RTV) over transportation movements. The survey makes use of 234 shippers, including retailers and manufacturers.

What is Real-Time Visibility?

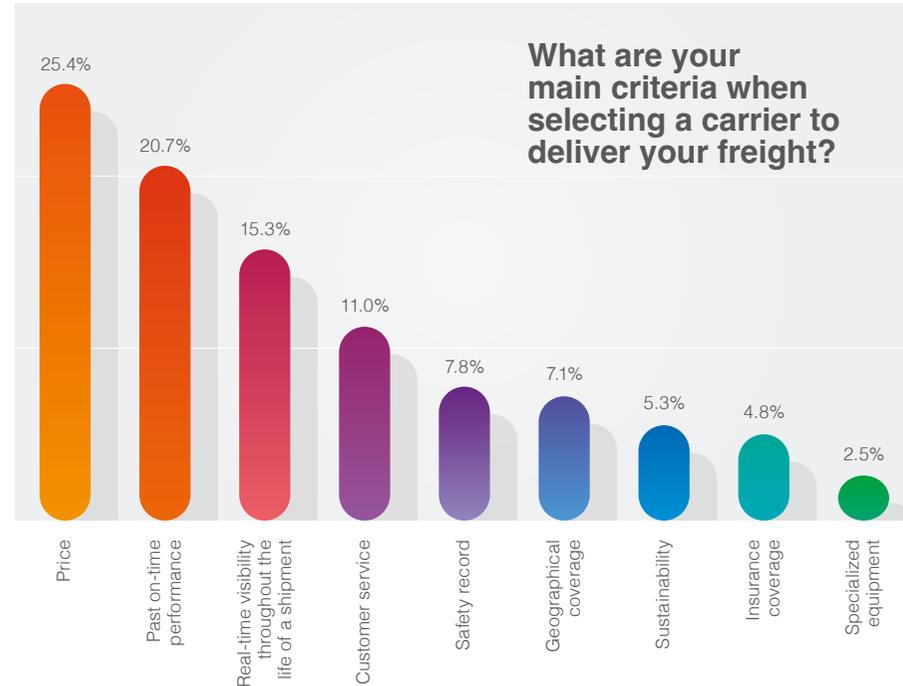
Real-Time supply chain visibility is the ability to track items in transit from their origin to destination at any given point. The goal of visibility is to improve and strengthen the supply chain by making data readily available to all stakeholders.



Reducing operational costs seems to be top of mind for shippers as 'Price' is considered the most important criterion for shippers when selecting a carrier to deliver freight. However, shippers seem to be aware that chasing the lowest cost often has costs of its own, whereas carrier performance and quality of service can bring long-term value and wider scope of benefits. They rank 'Past on-time performance' as the second most important selection criterion and 'Real-time visibility throughout the life of a shipment' as the third-most important.

'Real-time visibility' is considered more important than factors such as 'customer service', 'safety record', 'geographical coverage', and 'sustainability'. As such, RTV is considered a

critical service differentiator by shippers, and an offer carriers must supply. The volatile demand, uncertain supply, capacity shortages and transport delays experienced during the Covid-19 pandemic have uncovered pain points within the supply chain that improved visibility can ease. This is likely to increase the importance shippers attach to RTV and carrier on-time performance when selecting their transportation partners. The findings here suggest that carriers unable to provide shippers with RTV throughout the life of a shipment may find themselves at a competitive disadvantage in the future, as more and more customers are adding RTV as a base requirement to their tenders.



project44 perspective:

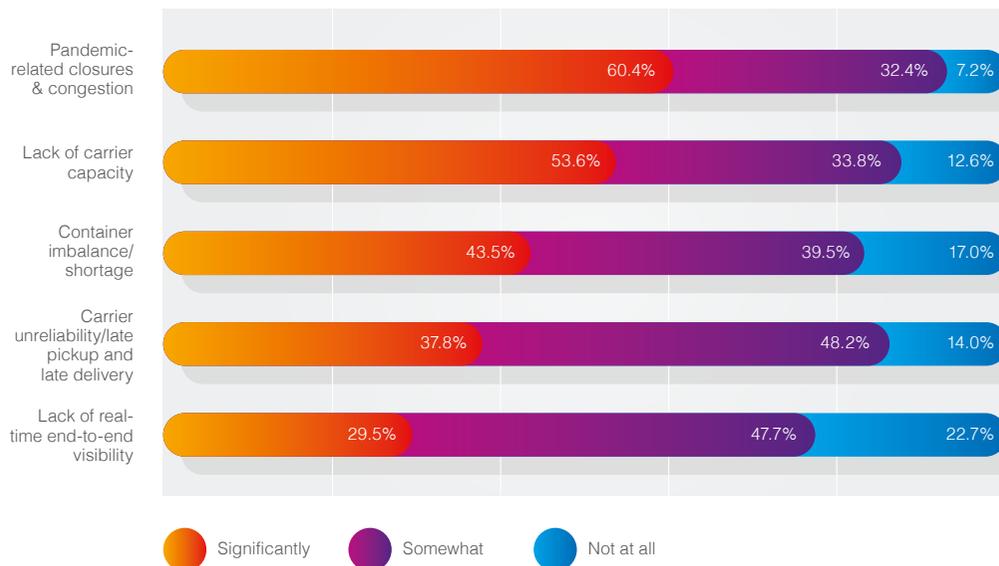
Real-time visibility is a means to an end, rather than an end in itself and is a crucial enabler in optimizing the supply chain across multiple dimensions. RTV helps shippers limit cost, improve efficiencies in back-end operations, and source capacity at higher service levels while gaining data-driven insights into their supply chain to improve on time performance, customer service, sustainability and predictability.

