Magic Quadrant for Transportation Management Systems

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Initiatives: Supply Chain Technology Strategy and Selection

> Transportation management systems help supply chain leaders manage disruptions and mitigate risks. With needs changing and the TMS market expanding in size, the vendor landscape becomes more crowded and complex. Supply chain technology leaders should use this research to evaluate the TMS market.

This Magic Quadrant is related to other research:

Critical Capabilities for Transportation Management Systems

View All Magic Quadrants and Critical Capabilities

Additional Perspectives

- Europe Context: 'Magic Quadrant for Transportation Management Systems' (28 March 2023)

- Asia/Pacific Context: 'Magic Quadrant for Transportation Management Systems' (28 March 2023)

- Midmarket Context: 'Magic Quadrant for Transportation Management Systems' (28 March 2023)

- International Context: 'Magic Quadrant for Transportation Management Systems' (28 March 2023)

Market Definition/Description

Gartner defines transportation management systems (TMSs) as software that supports multimodal planning and execution of the physical movement of goods across the supply chain. It allows a company to manage increasing levels of transportation complexity across multiple transport modes and geographic regions. TMS solutions are utilized by companies of varying size, operational complexity, industry and geographic location. TMS solutions are primarily delivered as a cloud-based subscription service.

The six core capabilities of a TMS solution are:

- Freight sourcing and procurement

- Planning

- Execution

- Visibility

- Settlement

- Analytics

The six extended capabilities of a TMS solution are:

- Appointment/dock scheduling

- Private fleet routing and scheduling/dispatching

- Parcel optimization and manifesting

- Transportation modeling

- 3D load building

- Transportation forecasting

Magic Quadrant

Figure 1: Magic Quadrant for Transportation Management Systems
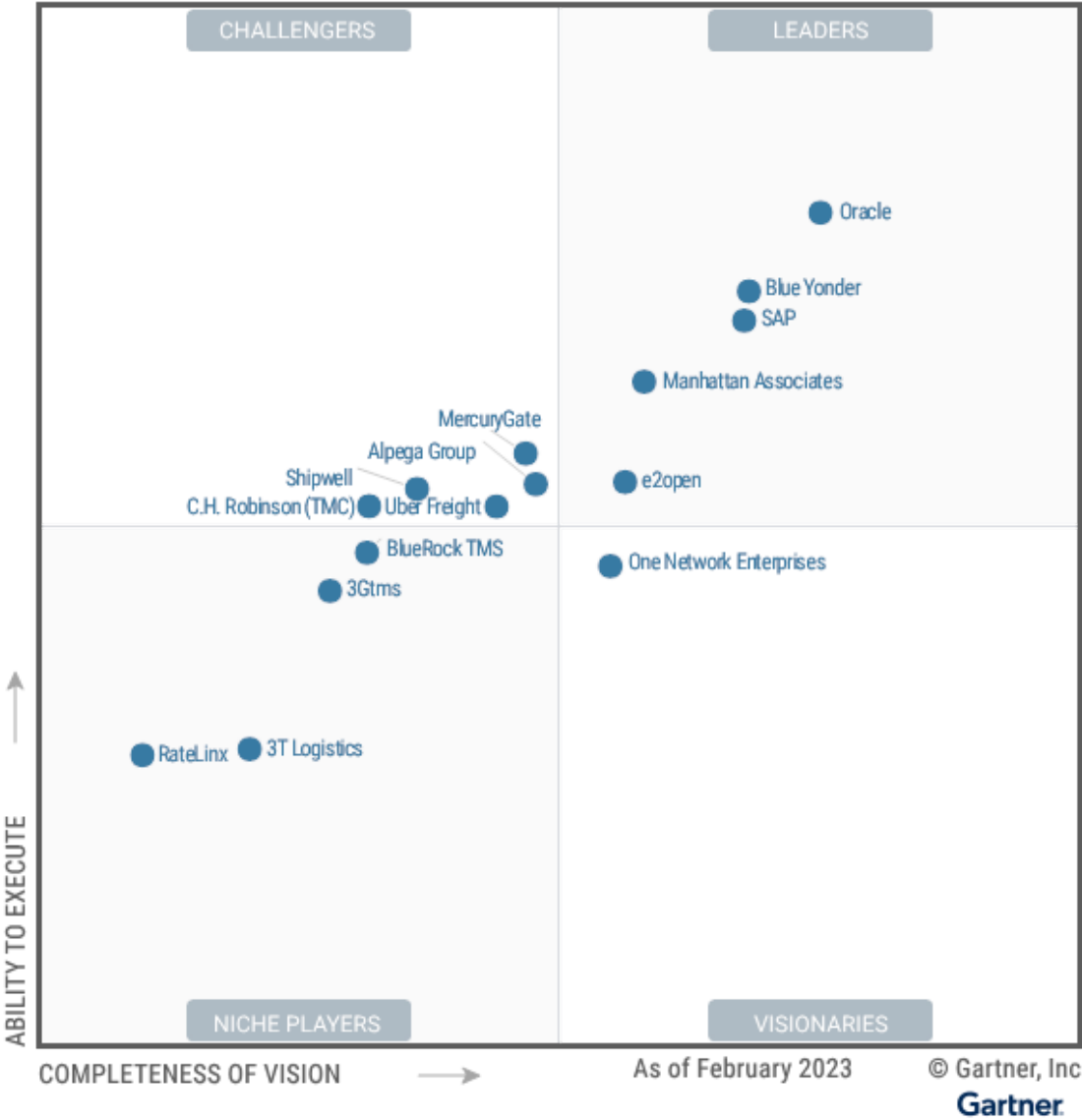
Vendor Strengths and Cautions

3Gtms

3Gtms is a Niche Player in this Magic Quadrant. Its solution, 3G-TM, is mainly focused on providing transportation management using multimodal capabilities to plan, execute and track shipments. Its operations are mostly focused in North America, and its clients tend to be midsize organizations within the consumer products, food and beverage, building products, and logistics industries. Its innovation and roadmap are geared toward making its solution simple and scalable by using cloud-native technology with an emphasis on configurability and process automation. Its roadmap specifically expands these concepts by increasing the ecosystem of applications, flexibility of shipper implementation options, making faster go-lives and updating user interfaces.

