

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 represented a wide range of industry leaders including

Descartes customers and followers, trade association members and industry

publications readers to provide a balanced view of transportation management.

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 2021 SURVEY: GAUGING THE PANDEMIC'S IMPACT

Last year's survey was conducted in late 2019 and early 2020 before effects of the pandemic were widespread. In light of the increased impact of COVID-19 by March, we decided not to release the 2020 survey results due to concerns that pre-COVID data would no longer be representative.

The 2021 survey was conducted in late 2020 and early this year. The results, compared with findings from our four earlier surveys, provide an opportunity to assess whether the pandemic has changed how organizations approach transportation management and if so, how top performers are adjusting.





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Who We Surveyed



This year's 211 survey participants represent the logistics community and shippers from a wide variety of industries. Here's a quick snapshot of their business type and global footprint, plus the transportation modes they use.

Growing participation by logistics community

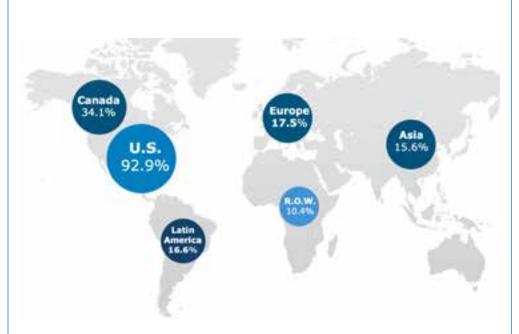
- 3PLs are the top business type represented (28%).
- Over half of respondents (54%) work in the logistics community.
- Similar to the past two surveys, manufacturers (19%) lead the shipper group.

Manufacturer Manufacturer Manufacturer Other Freight Broker Forwarder/NVOCC Retailer

Little change in geographic coverage

- 2021 and 2020 respondents reported nearly the same coverage.
- Respondents continue to have a strong North American presence for operations, with the U.S. and Canada again cited as the top two locations.
- More 2021 respondents (25.2%) spent €100M+ on transportation than in 2020 (21.5%)

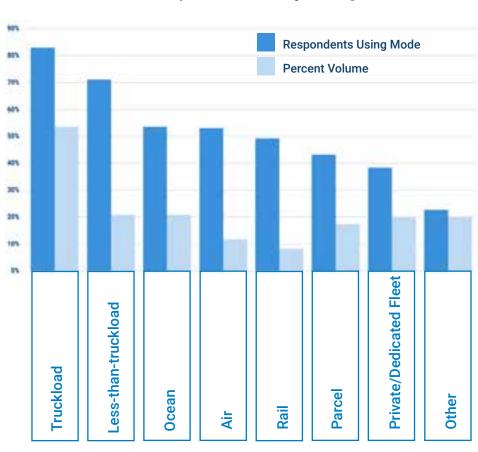
Where are your operations? (2021 responses)



Truckload continues to dominate

- As expected, truckload leads other modes in percentage of survey respondents (83%), as well as in volume (54%).
- LTL and ocean ranked second and third in both categories, with (71%/21%) and (54%/21%) respectively.
- While the mode breakdown was similar to 2020, air gained 10%, parcel was up 5%, and fleet grew 4% in 2021.

What modes of transportation does your organization use?



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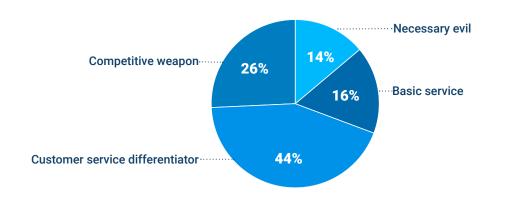
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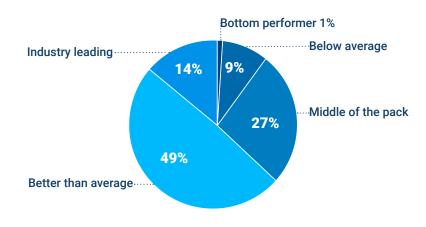
We asked respondents to rate their companies on senior management's strategic view of transportation and overall financial performance. Based on their ratings, respondents were consolidated into groups for further analysis and to compare results from the five benchmark surveys.

Breakdown of 2021 respondents

Strategic View of Transportation Management

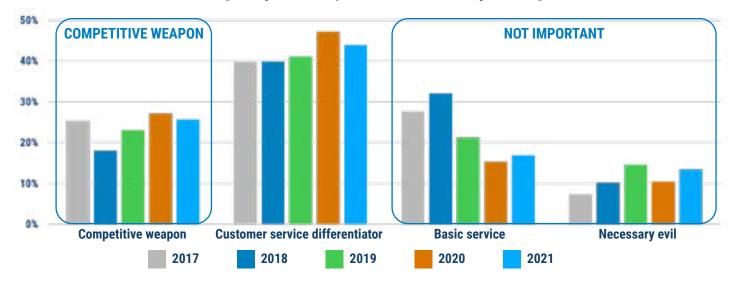


Financial Performance



Have perspectives changed?

