

#### INTRODUCTION

Real-time end-to-end supply chain visibility remains a top investment priority for organizations. According to Gartner, "Visibility continues to be one of the top technologies supply chain end users invest in" and "by 2023, 50% of global product-centric enterprises will have invested in real-time transportation visibility platforms." However, the many benefits remain difficult to quantify for those driving visibility project within their organizations.

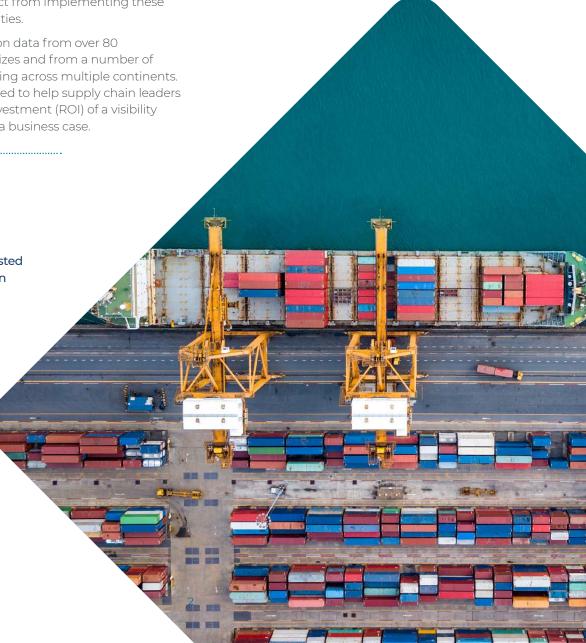
This guide outlines the major pain points related to a lack of supply chain visibility, the corresponding benefits of real-time transportation visibility (RTTV) solutions and quantifies the average gains in efficiency or cost savings an organization can expect from implementing these real-time visibility capabilities.

The estimates are based on data from over 80 customers, in a range of sizes and from a number of common verticals, operating across multiple continents. This information is designed to help supply chain leaders estimate the return on investment (ROI) of a visibility project, to aid in building a business case.

By 2023,

of global product-centric enterprises will have invested in real-time transportation visibility platforms.

The team at Shippeo are also able to provide bespoke value assessments based on your organization's unique needs and context and this is strongly recommended early on in your exploration of end-to-end visibility solutions, as well as transport management systems, which benefit from integration with RTTV. Having worked on countless visibility projects for international organizations, Shippeo can help you quantify the many benefits for your business case and assist in demonstrating their value to stakeholders.

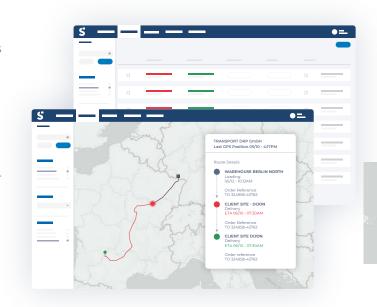


# VISIBILITY PAIN POINTS AND BENEFITS

Many organizations experience a visibility gap when it comes to transportation. They know when a shipment is booked to be picked up and dropped off, but there's no indication of actual or estimated times, or any status updates available during transit.

With improved transportation transparency and data quality, it's possible to see more of what's happening within the network. This holistic view of a supply chain enables operational optimizations to be made complete the resulting transparency increases network stoppings attention to the information needed in o take action more quickly and makes cross-functions efficiencies possible.

There are eight common areas of cost reduction that real-time transportation visibility solutions can bring supply chain organizations, for a variety of sizes and industry sectors. These can help to form the foundation of a visibility project business case:



| LOGISTICS TEAM LABOR COSTS          | 4  |
|-------------------------------------|----|
| CUSTOMER CHURN COSTS                | 5  |
| DISPUTES ON CARRIER ACCESSORIALS    | 6  |
| PENALTIES AND DISPUTE COSTS         | 7  |
| LABOR TIME WASTED AT DELIVERY SITES | 8  |
| FRESH INVENTORY TURNOVER            | 9  |
| MARITIME DEMURRAGE COSTS            | 10 |
| CUSTOMER SERVICE COSTS              | 11 |
|                                     |    |

# LOGISTICS TEAM LABOR COSTS

For decades, transport teams have employed workers to manually follow up via phone, email or even fax on deliveries in transit - a very time-consuming and inefficient process. Faced with this lack of information, shippers developed and used their own tracking portals, and required carriers to manually enter information after each delivery. These proprietary tools, sometimes based on spreadsheets, create a significant amount of work for carriers. In a medium-sized firm, data entry can take three to five hours per week. Prone to human error, the data also lacks accuracy and objectivity for the shipper, and is usually collected several hours after a delivery occurred. This slow flow of information can in turn create invoicing delays, affecting cash flow.

