





About the Survey

Since 2017, Descartes has conducted an annual benchmark survey of global transportation professionals to identify the strategies, tactics and technology-thinking of top-performing organizations.

Survey participants represent a wide range of industry leaders including Descartes customers and followers, trade association members and industry publication readers to provide a balanced view of transportation management (TM). Only the last five years of results are used to keep the study relevant.

Each year our benchmark survey:

- Explores how companies view the role of TM
- Identifies key industry trends driving the market
- Examines how transportation value is measured
- Uncovers which capabilities, technologies, and competitive strategies/tactics are making the greatest impact
- Provides the outlook for future IT investment

The 2023 Survey: Transportation Management in Transition

Late 2022 set the stage for 2023 for many economies and transportation. Consumers pulled back from the buying spree of the previous two years. Higher costs, especially energy and commodities, and inflation have been big reasons for slower economic growth and, in some countries, recession. The cost of ocean and air transportation receded as capacity opened up; however, driver shortages continue to impact over-the-road capacity and reliability. Transportation leaders are focused on addressing the capability shortfalls that were exposed during the pandemic such as shipment visibility. Top performers continue to take more aggressive actions to turn these transportation management challenges into opportunities to become more competitive and grow.









Who We Surveyed

This year's 345 survey participants represent the logistics community and shippers from a wide variety of industries. Again, there was a significant emphasis and success on garnering more respondents beyond North America. Here's a snapshot of respondents' business type and global footprint, plus the transportation modes they use.

Growing participation by logistics community

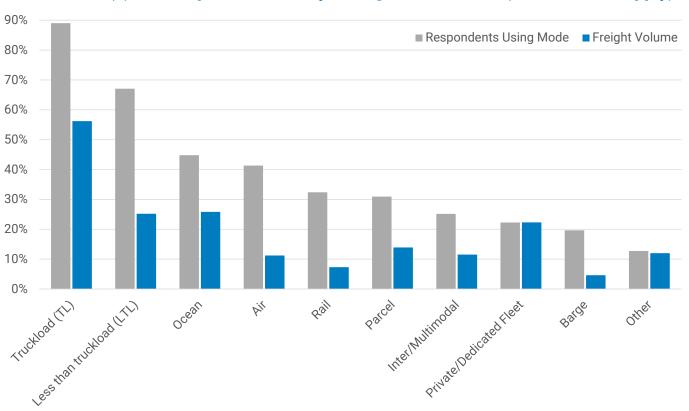
- Freight Brokers are the top business type represented (24%)
- Almost two-thirds of respondents (66%) work in the logistics community
- Similar to the past three surveys, manufacturers (14%) lead the shipper group

What is your primary business type? (select one) 25% 20% 15% 0% Spr. Caries Manufactures Other Caries Realthant Caries Realth Control Re

Truckload continues to dominate

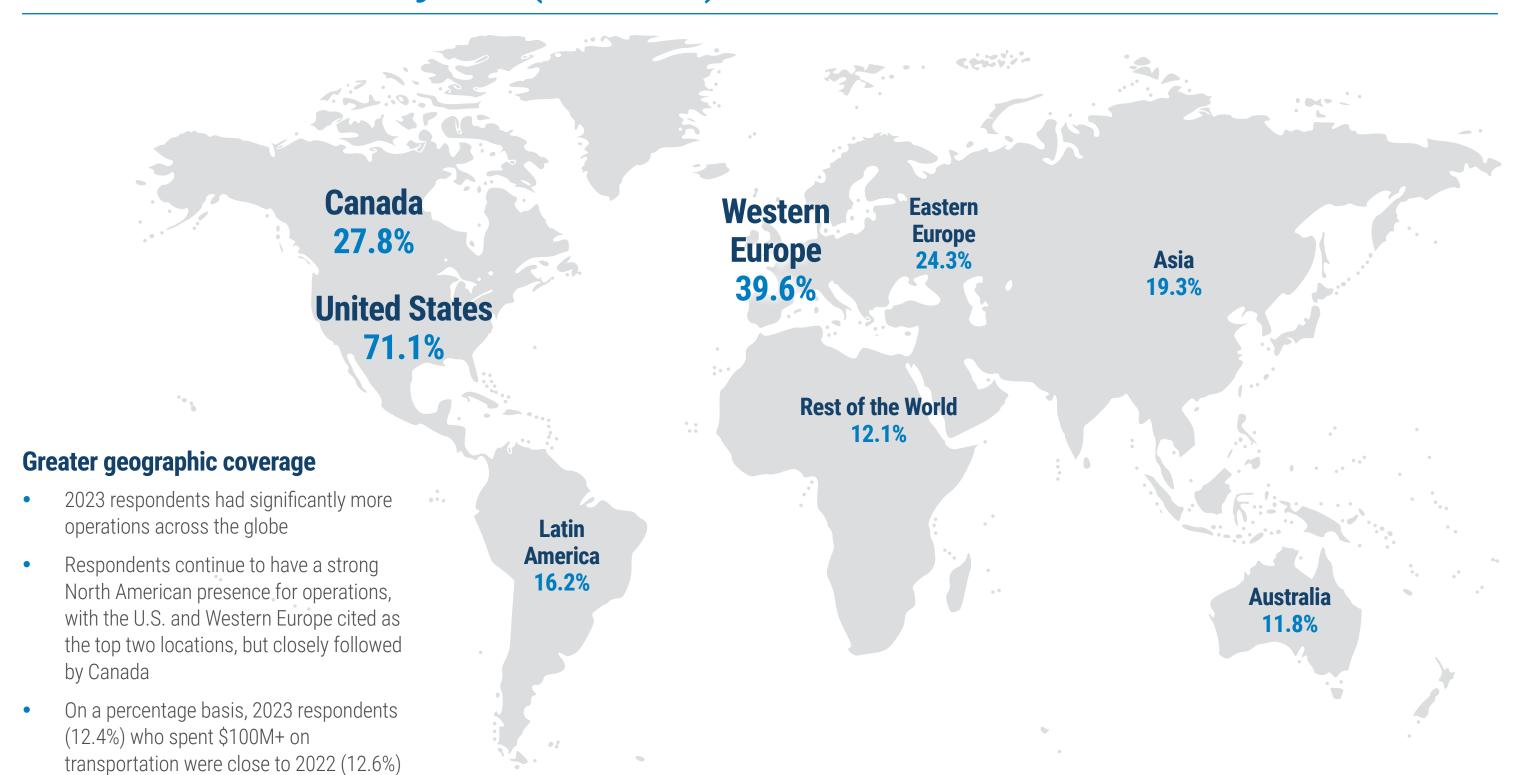
- As expected, truckload usage leads other modes in percentage of survey respondents (89%), as well as in volume (56%)
- Truckload usage was up 9% and 4% in volume in 2023 versus 2022
- LTL and ocean ranked second and third in both categories, with 67%/22% and 45%/26% for 2023 and 2022 respectively