How strategically is transportation viewed by management?



- In the past four benchmark surveys there was a slight shift towards transportation increasing in strategic importance among senior management.
- The percentage of respondents' whose management view TM as a competitive weapon remained nearly constant in 2020 (27%) and 2021 (26%).

How well is your company doing financially?



Over the benchmark survey's five-year history, the percentage of participants representing top financial performers declined, while poor performers increased.

• It's interesting the percentage of top performers rebounded 4% in 2021 (14%) in comparison to 2020 (10%), which was pre-pandemic.





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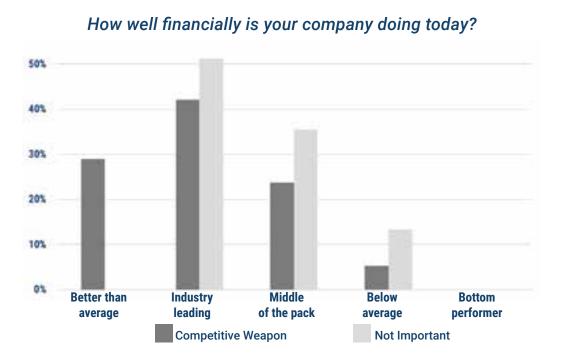
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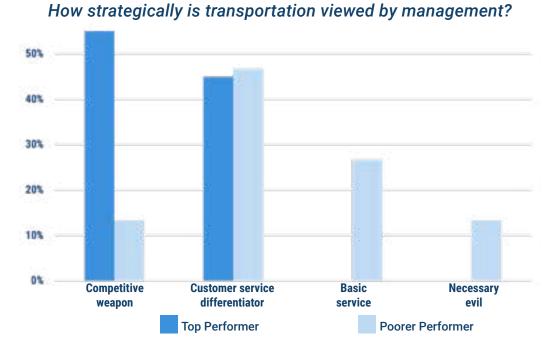


As in previous surveys, 2021 results once again indicate a correlation between how well a company performs financially and the strategic importance senior management places on transportation management.

Survey findings

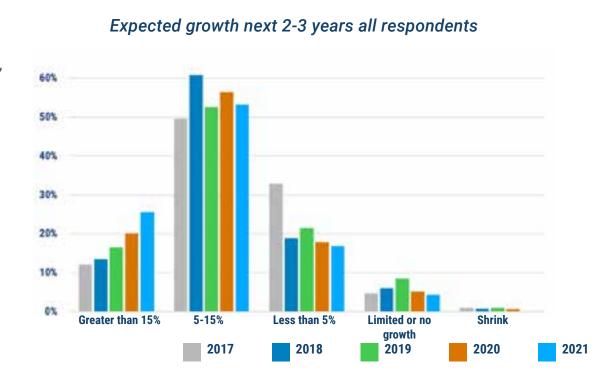
- Industry-leading financial performance more than doubled in 2021 (29% vs. 13% in 2020) for companies that viewed transportation as a Competitive Weapon.
- Not a single company that believed transportation was Not Important achieved industry-leading performance.
- All Top Performers indicated that transportation was a factor in their company's success.

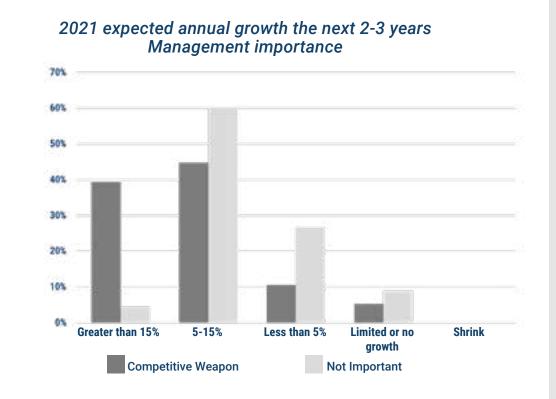




Company Growth: Looking forward

- The 5-year trend of increased growth is projected to continue despite the pandemic, with 26% of respondents in 2021 expecting >15% annual growth. That's a 6% increase over 2020.
- Competitive Weapon respondents are over 10x more likely to grow >15% annually than those who believe transportation management is Not Important.
- Top Performers (40%) are almost 6x more likely to experience >15% growth than Poorer Performers (7%).







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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.