Being able to predict accurate shipment ETAs can reduce administration costs for organizations by automating processes and allowing teams to focus on exceptions. This allows shippers to better utilize teams who used to perform time-consuming tasks like sending delivery notifications, calling carriers to follow up on the whereabouts of deliveries, scheduling of docks and processing of payments using automated workflows. The automated customer notifications on shipment locations and status help improve customer satisfaction, while also reducing the number of customer inquiries.

The streamlining of communication between carriers, customers and shipping departments gives transport managers more bandwidth to focus on activities that add greater value to the business. The reduction in time spent on non-value-added activities for a typical logistics team creates substantial savings. For example, labor hours spent by operators to complete an 'incident form' or ticket due to tracking issues can be reduced by 60-70%.

Labor hours spent by operators to complete an 'incident form' due to tracking issues can be reduced by



#### THE ADDED VALUE OF APPS

Shippeo's mobile application facilitates paperless processes, with digital ePODs (electronic proof of delivery) replacing millions of sheets of paper each year, while saving drivers paper printing and handling time and accelerating customer invoicing to improve cash flow. In the same way, it creates administrative time and cost savings for the end customer as well, reducing the number of full-time employees required.

A Shippeo retail customer based in France has estimated a reduction of 25 full-time employee roles by implementing ePOD. Another customer, specializing in freight transport and logistics solutions, has equipped 800 drivers with Shippeo's mobile app, leveraging paperless processes including automatically generating an electronic POD to reduce logistics team labor costs and offer customers a higher quality of service.



### CUSTOMER CHURN COSTS

Many shippers are facing increasingly demanding customers. These demands are driven by new practices adopted in B2C transportation (deliveries in less than 2 hours, precise follow-up of deliveries, etc.) and push companies to improve their quality of service at the delivery level. Currently, problems occurring during transportation (particularly delays) are known only several hours after a delivery occurs. In most cases, it is the end customer themselves who alerts the shipper about a delivery problem. For the receiver, whether a store or a warehouse, this lack of visibility results in significant costs, such as those incurred to mobilize teams for unplanned loading and unloading of goods. In addition, depending on the situation, a large retailer's warehouse may have no-show rates between 5% to 15% (i.e. deliveries that fail to arrive when promised).

A lack of real-time delivery information also leads to customer service teams receiving numerous calls and complaints, and tends to erode the relationship between the shipper and the recipient or end customer. The decline in brand and reputation also affects an organization's ability to build healthy margins into delivery services. The resulting higher costs, and thinner margins, can create a vicious cycle.

Real-time transportation visibility (RTTV) platforms like Shippeo's improve delivery service levels, contributing to reduced churn and increased sales of approximately 1% on average. One of the world's largest energy solutions players uses Shippeo's real-time shipment visibility to enhance customer satisfaction by creating value-added services such as real-time tracking, accurate delivery ETAs and better incident management for shipments in transit to ensure impact on end customers, and consequently churn, is minimized.

RTTV platforms give service teams the ability to respond to exceptions quickly, anticipate delays and other issues to mitigate negative impacts on end customers. Information on deliveries can also be made available directly to end customers, eliminating the middleman and helping to manage expectations. Both of these capabilities result in increased customer satisfaction, through a reduction of negative NPS scores, and potentially increase sales and customer retention as a result of a better level of service and customer experience.



# DISPUTES ON CARRIER ACCESSORIALS

With demand outpacing supply, costs have been on the rise and it's become progressively important to optimize transportation asset use. As B2B supply chains have become increasingly complex and fragmented, deliveries have in turn become even more challenging to monitor. Companies are faced with a lack of tools to measure delivery service levels of carriers, especially when they're subcontracted. This lack of precise data makes it difficult to reliably measure On Time, In Full (OTIF) delivery performance, which is one of supply chain management's main objectives.