What mode(s) of transportation does your organization use? (select all that apply)





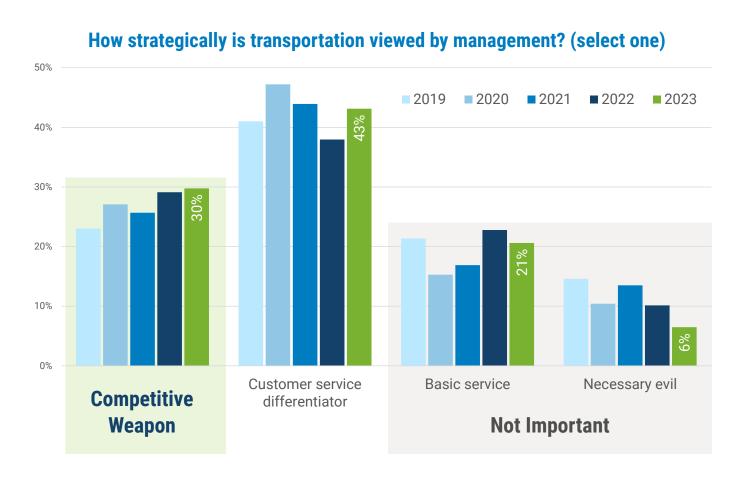
Who We Surveyed (cont'd)



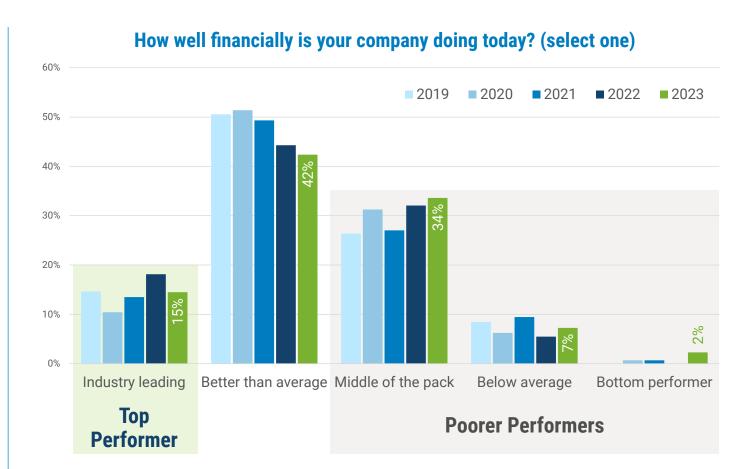


Respondent Perspectives

To get a better sense of how companies think and act, we asked respondents to rate their companies on senior management's strategic view of transportation management. We also wanted to see how those perspectives related to overall financial performance. Based on their ratings, respondents were consolidated into groups for further analysis. The first grouping concerns the strategic importance of transportation and whether management believes it is a Competitive Weapon or Not Important. The second grouping looks at the difference in financial performance where industry leaders are defined as Top Performers, and average financial performers and below are defined as Poorer Performers. The results of the study were then compared by these groups to see if management importance and financial performance had an impact on strategic, tactical and technology decisions.



- Management that views transportation management as a Competitive Weapon has grown during the last 5 years of the benchmark study to an all-time high (30%)
- Lowest-ever score for management viewing transportation management as a necessary evil (6%)



- Top Performers decreased for the first time in 4 years (15%)
- But Poorer Performers maintained their 5-year high (43%)

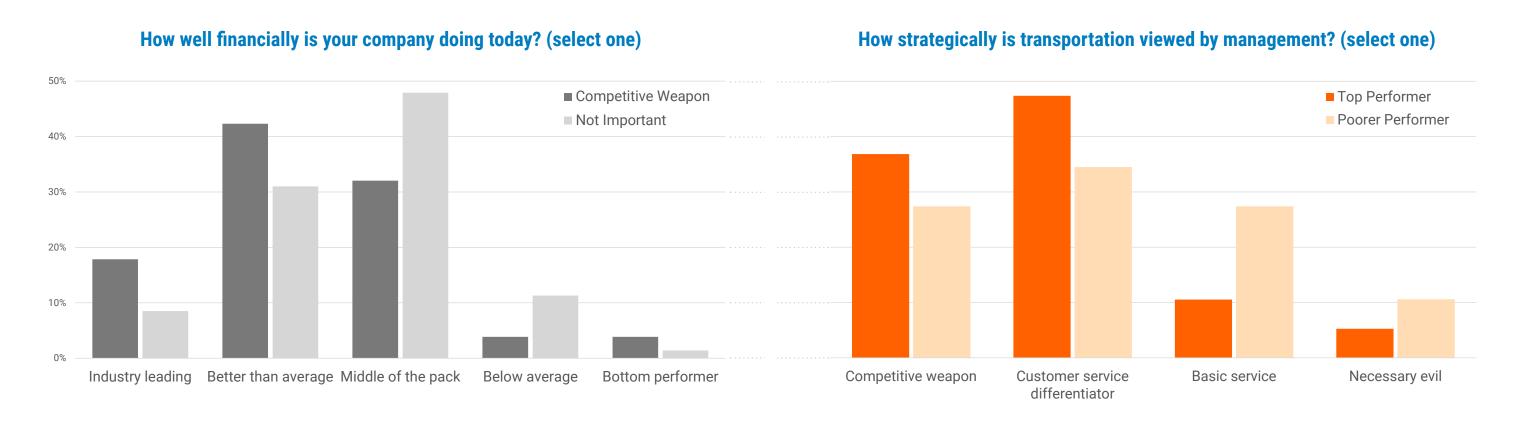


TM Strategy, Financial Performance & Growth: A Strong Correlation

As in previous surveys, the 2023 results once again indicate a correlation between how well a company performs financially and the strategic importance senior management places on transportation.