** A score was calculated in order to rank the main criteria – first preference was awarded three points, a second preference two points, and one point for the third preference.*

Capacity constraints and supply chain bottlenecks have been a feature of the global logistics market in 2021 and consequently are the highest-ranking risk factors in the past six months according to the survey results.

With piling pressures for shippers, such as ensuring the smooth transit of cargo, pandemic-related closures and congestion as well as transportation delays, to name a few, lack of real-time end-to-end visibility gets pushed to the bottom of the pile. Survey respondents stated that 'Lack of real-time end-to-end visibility' did cause some disruption during the past 6 months, but to a lesser extent compared to other factors. However, the high ranking of 'closures & congestion' and 'capacity shortages'

To what extent have the following factors caused disruption to your supply chain operations in the past six months?



underscores how important it is for carriers to implement RTV solutions. It highlights that for shippers, timely and accurate representations of real-world challenges creates value that RTV-enabled carriers can provide. For example, while RTV solutions across the entire transportation lifecycle can't predict how long a ship will dwell at ports, they can enable a swift reaction to delays and ensure the rest of the journey goes smoother. Managing exceptions is one of the most time-consuming and costly activities within supply chain management. Being able to identify issues and find solutions early reduces costs including reduced penalties, lower transportation cost and reduced detention payments.

project44 perspective:

These fundamental shifts in supply chain are likely to stay well into 2022 and shippers need to evaluate blind spots to decrease their exposure to risks. RTV platforms are able to use vast networks and data sets to help optimize a customer's supply chain through prescriptive and predictive analytics that can help alleviate swings in capacity and volatile demand.

As capacity continues to remain scarce, we see shippers turning to carriers that provide RTV, even if it is at a lower OTP, in order to secure capacity, while using RTV to uncover and improve pain points. As long as carriers provide visibility, shippers can more accurately manage delays and exceptions, creating more certainty in planning.

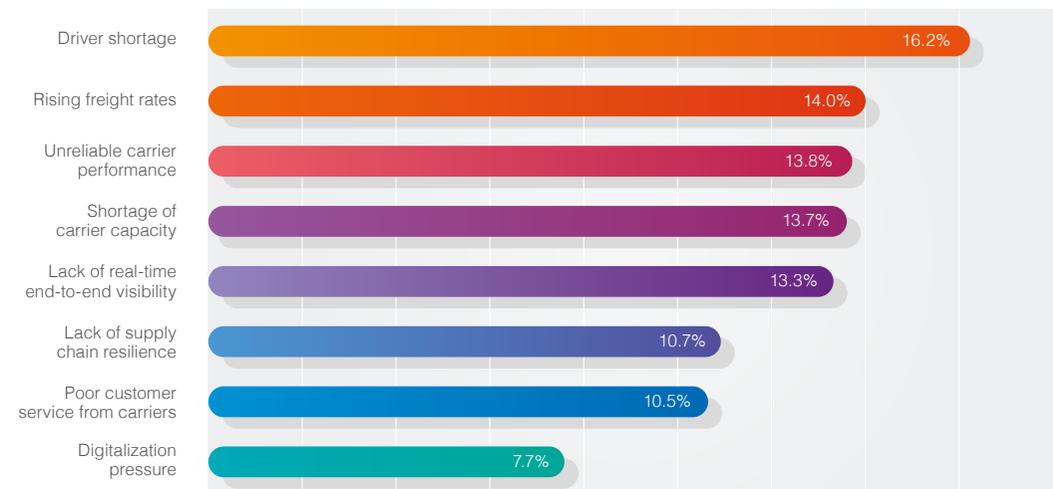
Labor and in particular driver shortages across the industry are at the core of the supply chain challenges limiting asset utilization and capacity. Respondents affirmed this sentiment, with the majority of shippers selecting 'driver shortages' as the most important issue currently affecting transportation operations.

The chart to the right shows that the factors affecting shippers' transportation operations are of a different character. The 'driver shortage' for instance is an ongoing structural issue restricting the supply of drivers and is most acute throughout Europe and the USA. Driver shortages have been going on for some time now but have been made worse by the pandemic – the re-opening of economies and the increased demand for goods along with other pressures on the global supply chains made the fulfillment of deliveries even more difficult. Therefore, it comes as no surprise that driver shortage emerges as the industry's top concern. As there are several underlying factors contributing to the driver shortage problem, and consequently no silver bullet to solve this problem, it is very likely that driver shortage will remain a top concern for shippers in the long run.

'Rising freight rates' and 'shortage of capacity' on the other hand are cyclical issues. The interaction between capacity and volumes has a profound impact on freight rates resulting in historically high freight rates. However, rising freight rates and capacity availability are likely to return closer to historical averages once the inventory restocking cycle by North American and European manufacturers and retailers normalizes.

Strategic issues that shippers must manage to stay competitive and relevant in the ever-changing business environment are further down the list. For instance, 'Lack of real-time end-to-end visibility' and 'Lack of supply chain resilience' rank quite low, even though understanding and managing these types of problems are essential to achieving long-term, sustained growth. Alternatively, this might also suggest that it is becoming common place for shippers to have good visibility and that this is no longer perceived as a gap as the RTV space matures.