Changes impacting the future market

Top 2 industry or regulatory changes that will have the greatest impact on transportation management over the next 5 years (select 2)



- Driver shortage and capacity remain the dominant market drivers at 42% each, and increased in importance this year vs. last.
- These top two market drivers ranked slightly higher in 2018 and 2019.
- COVID-19 was a distant 5th with 17%.
- Ecommerce and home delivery moved up to 3rd & 4th overall (26% and 21% respectively) but were 2x more important to Competitive Weapon versus Not Important respondents.

What's driving TM expansion?

Top 3 business drivers are resulting in your expanded (or initial) use of a transportation management system



- Service (65%), Growth (64%) & Cost (42%) remain the top 3 overall business drivers for the 5th year.
- Cost continues to decline despite significantly higher transportation prices in today's market.
- Business growth was significantly more important for Top Performers (60%) and Competitive Weapon (68%) respondents 20% higher than Poorer Performers and Not Important respondents.
- There was no difference in cost importance for Financial Performance and Strategic Importance respondents.





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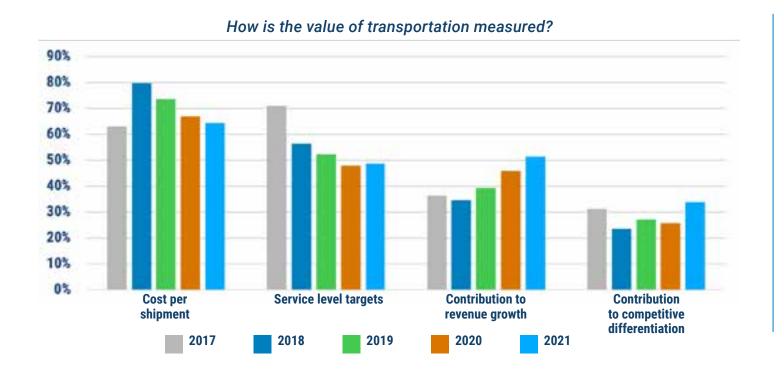


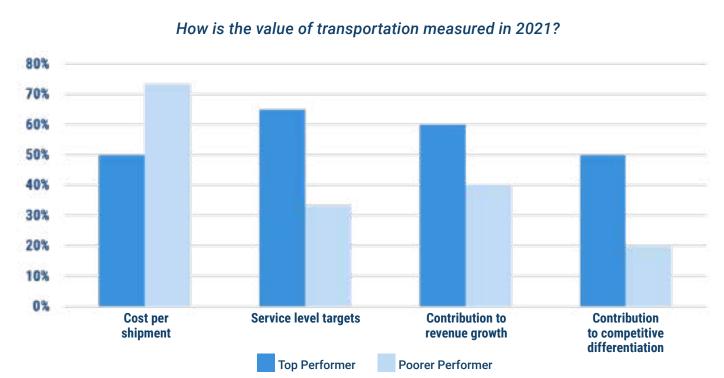
Key Trends & Practices (cont.)





- Contribution to revenue growth and competitive differentiation continued their 4-year growth among all respondents, with both achieving their highest ranking in benchmark survey history.
- More specifically, Top Performers do a better job measuring transportation value, especially on measurements that capture its broader business importance and make the most difference to the C-suite.
- Competitive Weapon respondents are 5x more likely to measure contribution to competitive differentiation than respondents who believe transportation is Not Important.





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Key Trends & Practices (cont.)



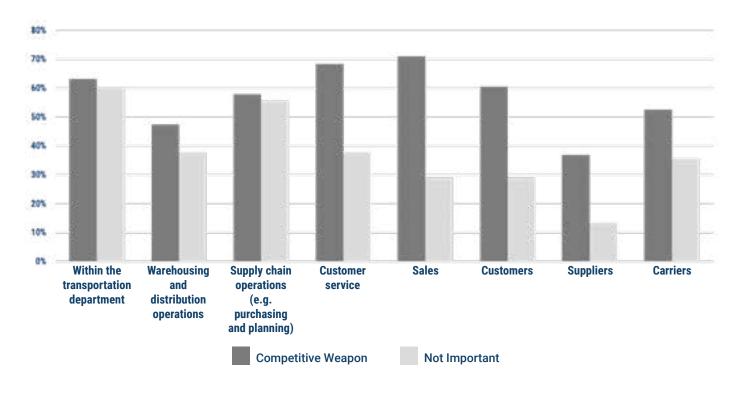




Sharing information beyond operations

- Once again in the 2021 survey, companies that believe transportation management is a Competitive Weapon do a significantly better job sharing information beyond operations.
- For the 4th year overall, the number of respondents sharing information with customer service (63%) and sales (53%) increased.
- Sharing with customers (53%) also increased in 2021, reversing a decline.