Survey findings

- Industry leading financial performance declined in 2023 (2023: 18% vs 2022: 23%) for Competitive Weapon respondents but was still 2X higher than Not Important respondents
- 60% of Not Important respondents had poorer financial performance—up 20% from 2022
- Poorer Performers (38%) were more than 2X more likely to view transportation management as Not Important than Top Performers (16%)



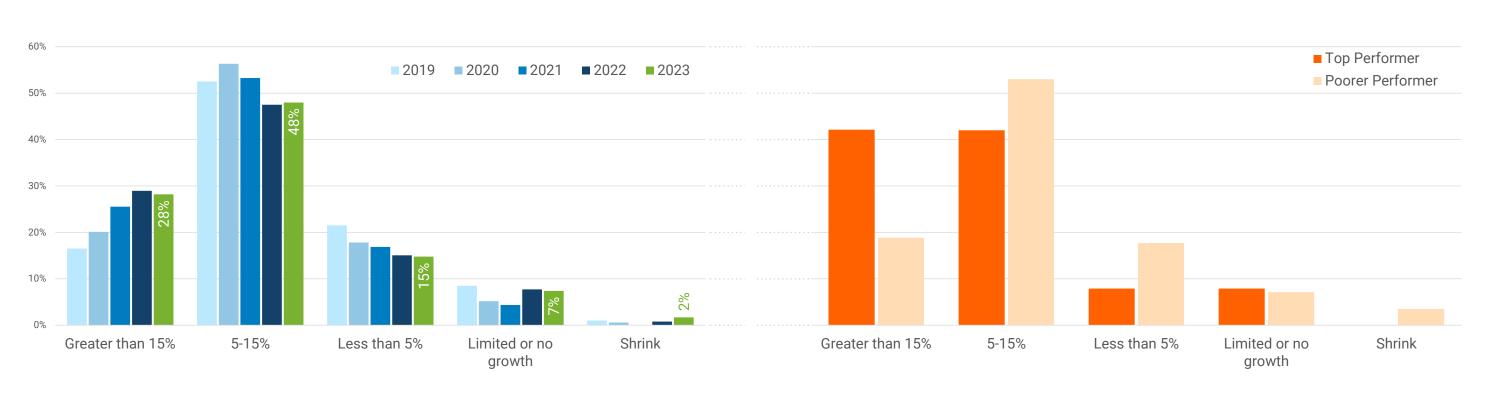


TM Strategy, Financial Performance & Growth: A Strong Correlation (cont'd)

Company growth: Looking forward

- Overall, the 5-year trend of increased growth stalled in 2023
- Top Performer respondents are more than 2X more likely to grow >15% annually than Poorer Performer respondents
- Competitive Weapon respondents are 11% more likely to grow >15% than Not Important respondents (32% versus 21%, respectively)

Based on current economic climate, what do you expect your annual growth to be over the next 2-3 years? (select one)





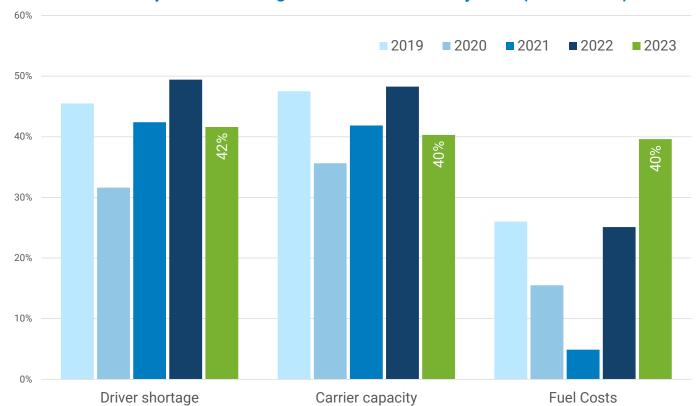
Key Trends & Practices

We asked respondents several questions related to transportation management regarding the future significance of current market and business drivers, value measurement, where information is used and concerns about competitive strategies.

Industry or regulatory changes with the greatest market impact over the next 5 years

- Driver shortage (42%) and carrier capacity (40%) remain the overall market drivers, but are down \sim 8%
- Fuel costs continued their rapid rise in importance, moving from #4 in 2022 (25%) to #3 overall in 2023 (40%)
- Fuel costs was the top response for Not Important respondents (56%)—almost 1.8X more important than for Competitive Weapon respondents (32%)

What industry or regulatory changes will have the greatest impact on transportation management over the next 5 years? (select three)









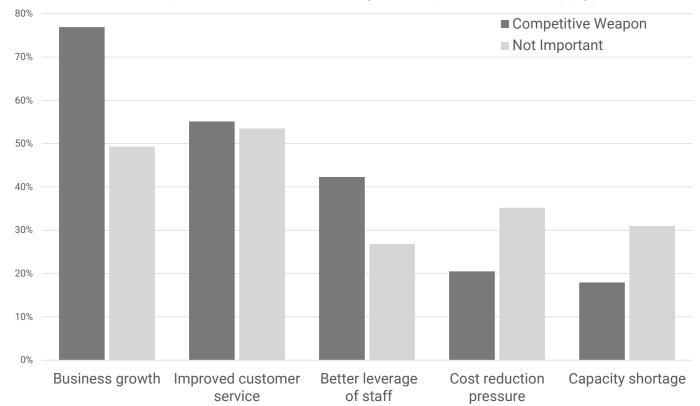


Key Trends & Practices (cont'd)

What's driving TM expansion?