Please rank the issues facing your transportation operations today in terms of importance.



Note: A score was calculated in order to rank the main criteria– first preference was awarded 8 points, a second preference 7 points, and so forth.

project44 perspective:

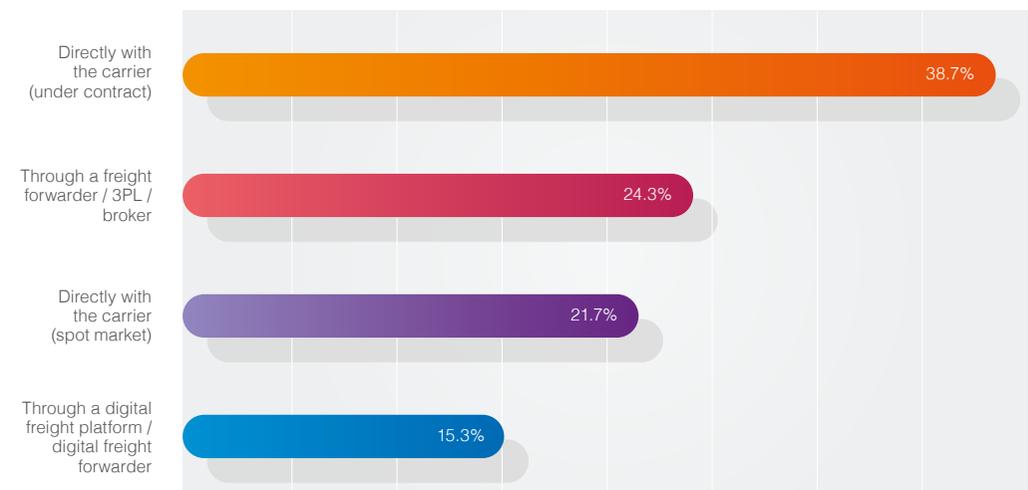
While there is no silver bullet for the current labor shortages, RTV maximizes the efficiency of existing resources through a reduction in manual processes. It also helps customers measure carriers' performance and create proactive feedback loops to drive continuous improvements.

Shippers use different avenues to book freight. The most common method to book freight is 'Directly with the carrier (under contract)'.

The share of 'spot market' bookings (21.7%) points to an acceleration of spot volumes as a percentage of total freight volumes. This trend started to emerge towards the middle of 2020 and has been particularly evident in the road freight sector, but there is also some evidence of shipping lines signing fewer long-term contracts and pushing customers towards the spot market. The increased use of the spot market has to do with the loose capacity and rising freight rates, which have been a feature of the global logistics market in 2020 and 2021. The implication of this shift in loads across networks is lower vehicle utilization, i.e., more empty miles, and a mismatch between capacity and demand.

According to the survey results, 'Digital freight platforms and digital forwarders' haven't yet achieved notable market penetration among shippers, with only 15.3% of those surveyed reporting their use. However, while the adoption rate of digital freight platforms and digital forwarders is moderate at present, it is likely to increase over time as the technology matures. Ultimately, however, the uptake will considerably depend on the quality of services offered by the platforms and digital forwarders as well as the extent to which the platforms can remove the inefficiencies inherent in the forwarding process.

How do you book your freight?

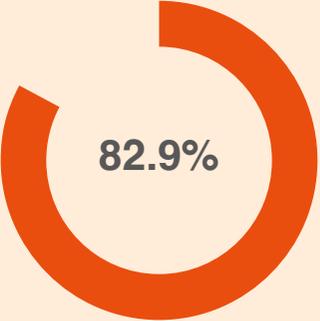


The average on-time performance (OTP) of carriers currently stands at 82.9%. OTP among the surveyed retailers was higher than that of manufacturers and stood at 84.4% compared to an OTP of 81.6%.

Shippers consider OTP of 71.7% to be sub-optimal, forming a key benchmark against which carriers must be able to demonstrate successful performance. Below this level, shippers start looking for new carriers.

OTP has experienced a drop during the Covid-19 pandemic and carriers have seen their OTP falter due to the volume surge and the resulting capacity crunch. For instance, the customer service of shipping lines has collapsed, not least by missing schedules, which will have longer term implications for customer relationships once market conditions normalize. In a post-pandemic, tech-enabled supply chain environment it is critical that carriers maintain and can demonstrate a high-level of OTP. Those that can have the opportunity to partner with shippers committed to making their supply chain more resilient against future shocks.

What is the current average on-time delivery performance of your main/primary carrier(s)?



82.9%

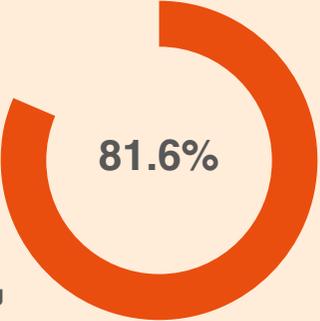
Average OTD performance

A closer look:



84.4%

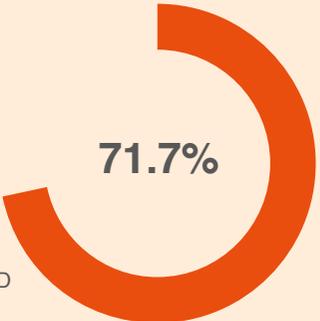
Average OTD performance
Retail



81.6%

Average OTD performance
Manufacturing

What do you consider as a suboptimal level of on-time delivery performance, i.e. what level of on-time delivery performance would prompt you to start looking for new carriers?