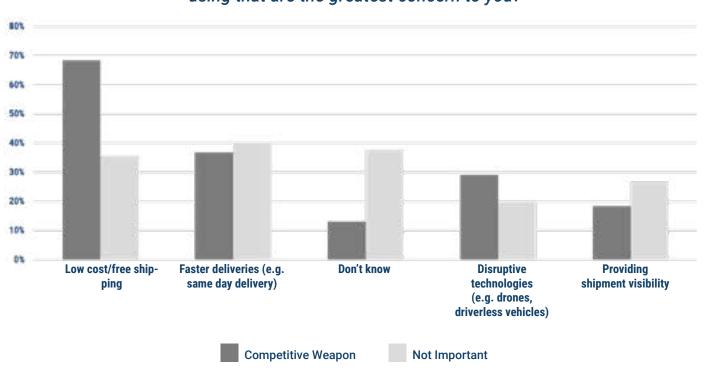
Where is transportation information used to create value?



Pinpointing competitive concerns

- Low-cost/free shipping and faster deliveries have been the top overall competitive concerns over the last five years.
- This year, faster deliveries (35%) barely trailed low-cost/free shipping (37%).
- Low cost/free shipping was a significant issue for Competitive Weapon respondents (68%), while Not Important respondents (36%) ranked it third among their concerns.
- Don't Know was the #2 concern for Not Important respondents at 38%, nearly 3x the percentage of Competitive Weapon respondents (13%).

What transportation strategies or tactics are the competition using that are the greatest concern to you?



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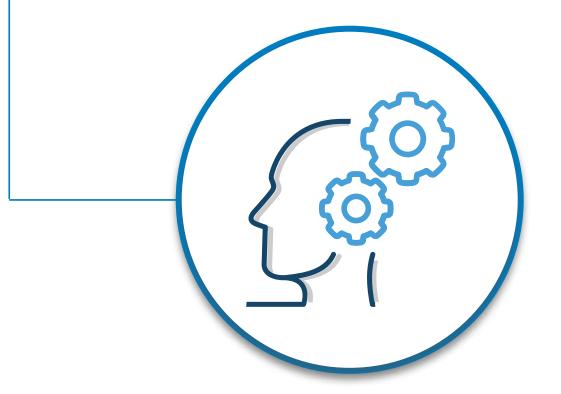
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Strategies & Tactics

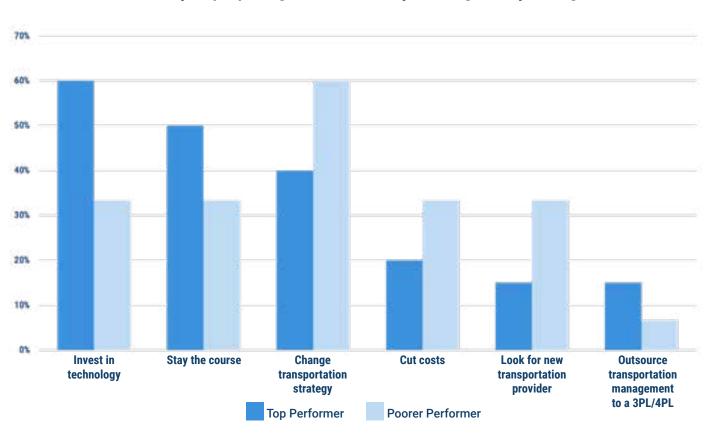
Survey respondents were asked how they are planning to address the key trends and improve transportation value -- both strategically and tactically. In addition, they ranked the capabilities required to effectively manage transportation, then took a deeper dive into the highest ranked capability.



Preparing for change

- Investing in technology was the dominant overall response in both the 2020 pre-pandemic survey (61%) and the 2021 survey conducted during the pandemic (61%).
- Top Performers were significantly more focused on change both in technology and strategy.
- Poorer Performers were significantly more focused on looking for new providers, staying the course and cutting costs, actions that would not fundamentally change their situation.

How are you preparing for the industry and regulatory changes?





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Strategies & Tactics (cont.)



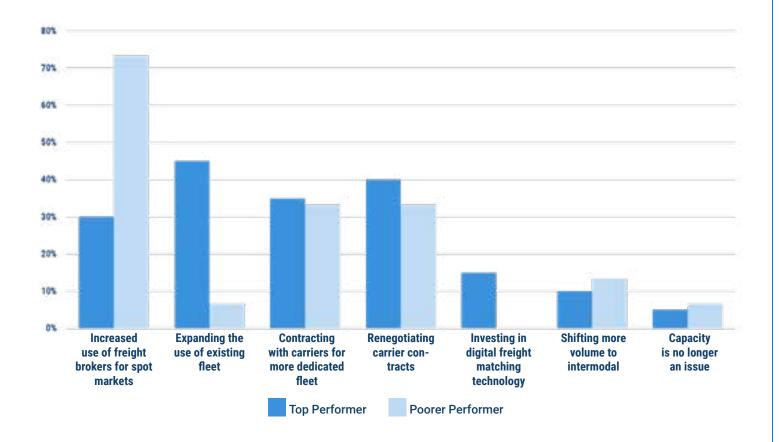
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Addressing the capacity crunch

- The top three overall answers concerned finding more capacity: using brokers on the spot market (35%), expanding existing fleet (34%) and contracting for dedicated capacity (33%).
- Top Performers were 6x more focused on leveraging their existing fleet than Poorer Performers.
- Poorer performers were 2.5x more focused on increasing the use of brokers for the spot market.