- Growth (62%) and customer service (62%) remain as the top 2 overall for the 6th year
- Better leverage of staff (38%) was third; cost (30%) was fourth but it continued to decline (2% from 2022) despite significantly higher fuel costs
- Business growth was significantly more important to Competitive Weapon (77%) versus Not Important (49%) respondents

What business drivers are resulting in your expanded (or initial) use of a transportation management system? (select all that apply)











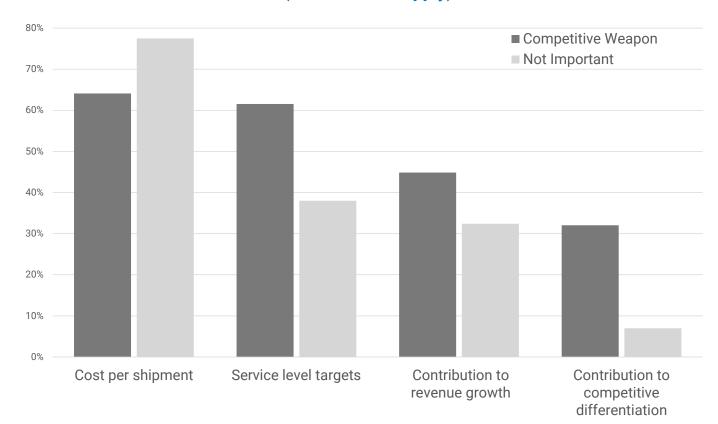
Key Trends & Practices (cont'd)

Measuring transportation value

• Overall, contribution to revenue growth (42%) was identical to 2022 and competitive differentiation (27%) grew 3% versus 2022

 Competitive Weapon respondents do a better job (4X+ versus Not Important) measuring transportation value, especially the metrics that make the most difference to the C-suite: contribution to competitive differentiation

How is the value of the transportation measured? (select all that apply)









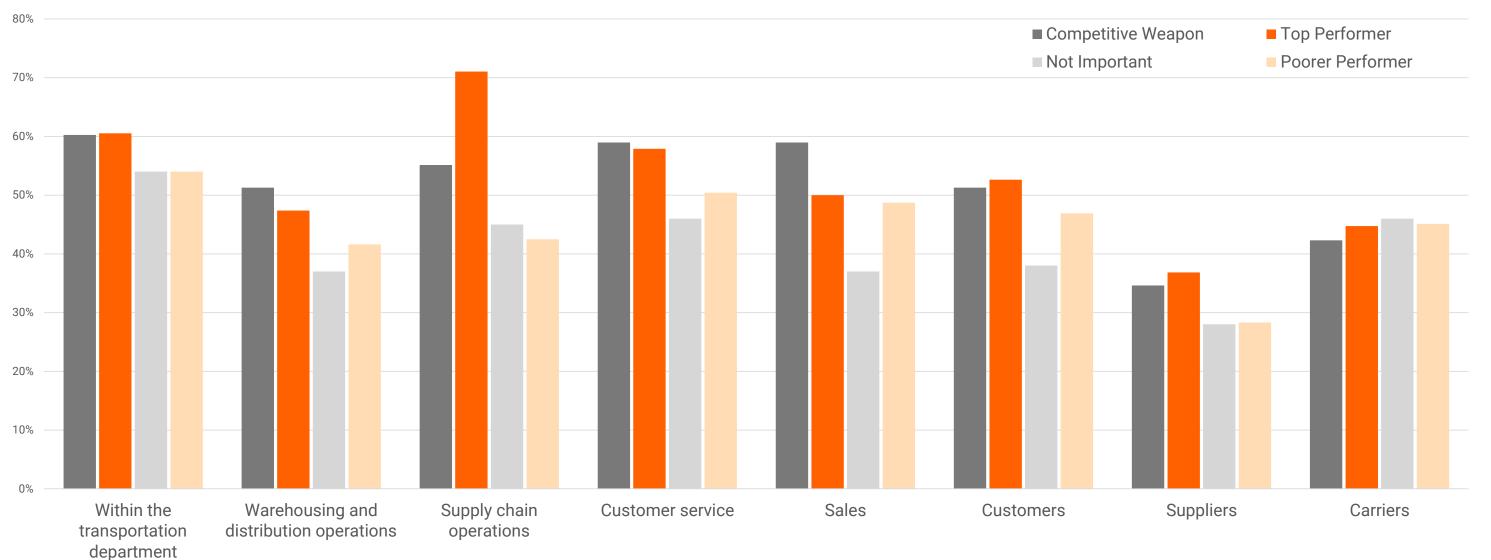


Key Trends & Practices (cont'd)

Sharing information beyond transportation operations

- Within the transportation department (59%) was the top overall response for the first time in 6 years followed by customer service (55%)
- Other customer facing areas—sales (51%) and customers (48%)—rounded out the top overall responses
- Competitive Weapon and Top Performer respondents do a significantly better job of sharing information across the organization and with external supply chains

Where is transportation information used to create value? (select all that apply)