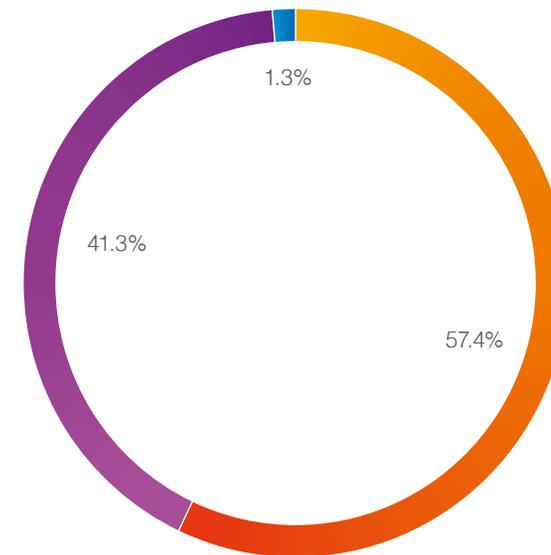
71.7%

Average suboptimal OTD performance

project44 perspective:

Accurate measurement of KPIs can be time consuming and difficult if self-reported. By providing a single source of truth for shippers and carriers, RTV platforms can lead to more fruitful carrier conversations and a mutual understanding of true performance, as well as translating real time location data into actionable information.

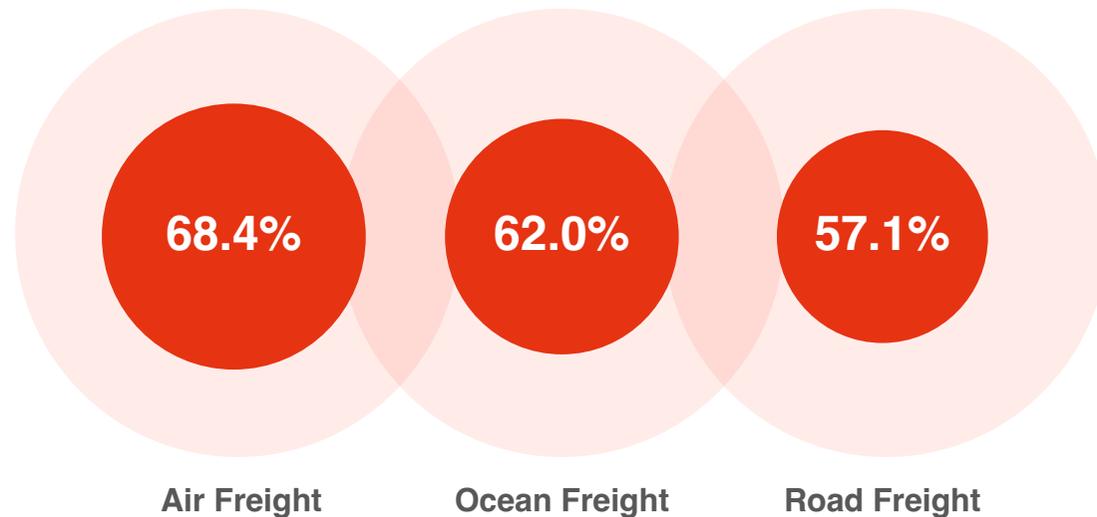
More than half of shippers consider RTV to be a pre-requisite for a carrier to be eligible to tender for their business (57.4%). For 41.3% of the shippers, real-time visibility is a nice-to-have feature when carriers tender for their business. Looking at the different transportation modes reveals some variation in the importance shippers attach to RTV when buying transportation services from carriers. Namely, shippers that use air freight carriers appear to attach greater importance, with 68.4% of them stating that RTV is a pre-requisite for an air carrier to be eligible to tender for their business. Overall, the results highlight that shippers increasingly demand RTV from their carrier partners.

Is real-time visibility an important factor when you are buying transportation services from carriers?

-  Real-time visibility is a pre-requisite for a carrier to be eligible to tender for our business
-  Real-time visibility is a nice-to-have feature when carriers tender for our business
-  Real-time visibility is not an important part of our tendering process

A closer look:

Real-time visibility is a pre-requisite for a carrier to be eligible to tender for our business:



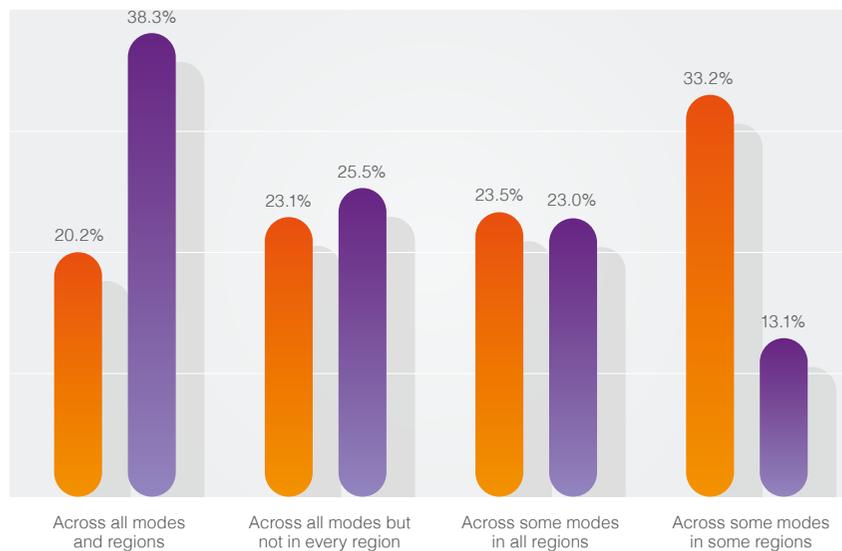
project44 perspective:

As air freight is typically used for more time sensitive shipments, it is unsurprising that more shippers using this mode are mandating RTV from their carriers. Regardless of the mode, carriers who embrace RTV have an opportunity to market themselves to their current and future customers as a partner who is committed to customer service and is tech-enabled to deliver on that promise.

Even though the majority of shippers view RTV as a pre-requisite for a carrier to be eligible to tender for their business, only a small proportion of shippers actually have full visibility into their operations. Only 20.2% of the surveyed shippers operate a fully transparent supply network— one with RTV ‘across all modes and regions’. The rest of shippers only have partial visibility on their transportation movements.

However, the supply chain disruptions over the last two years make it apparent that having a partial view of transportation movements is not enough. The supply chains of the future will be characterized by full transparency and increased resilience. This will enable supply chain networks to better manage issues and the resulting uncertainties, as well as to create and capture the value of deeper and more efficient carrier-shipper partnerships. A large proportion of the surveyed shippers appear to be aware of this and have as a result expressed willingness to implement RTV across all modes and regions in the next 5 years. The results show carriers must develop the capability to operate in a connected RTV environment.

What level of real-time visibility do you currently have on transportation movements and what would you like to obtain in the next 5 years?



project44 perspective:

Large, international shippers have complex, multi-echelon, multi-modal transportation networks and need all of the many actors to share data in order to achieve visibility across the extended supply chain. Shippers should evaluate how their RTV provider can support them in this endeavor.

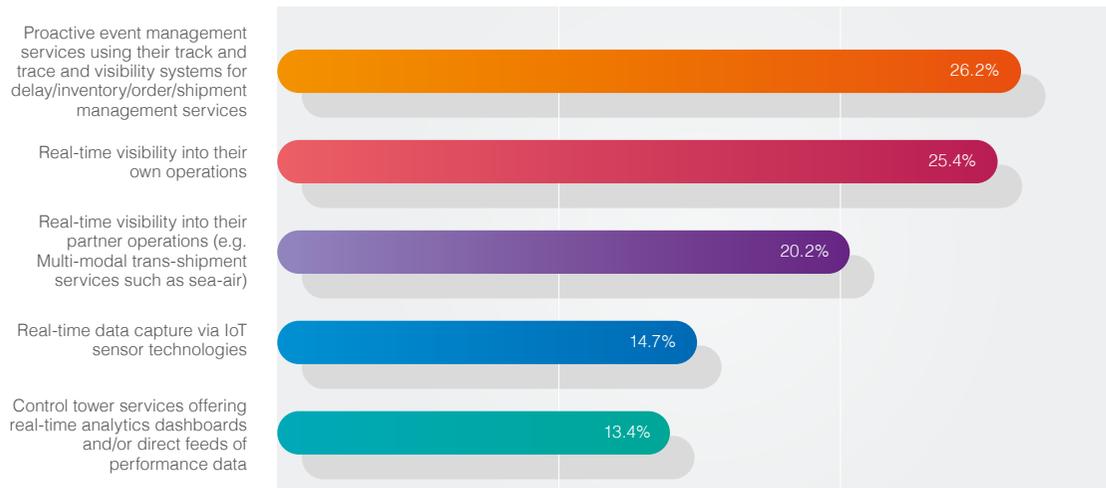
Simplified onboarding experiences for both shippers and carriers can decrease the initial friction for implementation and create an opportunity for rapid time to value.

Further reinforcing the finding that the industry has low levels of RTV, only 20.2% of shippers stated that their carriers provide 'Real-time visibility into their partner operations'. The implication is that these shippers don't have visibility over multi-modal trans-shipment services. This limits their ability to improve their operations and respond more quickly to changing dynamics.

Nowadays, logistics companies must operate in a much more networked and collaborative world. Carriers of all sizes must integrate with a variety of different systems and services across the operating spectrum. At the same time, streams of data from a range of devices and sensors need to be captured and processed in support of the ever-present demand for visibility.

Many logistics companies are exploring the adoption of "Control Towers" to monitor and manage supply chain activity on a global basis. In essence, this is really another description for the provision of complete supply chain visibility. However, the survey results show that the adoption of control towers and real-time data capture are still notoriously low in the industry.

Do your carriers provide any of the following?



project44 perspective:

The advantage afforded by end-to-end supply chain visibility is simply too great to overlook and this is a trend that is only going to accelerate. To maximize this advantage, shippers should seek a RTV partner that provides 'connective tissue' between disparate systems in order to create information symmetry, creating an environment that allows all parties to easily communicate and collaborate.