Real-time ETAs also help shippers gain greater transparency of carrier operations. This transparency helps to ensure costs associated with freight are fair and reasonable, particularly for accessorial (non-standard) costs through workflows. GPS and geofencing makes it possible to capture precise delivery performance data, including loading and unloading site arrival and departure times, dwell times and journey times, providing reliable and actionable insight for improving supply chain efficacy. The Shippeo Insights module presents useful metrics in a customizable online dashboard. Loading and rotation rates can be optimized, in turn boosting service levels and in many cases reducing costs.

This data facilitates route optimization and ensures carrier costs quoted are justified, which helps minimize transport costs. In fact, improved data to eliminate carrier accessorials results in a 0.5-1% freight tariff reduction. For example, one of the world's top 10 automotive manufacturers uses Shippeo's real-time insights on shipments in transit to collaborate more effectively with inbound delivery partners. This ensures smooth business-critical operations at their assembly lines, ensuring fees are reasonable based on objective historical data. This has allowed them to save an average of €775k on their transport budget annually.

Carriers also benefit from the data collected, allowing them to optimize their operations and reduce costs. Shippeo also offers carriers a cost-free way to integrate with a wider supply chain ecosystem. Traditional system integrations can be expensive and difficult to implement, especially when using more traditional EDI data exchange technologies. Shippeo's own API integrations make it possible to connect in a fraction of the time.



# PENALTIES AND DISPUTE COSTS

A lack of time-stamped delivery data can lead to penalties and disputes. Loading and unloading slots at delivery sites can be strict. If a shipment arrives too early, it can mean additional storage costs for the shipper. If too late, it could result in penalties, dissatisfied customers and other knock-on effects downstream. What's more, some industries like manufacturing and automotive rely heavily on just-in-time delivery to enable production line efficiency, which in turn demands precise delivery times.

Precise location data collected and processed by a real-time transportation visibility solution allows for greater objectivity when measuring punctuality and OTIF performance. Automated notifications give advance warning of delays to end customers to help manage expectations and potentially avoid late penalties. For example, dock slots may be able to be rebooked without incurring additional cost. In addition, platforms such as Shippeo's that enable automated electronic proof of delivery (otherwise known as ePOD) also bring clarity and objectivity to help resolve or avoid disputes. Shippeo's mobile application makes more granular layers of visibility possible through handlingunit tracking. Using the app's barcode scanner on units or pallets during loading or unloading helps to reduce the number of misdeliveries and disputes.

A large European supermarket chain uses Shippeo to save €750,000 a year on franchisee dispute costs, a 75% reduction on total annual dispute costs.

On average, real-time transportation visibility platforms also help shippers achieve up to a 30% decrease in waiting time penalties from carriers. In addition, both a large European FMCG producer and a global beauty and cosmetics CPG manufacturer have estimated a reduction in penalties of €1 million per year in the French market alone by using Shippeo.

Reduce labor costs relating to dispute resolution by up to



and carrier waiting time penalties by up to





# LABOR TIME WASTED AT DELIVERY SITES

A lack of visibility also creates operational inefficiencies throughout the chain, particularly at delivery sites. This can result in high labor costs at warehouses, loading docks and production lines. With no advanced knowledge of delays or early arrivals, loading docks are not managed efficiently. An early arrival results in long dwell times while a truck waits for its scheduled delivery slot. A late arrival is forced to wait for a gap in the schedule, again increasing dwell times and associated costs.

Stores or other delivery recipients can incur additional and unnecessary costs due to poor operational visibility. Just like at warehouses, trucks held up at delivery sites, unable to unload, end up costing more in driver overtime. It's a particularly relevant problem for retailers, where late deliveries can draw staff away from other important activities such as shelf restocking or selling to customers during busy periods.

When real-time tracking is combined with the advanced computational power of machine learning, it's possible to attain highly accurate and reliable ETAs. This in turn makes it possible to increase the efficiency of operations in warehouses, improving resource utilization with dynamic dock appointment bookings.