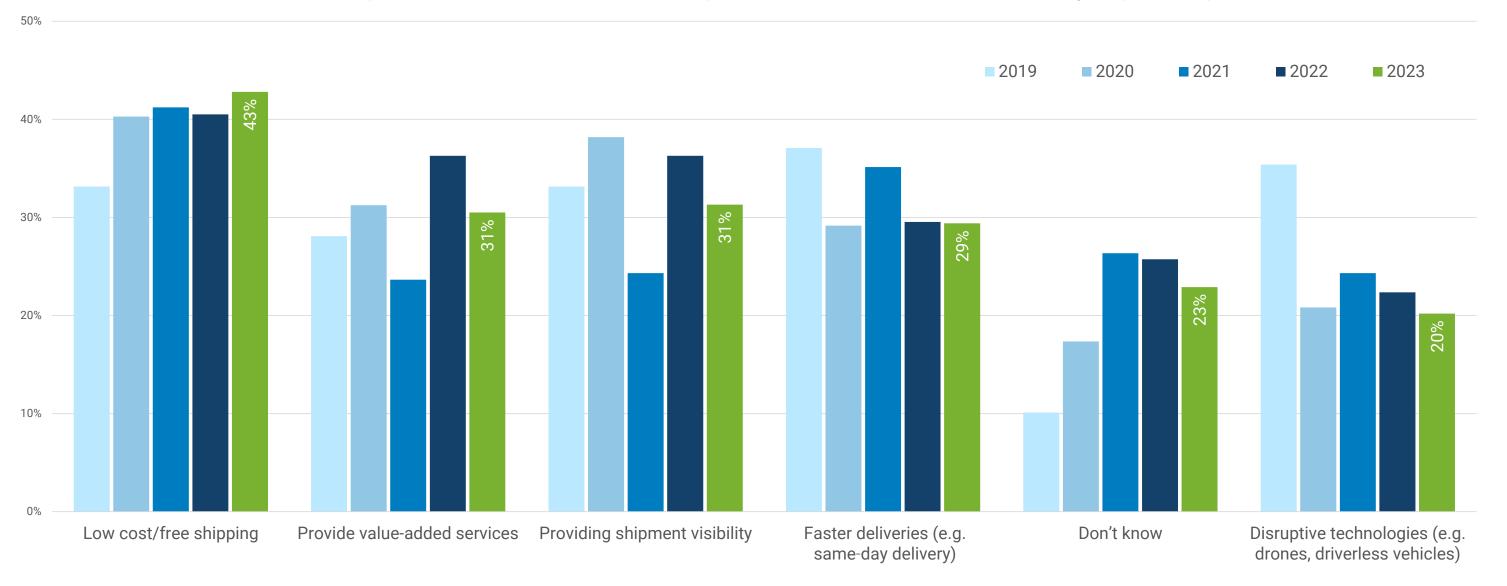


Key Trends & Practices (cont'd)

Pinpointing competitive concerns

- Low cost/free shipping (43%) has stabilized as the top overall competitive concern and grew 2% in 2023
- Low cost/free shipping was especially important to Not Important (48%) and Poorer Performer (50%) respondents compared to Competitive Weapon (37%) and Top Performer (34%) respondents

What transportation strategies or tactics are the competition using that are the greatest concern to you? (select two)





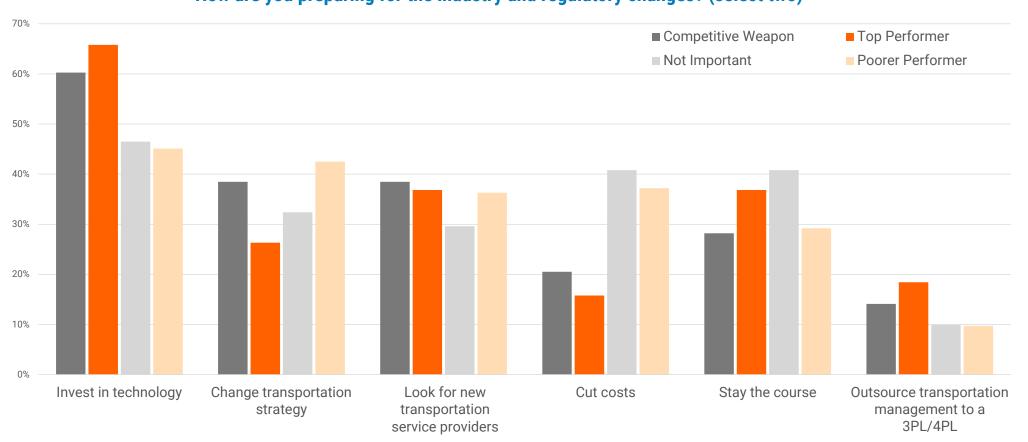
Strategies & Tactics

Survey respondents were asked how they are planning to address the key trends and improve transportation value—both strategically and tactically. In addition, they ranked the capabilities required to effectively manage transportation, and then took a deeper dive into the highest ranked capabilities.

Preparing for industry and regulatory change

- Overall, invest in technology was the top overall response (55%) for the 6th year and similar to 2022 (54%)
- Top Performers were significantly more focused on investing in technology (66%)
- Not Important (41%) and Poorer Performer (37%) respondents were significantly more focused on cutting costs than Competitive Weapon (21%) and Top Performer (16%) respondents

How are you preparing for the industry and regulatory changes? (select two)











Strategies & Tactics (cont'd)

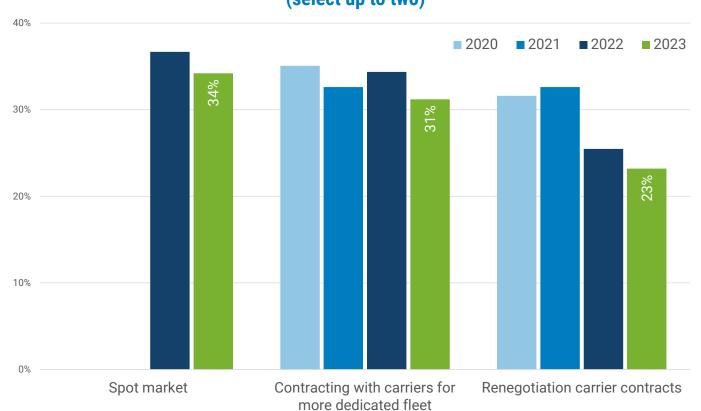
Addressing the capacity crunch

• Using the spot market (34%) was the top overall response closely followed by contracting for dedicated capacity (31%)