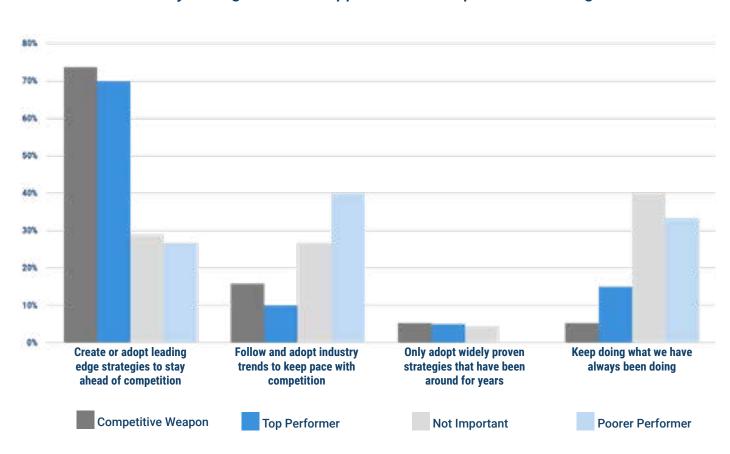
How are you addressing variability in capacity?



Strategic approach to transportation

- Leading-edge respondents increased by 15% to 51% overall in 2020 and stayed there in 2021.
- However, Top Performers and Competitive Weapon were 43% and 45% respectively, much more likely to be a leading strategy adopter than all respondents.
- It's not surprising that 40% of Not Important were not looking to change their transportation strategies.

What is your organization's approach to transportation strategies?



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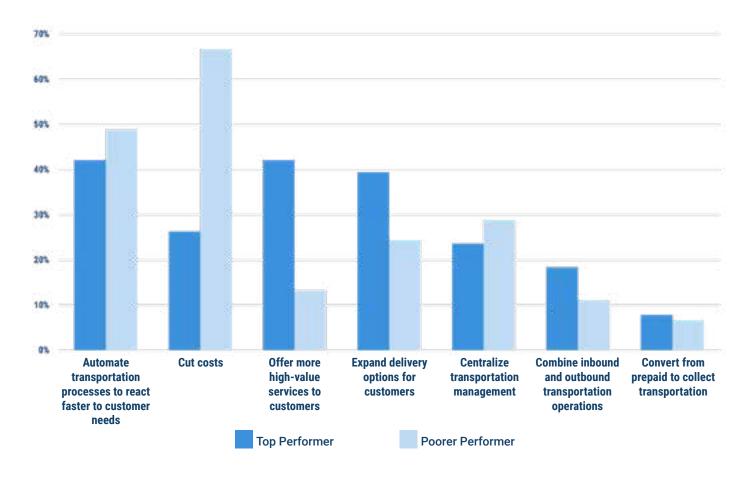




Improving transportation value

- Automating transportation processes (49%) was the top response ahead of cutting costs (43%) - mirroring the 2020 survey rankings.
- Top Performers and Competitive Weapon respondents were much more focused on offering more high-value services (2x and 3x respectively) versus Poorer Performers and Not Important respondents.
- Poorer Performers and Not Important respondents were fixated on cost reduction -- 2.5x greater than Top Performers and Competitive Weapon respondents.

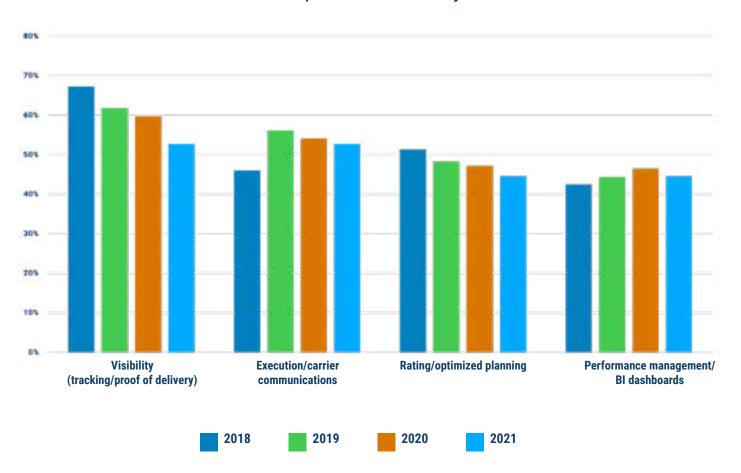
What are the most important strategies or tactics you are using to improve the value of transportation?