Conclusion

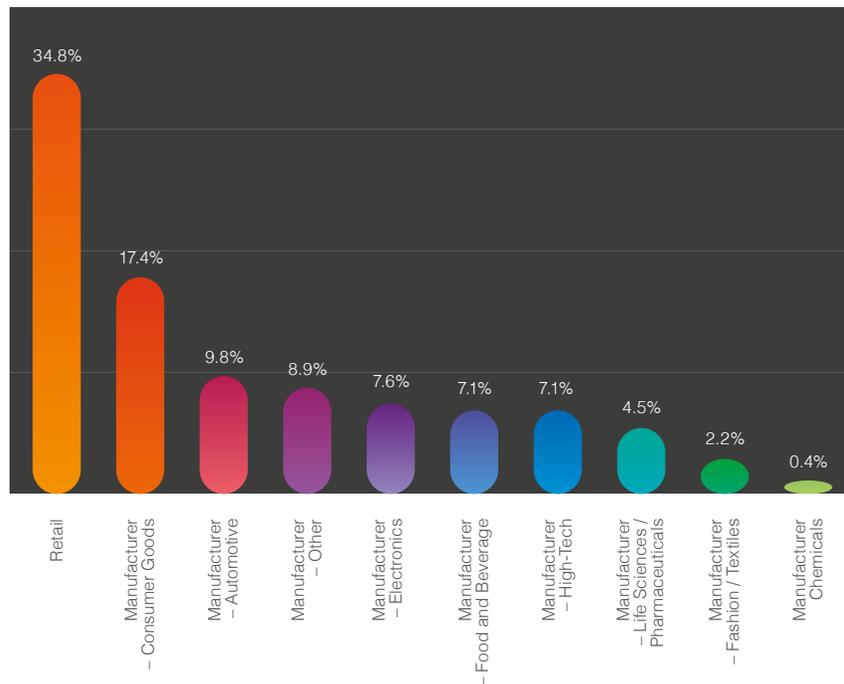
The Covid-19 pandemic uncovered vulnerabilities and a lack of resilience in global supply chains, with businesses being forced to operate under uncertain conditions and struggling to identify the most appropriate course of action. As a result, the importance of RTV in the logistics industry has increased, with the majority of shippers realizing that visibility is no longer a nice to have, but a must have. The fact that the provision of RTV is one of the top three criteria when choosing transportation partners shows that the ability to provide RTV has become a key service criteria shippers demand from carriers.

Nonetheless, while shippers recognize the need to improve supply chain visibility, survey results suggest that true RTV continues to be an elusive goal. Only a small proportion of shippers claim to partner with carriers that have full transparency over their transportation movements, suggesting that end-to-end RTV is still an exception rather than the norm, and that most of businesses are not yet equipped to withstand the next storm. In light of the increasing demand for RTV from shippers, moving forward, those carriers that have the capabilities to operate a fully transparent global supply network will stand out from the competition and win new business, but also improve existing customer relationships.

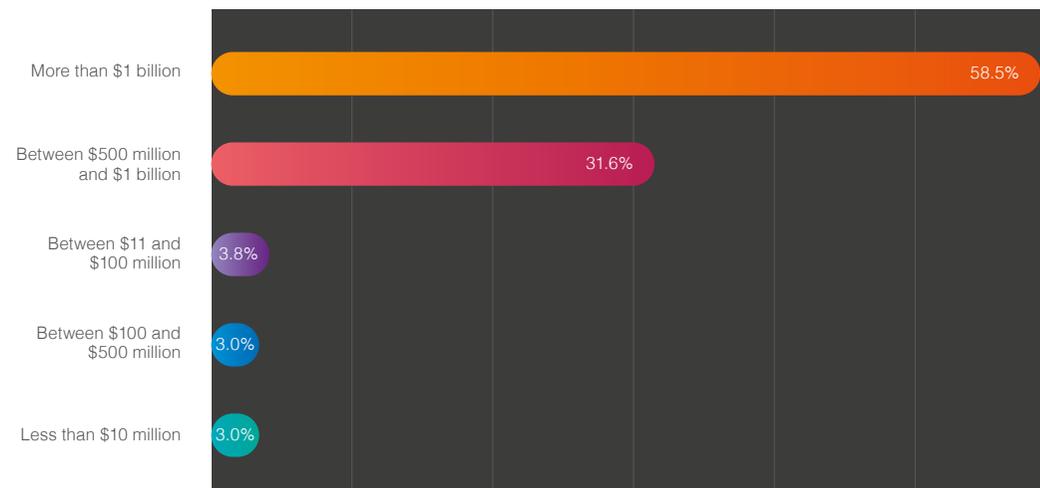


Who took part in our survey?

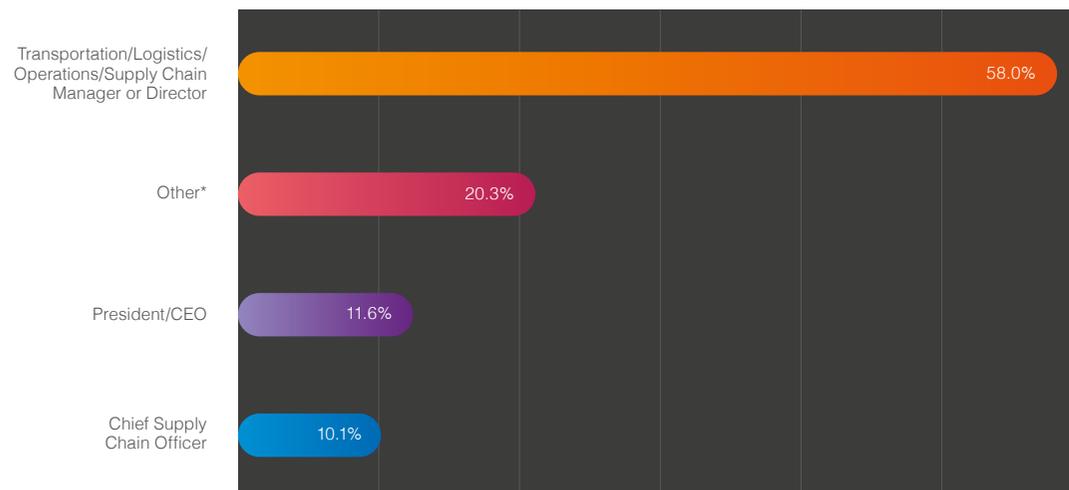
Which of the following best describes the company you work for?