• Capacity not an issue was the lowest response again, but it more than doubled from 6% in 2022 to 13% in 2023. Another way to look at this is that 87% of respondents still have capacity issues

• Not Important (44%) and Poorer Performer (37%) respondents were more focused on using the spot market than Competitive Weapon (31%), and Top Performers (32%) were the most focused on contracting for more dedicated fleet

How are you addressing capacity challenges? (select up to two)









Strategies & Tactics (cont'd)

around for years

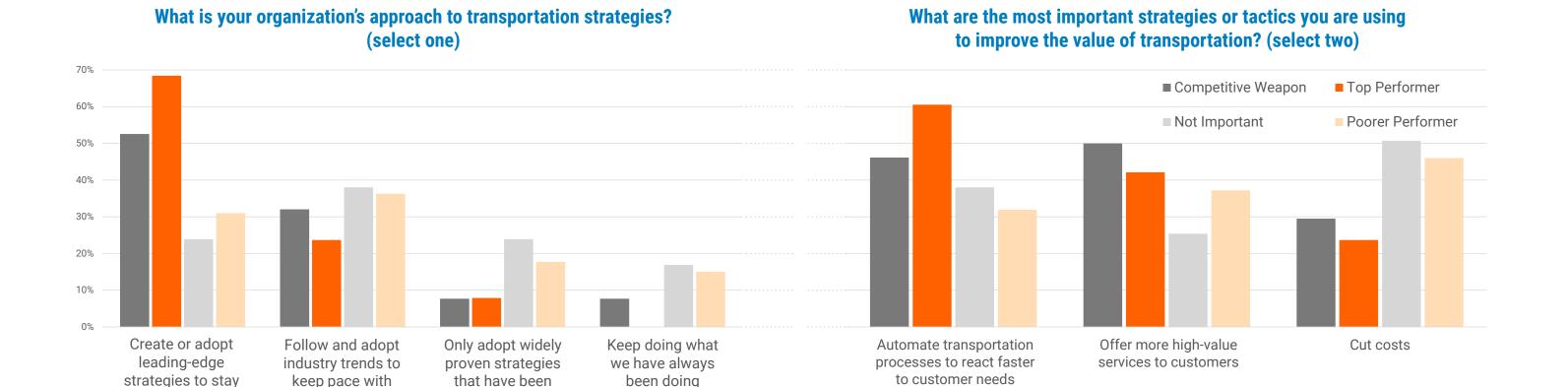
Organizational approach to transportation strategies

- Overall, create or adopt leading-edge strategies was again the top response in 2023 (42%) but down 7% versus 2022
- Competitive Weapon (53%) and Top Performer (68%) were both 2X+ and 2.5X more likely to be a leading-edge strategy adopter than Not Important (24%) and Poorer Performer (31%) respondents
- Majority of Competitive Weapon (85%) and Top Performer (92%) respondents considered themselves leaders or trend followers

competition

Strategies and tactics for improving transportation value

- Overall, automating transportation processes (44%) was the top response; offering more high-value services (39%) was #2 followed by cutting costs (37%)
- Competitive Weapon and Top Performer respondents were more focused value-creating strategies and tactics (automation and high-value services)
- Not Important (51%) and Poorer Performer (46%) respondents were most focused on cost reduction, a tactical fix





ahead of competition

Strategies & Tactics (cont'd)

Capabilities needed for effective transportation management

- Visibility (60%) was top overall capability for the sixth year, reversing a 3-year decline
- Carrier sourcing, a new answer option last year, remained second (46%) overall
- Performance management/BI dashboard experienced a 10% increase in 2023 to 45% and moved from the seventh to the third spot

Which of the following capabilities does your organization need to manage its transportation effectively? (select all that apply)





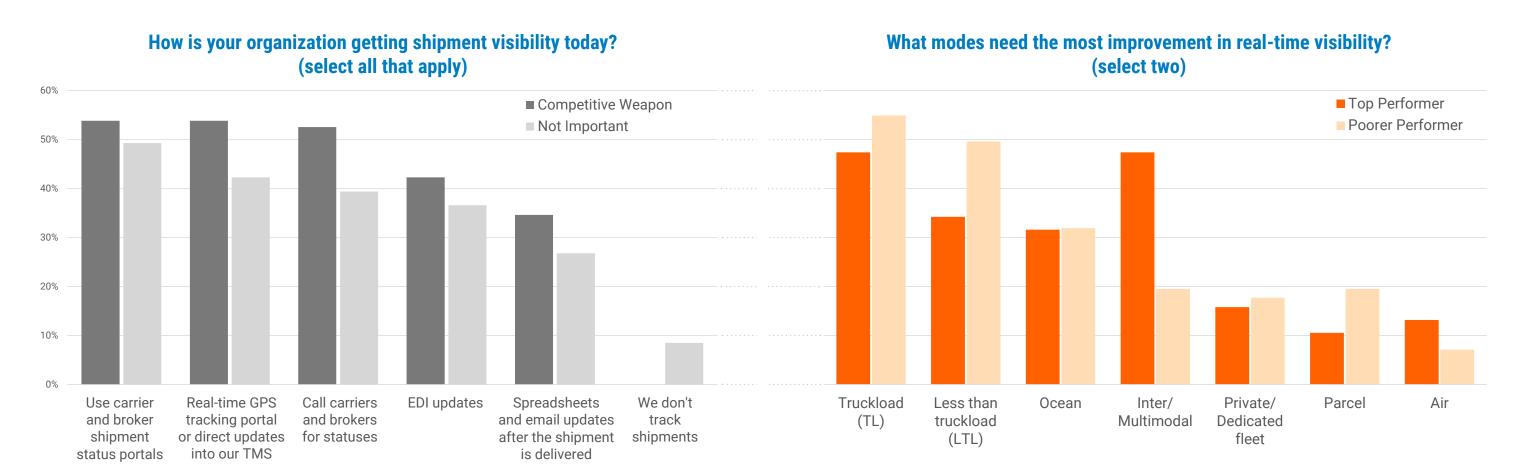
Strategies & Tactics (cont'd)