Capabilities needed for effective TM

- Visibility (53%) was the top overall capability for the fifth consecutive year, but declined slightly.
- Execution/carrier communications (53%), which was the second highest response last year, remained #2, narrowly missing the top spot by a small margin.
- However, Performance Dashboards moved to #2 for Top Performers (55%).

Which of the following capabilities does your organization need to manage its transportation effectively?



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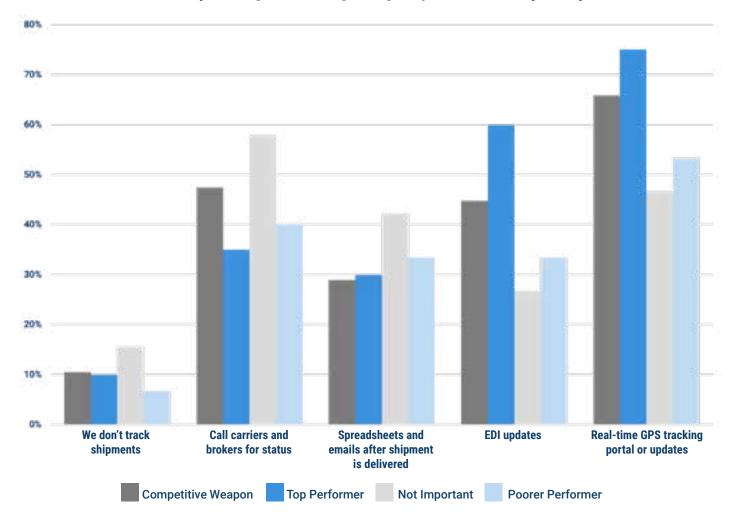




Shipment visibility today

- Real-time GPS remained the top overall visibility method (61%), with calling (51%) and EDI (45%) also highly used.
- Since 2018, real-time GPS has grown from 47% to 61% of all respondents' choices.
- Competitive Weapon and Top Performers were much more focused on automated visibility updates (EDI + real-time GPS).

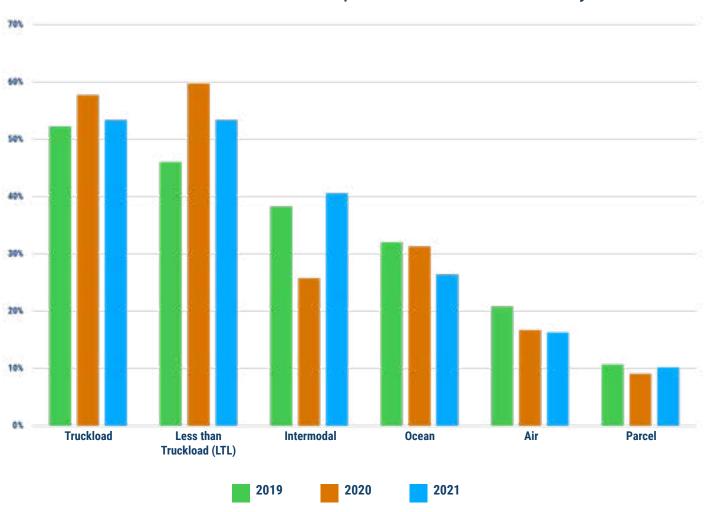
How is your organization getting shipment visibility today?



Real-time visibility performance

- LTL and truckload tied as the modes perceived to have the worst performance overall by 53% of 2021 survey respondents, and also ranked as the poorest perceived performers for 3 years.
- Poorer Performer (80%) respondents were much more concerned about truckload visibility improvement than Top Performers (50%).
- Almost half (45%) of the Competitive Weapon respondents were concerned with intermodal visibility quality.

What modes need the most improvement in real-time visibility?