What are your company's annual revenues?

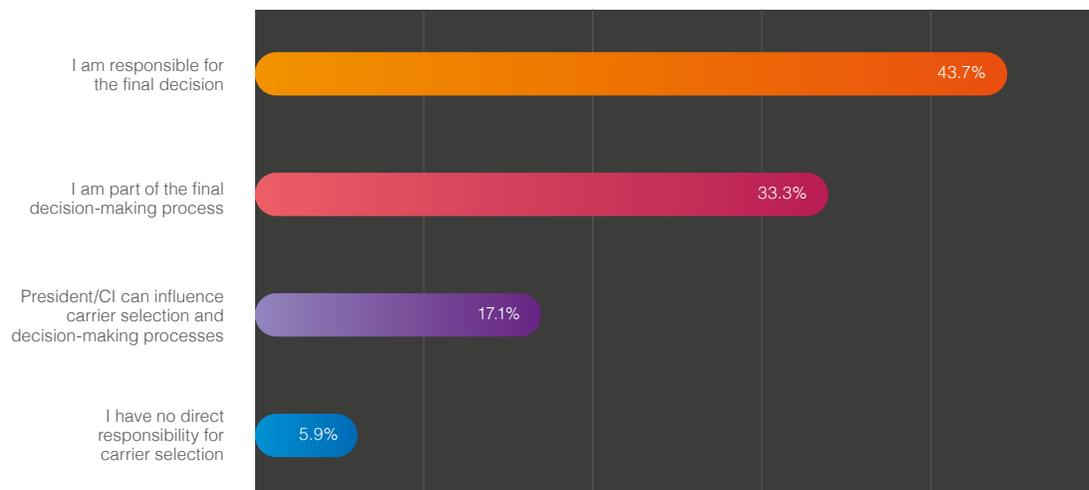


What is your job title?

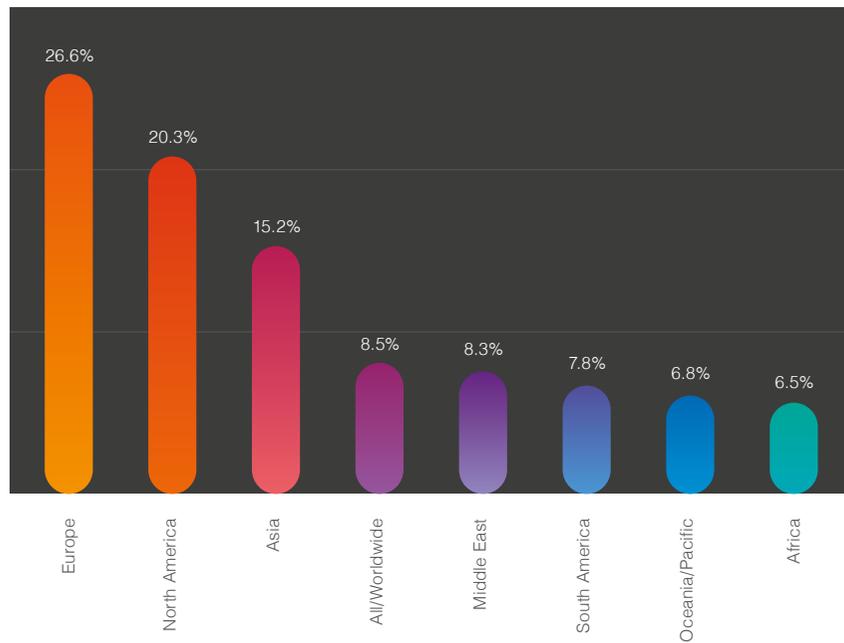


**Other (VP, Managing Director, Supply Chain Planner, Transportation Analyst, Digital Transformation, Supply Chain Analyst, Procurement etc.)*