Shipment visibility today

- Use carrier and broker web portals was the top overall response (50%) but down 7% from 2022
- Top Performer respondents were the greatest users of advanced visibility updates (EDI: 50% and real-time GPS tracking: 53%)
- Not Important respondents used all forms of shipment visibility the least and were the most likely to not track shipments at all (9%)

Real-time visibility performance

- Truckload (53%) followed by Less than truckload (47%) were the modes perceived to have the worst performance overall and the poorest perceived performance for the last 5 years
- Intermodal (47%) was tied with truckload by Top Performers as the mode needing the most visibility performance improvement
- Poorer Performers are struggling more with Truckload (+8%) and Less than truckload (+12%) visibility performance than Top Performers





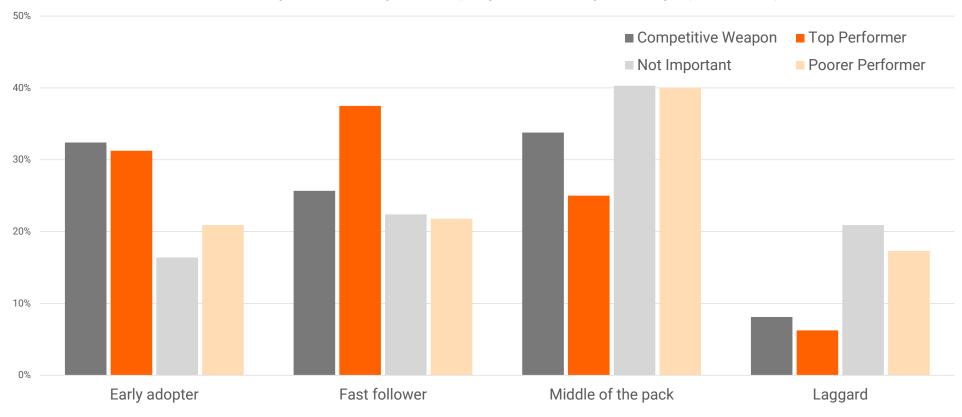
Technology Implications

This year's survey asked participants questions designed to learn how they view the role of technology as well as their strategies and plans for adopting, investing in and leveraging it to create value for their companies.

Technology adoption strategy

- 2023 tied for the most early adopter responses (22%) in the 7-year history of the study
- Competitive Weapon (32%) and Top Performers (31%) were 2X and 1.5X respectively more likely to be an early adopter versus Not Important (16%) and Poorer Performer respondents (21%)
- Not Important (21%) and Poorer Performer (17%) respondents were almost 3X more likely to be a laggard than Competitive Weapon (8%) and Top Performer (6%) respondents

How would you describe your company's technology strategy? (select one)











Technology Implications (cont'd)

Transportation management IT spend outlook

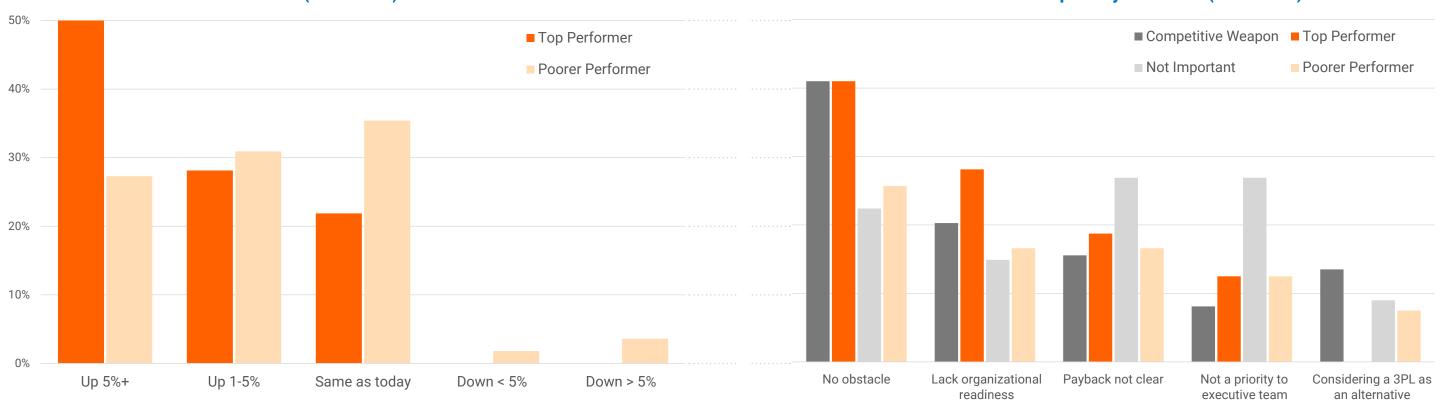
- Overall, increasing transportation spend by 5%+ in 2023 (33%) was down slightly from its 7-year peak of 2022 (37%)—the highest in the history of the study
- Overall, two-thirds of respondents indicate they are increasing transportation management IT investments for the next two years
- Top Performers (50%) were almost 2X more likely than Poorer Performers (27%) to increase transportation management IT investment by 5%+

Primary obstacle to TMS investment

- Overall, no obstacle (33%) responses declined by 3% versus 2022
- Competitive Weapon (41%) and Top Performers (41%) were both significantly more likely to not have obstacles to securing TMS investment versus Not Important (22%) and Poorer Performer respondents (26%)
- Not Important respondents cited lack of payback not clear (27%) and not a priority (27%) as their top obstacles

How will your Transportation Management IT spend change over the next 2 years? (select one)

If your organization is considering an investment in TMS but has not yet done so, what would be the primary obstacle? (select one)





Technology Implications (cont'd)