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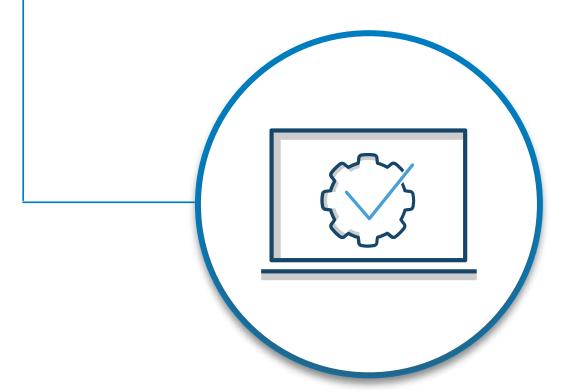
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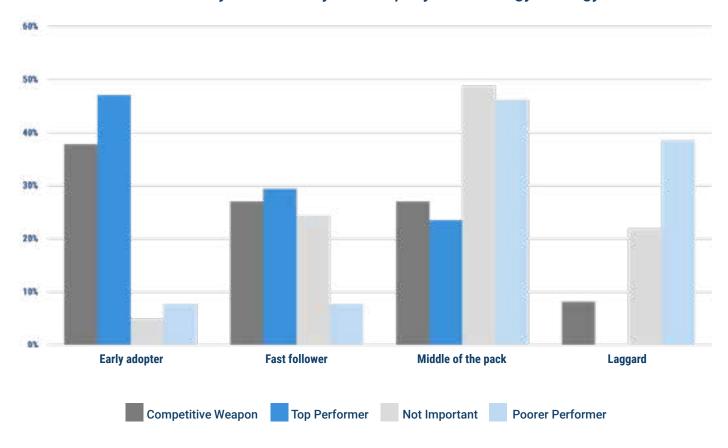
This year's survey asked participants questions designed to learn how they view the role of technology as well as their plans and strategies for adopting, investing in and leveraging it to create value for their companies.



Technology adoption strategy

- Over the last five years, the percentage of respondents identifying as early adopters has increased 4% to 19%, and fast followers have seen an 8% increase to 31%.
- However, Competitive Weapon and Top Performers dominated the Early Adopter IT strategy position versus their Not Important and Poorer Performer counterparts by 6x and 7x respectively.

How would you describe your company's technology strategy?







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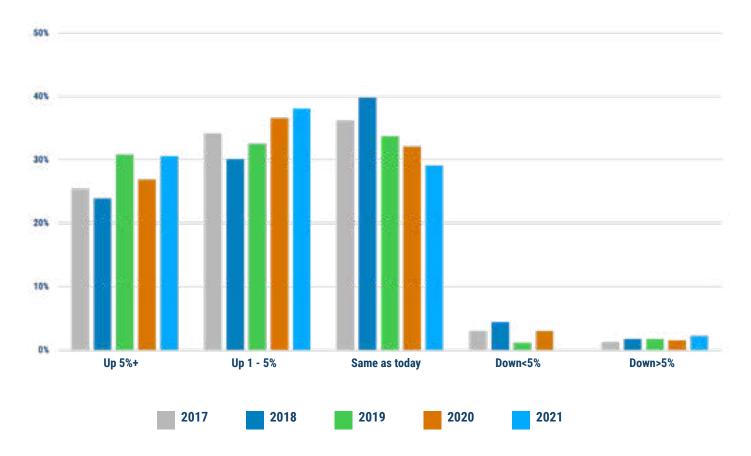
Technology Implications (cont.)



IT spend outlook

- The 5-year overall trend shows a slight shift to increased spending.
- In 2021, Competitive Weapon respondents (46%) were almost 4x higher than Not Important respondents to increase spend >5%.
- More than 50% of Not Important and Poorer Performer respondents claimed they won't increase their IT spend.

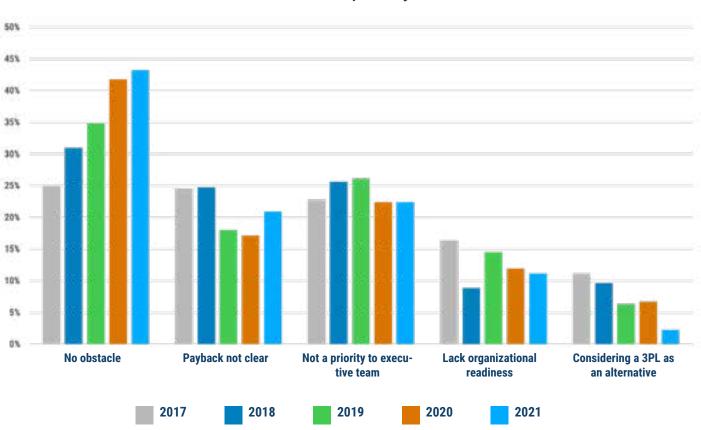
How will your Transportation Management IT spend change over the next 2 years?



Investment obstacles

- No obstacle (43%) improved by 18% overall in the last 5 years.
- Top Performers (53%) have considerably fewer issues obtaining funding than Poor Performers (15%).
- The top responses for Not Important respondents were "not an executive team priority" (39%) and "payback not clear" (29%).