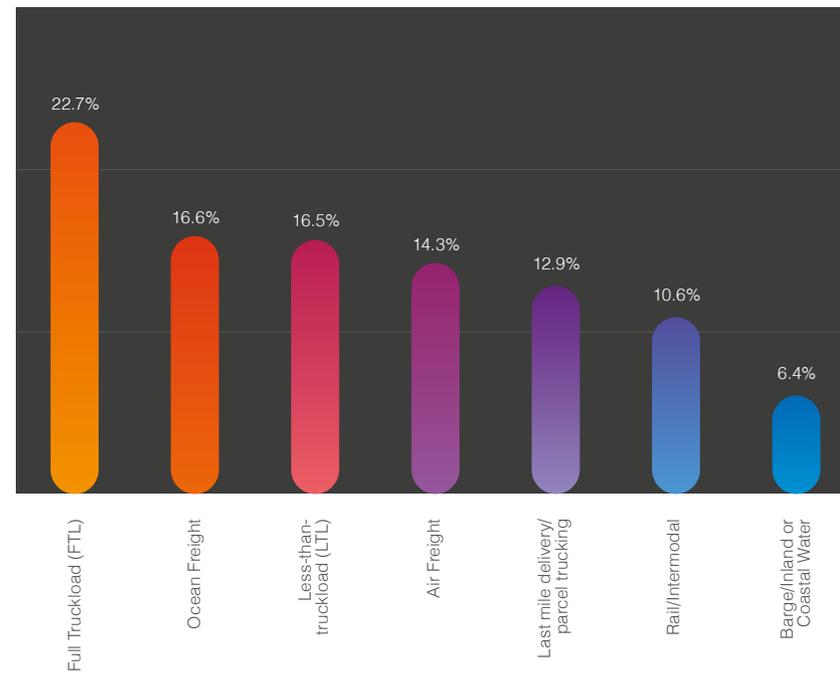
Which of the following best describes your level of decision-making influence in carrier selection?



In which of the following regions do you use carriers for transportation shipments?



What types of carriers do you use for transportation movements in your supply chain?



About project44

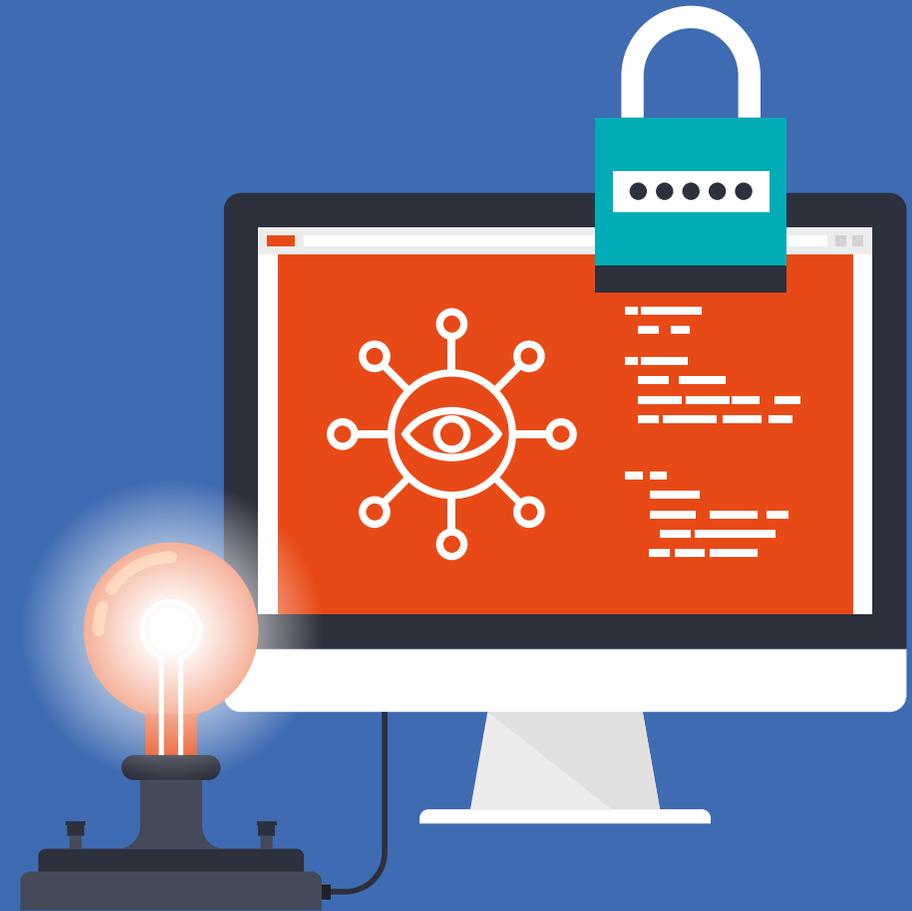
project44 is the world's leading advanced visibility platform for shippers and logistics service providers as defined by number of carriers, number of customers, ARR, net retention, shipments per day, growth rate and gross margin.

project44 connects, automates and provides visibility into key transportation processes to accelerate insights and shorten the time it takes to turn those insights into actions. Leveraging the power of the project44 cloud-based platform, organizations increase operational efficiencies, reduce costs, improve shipping performance, and deliver an exceptional experience to their customers.

Connected to thousands of carriers worldwide and having comprehensive coverage for all ELD and telematics devices on the market, project44 supports all transportation modes and shipping types, including Air, Parcel, Final-Mile, Less-than-Truckload, Volume Less-than-Truckload, Groupage, Truckload, Rail, Intermodal, and Ocean.

In 2021, project44 was named #1 on the FreightTech 25 List and Leader among Real-Time Transportation Visibility Providers in Gartner's Magic Quadrant.

To learn more, visit www.project44.com



About Ti

Transport Intelligence (Ti) is one of the world's leading providers of expert research and analysis dedicated to the global logistics industry. Utilizing the expertise of professionals with many years of experience in the express, road freight and logistics industries, Transport Intelligence has developed a range of market-leading web-based products, reports, profiles and services used by many of the world's leading logistics suppliers, consultancies, banks and users of logistics services.

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