Greatest TMS value in the next 2 years

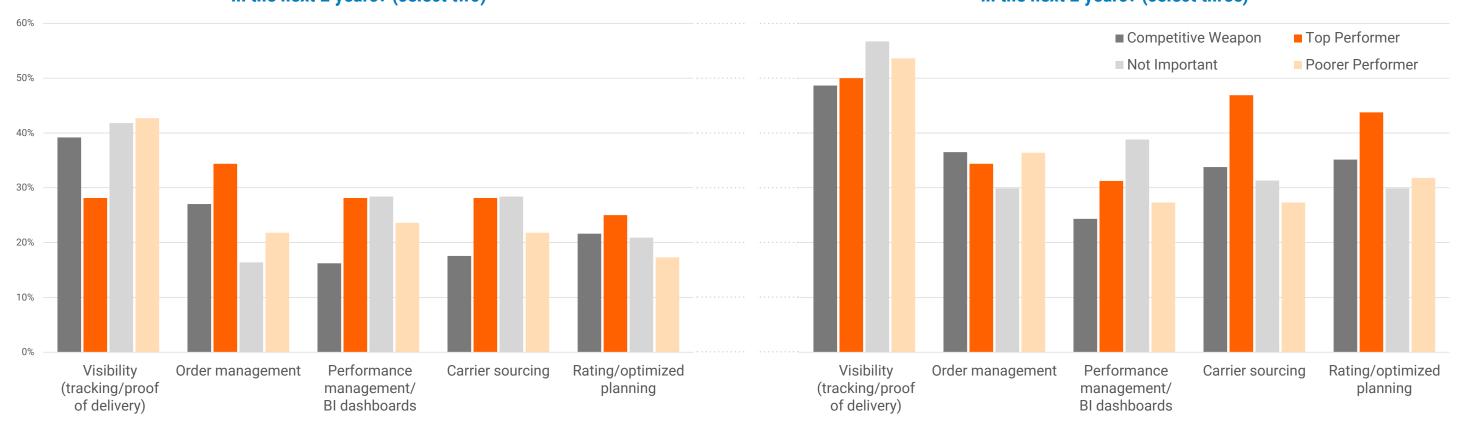
- Overall in 2023, visibility (43%) is expected to deliver significantly more value than any other capability, up 3% from 2022
- Next closest overall response was order management (25%), 18% lower than visibility and driven by Competitive Weapon (27%) and Top Performer (34%) respondents
- Carrier sourcing dropped from #2 in 2022 (41%) to #4 in 2023 (23%)

Greatest TMS investment in the next 2 years

- For the 6th year, visibility was the top investment overall (52%), tied with 2022 results and 17% higher than any other answer choices
- Order management (35%) moved from #3 to #2 and carrier sourcing (32%) dropped from #2 to #5
- There is good alignment with TMS value and investment for the next 2 years for the top 3 most cited capabilities (visibility, order management and performance management/BI dashboards)









Key Survey Findings



There is a direct relationship between management's perception of the strategic value of transportation and performance—higher strategic value results in better financial performance and growth



Driver shortage, carrier capacity and now fuel costs are the top overall concerns



Competitive Weapon and Top Performer respondents are much more likely to have operations, technology adoption strategies and investment plans that are the most aggressive



Competitive Weapon and Top Performers do a much better job at measuring TM value and sharing TM information across the supply chain and, hence, are much less challenged to obtain further TM investments



Technology investment is still the leading choice to address industry trends and relates closely with the use of automation to get more value from transportation management



Visibility dominates the transportation management agenda and another year of increased IT spend will focus on it









Descartes Transportation Solutions

Descartes' transportation solutions suite provides standard and advanced capabilities that improve transportation efficiency, coordination and visibility.



Transportation Management: Reduce freight spend and improve coordination

- Easily maintain multimodal contracts
- Automatically rate shipments, optimize loads, select carriers
- Streamline carrier interaction (tendering, booking, tracking, delivery)
- Audit freight bills to identify discrepancies



Retail Distribution: Gain control and lower costs

- Leverage a network to reduce costs and improve delivery frequency
- Track items from DC to store to reduce loss and claims.
- Provide delivery visibility to stores to reduce labor costs
- Use a single view to manage all delivery operations



Real-time Visibility and Capacity Matching: Make better logistics decisions

- Know load location and status, understand patterns
- Find open capacity using real-time tracking data
- Minimize disruptions with real-time ETA calculations
- Communicate load status with customers and suppliers



Parcel Shipping: Reduce costs and improve service with automation

- Optimize multi-carrier shipments
- Ensure rate and label compliance
- Manifest support for parcel and LTL
- Streamline the pick, pack and ship process
- Track deliveries and evaluate service performance



Descartes Transportation Solutions (cont'd)





Freight Brokerage Automation: Increase productivity and meet customer demands

- Shorten cycle times and reduce costs through integration
- Track loads in real-time with Descartes MacroPoint™



Dock Scheduling and Yard Management: Streamline truck flow and track in-transit inventory

- Reduce load/unload times, DC congestion, labor costs, inventory
- Gain control over supplier-managed freight
- Improve DC productivity and reduce loss



Routing, Mobile and Telematics: Enhance fleet management

- Reduce delivery costs
- Improve customer experience
- Improve driver and vehicle performance and safety





About Descartes Systems Group

Descartes is the global leader in providing on-demand, software-as-a-service solutions focused on improving the productivity, security, and sustainability of logistics-intensive businesses.

Customers use our modular, software-as-a-service solutions to:

- route, track and help improve the safety, performance and compliance of delivery resources
- plan, allocate and execute shipments
- rate, audit and pay transportation invoices
- access global trade data
- file customs and security documents for imports and exports
- complete numerous other logistics processes by participating in the world's largest, collaborative multimodal logistics community

Our headquarters are in Waterloo, Ontario, Canada and we have offices and partners around the world.

Learn more at www.descartes.com, and connect with us on LinkedIn and Twitter.

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Uniting the People & Technology
That Move the World

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