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



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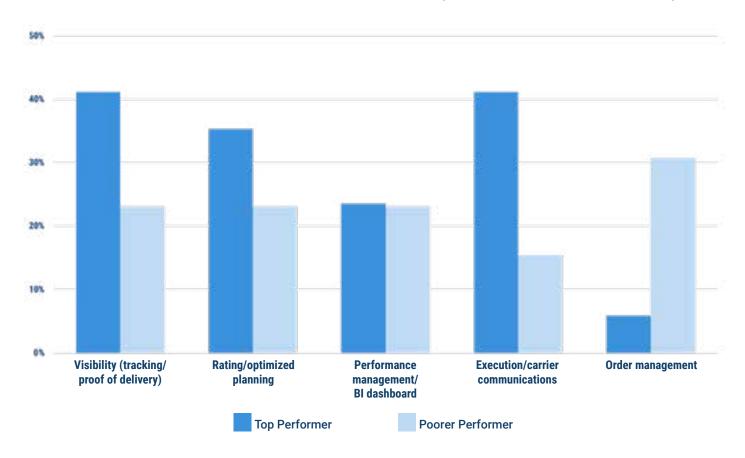
Technology Implications (cont.)



Delivering greatest future value

- Overall, 2021 respondents expect visibility (41%) to deliver significantly more value than any other capability over the next two years. This aligns with 2020 pre-pandemic responses (41%).
- Rating/optimized planning, execution/carrier communications and performance management/ BI dashboards tied for most important to Competitive Weapon respondents (35%).
- Top Performer respondents were almost 3x more likely to focus on execution/carrier communications than Poorer Performers.

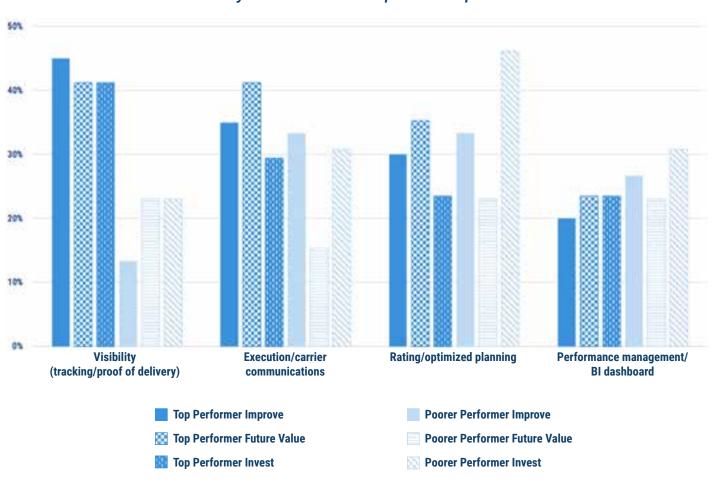
Which TMS capabilities will deliver the greatest value to your organization in the next 2 years?



Future TM investment

- For the 5th year, visibility is the top response for both investment overall (39%) and 2021 Top Performers (41%).
- There was little overall investment focus change before (2020) and during (2021) the pandemic related to the top 4 capabilities providing future value.
- Poorer Performers are struggling with value/investment alignment in execution/carrier communications and rating/optimized planning.

Top 4 capabilities focused on today, greatest future value and 2 year IT investment plans comparison





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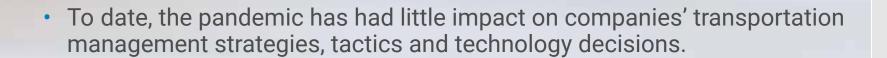
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- There is a direct relationship between management's perception of the strategic value of transportation and a company's performance. Higher strategic value placed on transportation typically results in better financial performance and growth.
- Driver shortage and carrier capacity reversed a recent decline and increased importance as this year's top overall concerns expected to impact the market moving forward, potentially creating issues, especially for high-growth companies.
- Competitive Weapon and Top Performer respondents are much more likely to have the most aggressive operations and technology strategies, as well as investment plans.
- Technology investment is still the leading choice to address trends and relates closely with the use of automation to gain more value from transportation management.
- The top investment areas over the next two years are visibility and execution/carrier communications, indicating a focus on improving working relationships with carriers.

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



PARCEL SHIPPING

Reduce costs and improve service with automation

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



REAL-TIME VISIBILITY AND CAPACITY MATCHING

Make better logistics decisions

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



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™



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



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

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About Descartes Systems Group

Descartes is the global leader in providing advanced home delivery solutions. The combination of our home delivery domain expertise and the power of our unique home delivery solution has changed how our retail customers are able to compete. We help retailers to significantly improve top and bottom line performance through the adoption of technology-enabled home delivery best practices that span the entire customer buying journey. Our scalable cloud-based and innovative dynamic delivery appointment scheduling, planning, execution and mobile capabilities have helped from the world's largest retailers to smaller ones, transform their home delivery experience.

Learn more about Descartes Transportation Management Solutions and connect with us on LinkedIn and Twitter.

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