Real-time location data from a real-time transportation visibility (RTTV) platform can be used to better plan the personnel in goods receiving areas or storage facilities. This is realized through the combination of dynamic dock appointment booking with real-time visibility and accurate ETAs. Accurate ETAs help keep labor hours to a minimum with less waiting around. In turn, the carrier is better served and can start their next activity faster. Many of the costs relating to exceptions, express costs, waiting times and rebooking of loading/ unloading time slots at storage facilities, can be reduced or avoided. By using the accurate data from dock booking tools, the load factor of trucks can also be increased. Consequently, work time spent to prepare and load material at these delivery sites can be reduced by 10-20% on average, thanks to greater operational visibility and more precise planning of dock activities. In stores, the streamlining of operations enabled by knowing precise delivery ETAs can help reduce extra costs and overtime by as much as 30%.



# FRESH INVENTORY TURNOVER

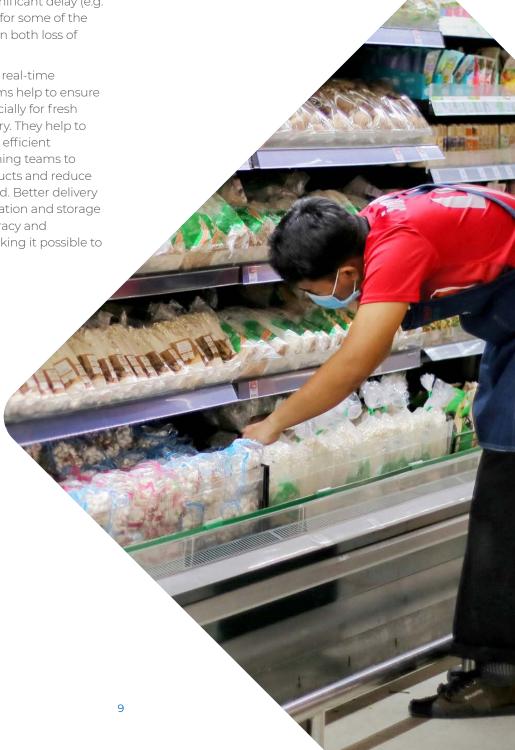
One of the consequences of poor visibility within stores is the opportunity cost of failing to keep satisfactory levels of stock on shelves. A late delivery can have a direct impact on turnover for retailers, especially for fresh products such as seafood, meat, fruit and vegetables, as well as those on promotion. Store staff restocking fresh items must work as early as 5am and tend to finish at lunchtime. If a delivery truck has a significant delay (e.g. 2 hours), there won't be enough time for some of the goods to be put on shelves, resulting in both loss of turnover and product wastage.

Predictive delivery ETAs generated by real-time transportation visibility (RTTV) platforms help to ensure daily deliveries are well received, especially for fresh products requiring just-in-time delivery. They help to improve delivery punctuality for more efficient restocking on shelves and allow scanning teams to better monitor the availability of products and reduce shrinkage without increasing workload. Better delivery visibility also makes inventory organization and storage more efficient by improving the accuracy and predictability of future shipments, making it possible to minimize safety stock.

RTTV can increase turnover by up to

**72**%

For these fresh or promoted products, RTTV can increase turnover by up to 2% by enabling smoother in-store operations thanks to precise shipment ETAs.



### MARITIME DEMURRAGE COSTS

For maritime cargo, poor execution and timing of loading or unloading can result in containers unexpectedly lying idle in ports and yards, resulting in hefty demurrage fees. This is often caused by the lack of visibility of a vessel's ETA or a container's status. Without this visibility, warehouses or other delivery sites downstream are unable to organize themselves properly to receive large volumes of inbound goods. As a consequence, containers sometimes remain at ports for many more days than necessary, resulting in millions of euros in unexpected costs.

Visibility solutions can reduce demurrage fees by an average of

**¥**30%

Gartner estimates that visibility solutions can reduce detention and demurrage fees by between 10-50% on average. In the same vein, yard management solutions can also be integrated with real-time transportation visibility platforms to improve locating of lost containers. A large European supermarket chain was paying as much as €10 million a year in demurrage costs. Shippeo's real-time visibility of container shipments has helped them cut these costs by 30%. This is achieved through better organization within distribution centers that the platform enables, helping to avoid bottlenecks and allowing containers to be emptied more quickly.



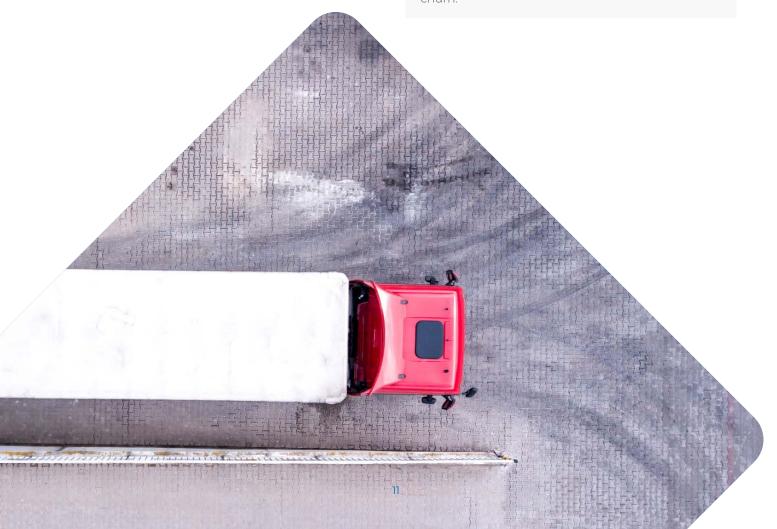
# CUSTOMER SERVICE COSTS

Many supply chains contain visibility blind spots, where the status or whereabouts of a shipment is completely unknown, potentially for days or weeks. In many cases, shippers only become aware of delays once an end customer complains about a late delivery, negatively impacting NPS. Customer service teams subsequently waste a lot of time manually following up on customer queries about late deliveries, rather than focusing on tasks that could be adding greater operational value.

Average labor hours spent by operators on delivery inquiries is reduced by



For many organizations, a significant proportion of their customer service enquiries are related to delivery status. Improved real-time transportation visibility (RTTV) helps customer-facing teams meet ever-higher B2B customer service expectations by sharing more delivery information proactively, in turn reducing the number of contacts the customer service center receives. This reduces pressure on team resources, allowing staff to provide a higher level of service when handling customer inquiries and to focus on exception management. Overall satisfaction is positively impacted and average work time spent by operators on delivery inquiries is reduced by 20-40%. A large European appliance manufacturer estimates that Shippeo's visibility helped them reduce their customer service workforce by as much as 50%. Reduced inquiries also means higher NPS scores, which assists with reducing customer



### SUMMARY

The quantified benefits for each of the eight core areas outlined above have been summarised in the table below.

| PAIN POINT   | QUANTIFIED BENEFIT   |
|--|--|
| Labor hours spent on tracking activity due to non-value-added activities                 | Up to <b>70%</b><br>reduction in labor hours                         |
| Customer churn and low margins from lack of proactive communication on delivery problems | Up to <b>1%</b><br>increase in sales                                 |
| Disputes on carrier accessorials due to lack of historical performance data              | Up to <b>1%</b><br>reduction in freight tarriffs                     |
| Penalties and dispute costs from lack of time-<br>stamped delivery data                  | Up to <b>30%</b><br>decrease in waiting time penalties from carriers |
| Reducing labor time wasted at delivery sites   | Up to <b>20%</b><br>reduction of labor hours                         |
| Fresh inventory turnover improvement   | Up to <b>2%</b><br>increase in turnover                              |
| High demurrage costs for maritime container shipments                                    | Up to <b>30%</b><br>reduction in demurrage costs                     |
| High customer service costs from delivery inquiries                                      | Up to <b>40%</b><br>reduction of labor hours                         |

### INDUSTRY-SPECIFIC BENEFITS

Below are additional examples of quantified benefits of real-time transportation visibility with some more precise guidance on average figures achieved for a variety of industry sectors.

| PAIN POINTS   | QUANTIFIED BENEFIT  | INDUSTRY SECTOR  |
|---|---|--|
| Labor hours spent on non-value-<br>added delivery tracking tasks                        | Reduction in time spent to treat an incident form               | Manufacturing <b>50-60%</b> Retail <b>60-70%</b> FMCG <b>80-90%</b>                        |
|   | Reduction in time needed to close a claim                       | Logistics 40-50%   |
| Unproductive store staff due to inefficiency from no visibility                         | Increase of store staff productivity                            | Retail 16%   |
| High transport cost from lack of precise, objective performance measurement             | Reduction in tariffs in transport contracts based on dwell time | Retail 40-70%  FMCG 50-80%   |
| Customer churn from lack of track and trace service offering                            | Increase in business retention (incremental revenue growth)     | Logistics Services 0.6%  |
| Eliminating disputes on carrier accessorials due to lack of historical performance data | Reduction in freight tariffs                                    | Retail <b>0.5-1%</b> FMCG <b>0.5-1%</b> Manufacturing <b>0.5-1%</b> Automotive <b>2-5%</b> |
| Penalties and dispute costs from<br>lack of time-stamped delivery<br>data               | Decrease in carrier waiting time penalties                      | Manufacturing 18-24%  Logistics 20-30%  Building Materials 20-30%                          |
|   | Decrease in client penalties                                    | Automotive 30-50%  |
| Cost of dwell time management inefficiency in plants                                    | Reduction of dwell time   | [\(\lambda\) FMCG <b>20-40%</b>  |
|   | Transport budget savings  | Automotive 1%  |

| PAIN POINTS   | QUANTIFIED BENEFIT                            | INDUSTRY SECTOR   |
|---|---|---|
| Costly production line halts from delayed part deliveries                             | Transport budget savings                      | Automotive 1.5%   |
| Costs of human error inefficiencies from lack of process automation                   | Transport budget savings                      | Automotive 0,5-2%   |
| Loss of productivity for<br>transportation teams for lack of<br>real-time information | Increased transportation team productivity    | Building Materials 15%  Retail 20%  |
| High exception costs due to lack of operational agility                               | Reduction of urgent exception transport costs | Building Materials 10-20%  Automotive 15-30%  |
| Reducing labor time wasted at delivery sites  | Reduced labor hours                           | Retail 10-20%  Automotive 15-20%  Building Materials 19-23%  FMCG 10-30%  |
| High customer service costs from delivery inquiries                                   | Reduced labor hours spent by operators        | Retail 20-40%  FMCG 23-41%  Automotive 18-28%  Building 30-50%  Logistics Services 25-45%  Manufacturing 20-40% |
| Unoptimized manufacturing utilization levels  | Decreased material loss value                 | FMCG <b>5-10%</b> Manufacturing <b>5-10%</b>  |

# REQUEST A SHIPPEO CUSTOMER VALUE ASSESSMENT

Shippeo can quickly prepare a value assessment to help organizations accurately estimate the projected return on investment of Shippeo's real-time transportation visibility solution.

Below are three quick generic calculations you can make to begin to quantify benefit for specific areas that a real-time transportation visibility platform can provide. Each of these is just one example from one area of benefit and there are usually at least a dozen others. We encourage you to contact our team for a full, more detailed assessment.

#### **Example 1:** Logistics team labor costs

#### Reduction in transport incident forms or tickets due to unforeseen events or delays

This represents the estimated annual labor savings from a reduction in incident forms/tickets for transportation management thanks to Shippeo's early detection of supply chain risks and automatic shipment delay warnings.

The total savings represents the associated costs of works, which could be eliminated or redeployed on tasks adding greater value to the organization.

#### Estimated reduction in time to treat an incident form/ticket concerning tracking issues: 80%

| Figure A: Time spent on each form/ticket:                   | minutes (e.g. 10    | ) minutes per form)       |                            |
|---|---------------------|---------------------------|----------------------------|
| Figure B:  Number of incident forms/tickets per year:       | form                | ns/tickets (e.g. 5,800 pe | r year)                    |
| Figure C:   |                     |                           |                            |
| Average salary of relevant full-time employee proc<br>year) | cessing forms/tick  | ets:                      | per year (e.g. €50,000 per |
| Figure D:   |                     |                           |                            |
| Total hours in working day: (e                              | e.g. 7 hours per da | у)                        |                            |
| Figure E: Total working days in working year:               |                     | (e.g. 220 days per year)  |                            |
|   |                     |                           |                            |
| Appual cavings on administrative la                         | hor costs           | A x B x C x 80%           | _                          |
| Annual savings on administrative la                         | abor costs —        | 60 x D x E                | _                          |

#### **Example 2:** Penalties and dispute costs

#### Reduction in reclaimed penalties

Reduction in reclaimed penalties from clients for late arrivals determined using objective data captured automatically.

| Estimated decrease in client penalties: 4%  |                          |              |   |
|---|--------------------------|--------------|---|
| Figure A:   |                          |              |   |
| Annual late arrival penalties:  | (e.g. €2,600,000 per yea | ar)          |   |
|   |                          |              |   |
| Annual savings in late penalties  | s A                      | \ x 0.04     | = |
| Example 3: Carrier Accessor   | rials                    |              |   |
| Reduction in planned dwell time   |                          |              |   |
| Reduction in planned dwell time hours built<br>transport contract based on objective measureal dwell time per site. |                          |              |   |
| Figure A:   |                          |              |   |
| Hourly waiting time cost:   | (e.g. €34 per hour)      |              |   |
| Figure B:   |                          |              |   |
| Annual transport orders:  | (e.g. 36,000 per year)   |              |   |
| Figure C:   |                          |              |   |
| Planned dwell time in contract:   | hours (e.g. 2 hours)     |              |   |
| Decrease in dwell time: 25%   |                          |              |   |
| Possible tariff reduction: 65%  |                          |              |   |
| Annual savings in tariffs   | AxB                      | x C x 0.1625 | = |

### DEVELOPING AN INTERNAL BUSINESS CASE

Calculating ROI is one of the core components of a real-time transportation visibility solution business case. To assist you in building your business case, here are four recommendations according to Gartner:\*

1

### Determine the objectives for real-time transportation visibility in your organization

Consult with teams internally to uncover the ways in which different departments will benefit from an RTTV platform. Benefits could include improved customer satisfaction levels, cost savings, increased productivity for teams, improved OTIF performance and increased transportation capacity thanks to more efficient operations.

2

#### Define solution implementation phases and objectives for each

Some organizations may opt to phase in various degrees of visibility depending on their unique business context and needs.



## Quantify the expected benefits for all supply chain stakeholders, to boost project buy-in

When carriers and other stakeholders are made aware of the benefits, they are more likely to collaborate on implementing a visibility solution.



## Demonstrate expected ROI by outlining all quantifiable and non-quantifiable benefits

By exploring all existing data available, teams can determine which benefits can be measured and explain any non-quantifiable ones, so leadership understands why investment in an RTTV solution should be prioritized.



At Shippeo, our teams are dedicated to helping you kickstart your visibility project. We're also proud to have been recognized in the inaugural Gartner Magic Quadrant for Real-Time Visibility Platforms. Having worked on numerous visibility projects for international

organizations, we can help you quantify the many benefits for your business case and assist in demonstrating their value to different stakeholders. Get in touch with one of our experts today at shippeo.com

## GET IN TOUCH WITH ONE OF OUR EXPERTS TODAY

**Hundreds of Shippians are present** in cities across the globe. Email contact@shippeo.com Shippeo offices MALMÖ. Shippeo team presence AMSTERDAM BERLIN WARSAW • DÜSSELDORF LONDON ROTTERDAM •STUTTGART VIENNA NANCY. GENOA MONTREAL MADRID ● ISTANBUL SAN FRANCISCO DALLAS • HOUSTON DUBAI • SINGAPORE JOHANNESBURG (

Shippeo, a global leader and European specialist in real-time transportation visibility, helps major shippers and logistics service providers leverage transportation to deliver exceptional customer service and achieve operational excellence. Their Multimodal Visibility Network connects FTL, LTL, parcel, and container transport and integrates 850+ TMS, telematics and ELD systems using a unique API. The Shippeo platform provides instant access to real-time delivery tracking, automates customer processes and offers unmatched ETA accuracy thanks to a proprietary and industry-leading algorithm developed in-house. Over 100 customers, including global brands like Coca-Cola HBC, Carrefour, Schneider Electric, Total, Faurecia, Saint-Gobain and Eckes Granini, trust Shippeo to track more than 28 million shipments per year across 75 countries.

Learn more at www.shippeo.com