Strengths

- **Vertical/Industry Strategy:** 3Gtms offers multiple solutions on one platform, providing options for shippers, third-party logistics (3PL) providers and brokers. Over 60% of its customer base is in 3PL, broker or logistics service provider (LSP)/carrier space. This could be of interest for shippers looking to expand and offer their own transportation services.

- **Customer Experience:** 3Gtms scored in the top quarter for customer experience, with high levels of positive customer feedback (as supported by Gartner Peer Insights reviews) and options for easy implementation and integration.

- **Business Model:** 3Gtms core business is TMS with a high percentage of its revenue being derived from TMS. It has also built strong customer relationships with above-average customer retention rates.

Cautions

- **Geographic Strategy:** Global expansion for 3Gtms continues to trail other vendors included in this Magic Quadrant. 3Gtms has chosen to follow a reseller-led strategy outside of North America, limiting its exposure. It continues to organically expand with existing customers.

- **Offering (Product) Strategy:** While continuing to focus on shippers, 3Gtms has had less success and growth in that market segment. The majority of 3Gtms' customers are in 3PL, broker or the LSP space, and much of its recent growth has taken place in the logistics and broker segments. Shippers should seek clarity from the vendor regarding the direction of the vendor to ensure they will continue to provide innovation and enhancements for their specific needs.

- **Sales Execution/Pricing:** It remains one of the smaller vendors in terms of number of TMS customers and shows growth rates below the average of the other vendors included in this Magic Quadrant. This could impact its future ability to invest in and further develop its capabilities.

3T Logistics

3T Logistics is a Niche Player in this Magic Quadrant. Its solution, 3T EVENT, is mainly focused on supply chain operations, providing shipper organizations with capabilities such as load optimization, vehicle routing, dock scheduling and parcel management. 3T Logistics' operations are focused mostly in Europe, and its clients tend to be small to midsize organizations that operate in industries like manufacturing, fast-moving consumer goods (FMCG), food distribution and aftermarket distribution. 3T EVENT uses a microservices architecture that leverages capabilities accessible via a digital self-service, app-store-like portal. 3T Logistics offers a Carrier Store providing access to capacity on demand, enabling price negotiation and collaboration between carriers and shippers.

Strengths
- **Offering (Product) Strategy:** 3T Logistics provides broad capabilities, both core and extended, that allow the solution to scale to different levels of complexity. 3T Logistics also offers a wide range of mobile app-like solutions, including carrier network connectivity, dock appointment and scheduling, carrier apps, and the possibility to contract with real-time visibility solutions directly from its app marketplace.

- **Vertical/Industry Strategy:** 3T Logistics has a broad customer base across a variety of industries, including shippers and 3PLs alike, offering capabilities that make its TMS flexible and adapt to different industry verticals with ease.

- **Customer Experience:** As supported by reviews on Gartner Peer Insights, 3T Logistics has above-average customer experience scores, with a particularly good score in product capabilities.

Cautions
- **Sales Strategy:** While 3T Logistics has customers outside its local market, its sales channels and number of resources trail most vendors in this Magic Quadrant. This may limit its ability to increase revenue to fund future development.

- **Market Responsiveness**: 3T EVENT is mostly used by small and midsize organizations with lower transportation complexity. It has the capabilities to support higher complexity and larger organizations, but its inability to attract these organizations are a concern. Larger and higher complexity organizations should ask for customer references to verify its capability to support their needs.

- **Marketing Execution:** 3T Logistics trails most of the other vendors in this Magic Quadrant in market momentum. 3T Logistics was one of the few vendors with negative customer growth in the past 12 months. Potential customers will need to consider if this will impact future roadmap plans.

Alpega Group

Alpega Group is a Challenger in this Magic Quadrant. Its solution, Alpega TMS, is broadly focused on supply chain operations, providing a portfolio of different solution bundles with capabilities that scale depending on the organization's transportation complexity. Alpega operations are geographically diversified with the bulk of its customers based in Europe and ranging from small to very large-size organizations that operate in industries like automotive, retail, fast-moving consumer goods and manufacturing. Alpega TMS offers deep integration and collaboration capabilities to improve supply chain execution and digitization. It now includes SAP S/4HANA standard interface and new industry-specific features for retail and fast-moving consumer goods customers.

Strengths
- **Sales Strategy:** Alpega has strengthened its sales organization, adding new leadership and experienced personnel, and investing in new go-to-market and brand awareness strategies.

- **Market Responsiveness/Record**: Alpega continues to deliver on its product roadmap. It has unified its product portfolio, improved the customer experience with a new user interface across products and released new integration capabilities with SAP S/4HANA among other capabilities.

- **Sales Execution/Pricing:** Alpega had a successful year growing the customer base, particularly in its home market, Europe.

Cautions
- **Operations**: Aplega trails other vendors in this Magic Quadrant in terms of implementation resources, and its network of implementation partners remains small. Organizations interested in global deployments or based outside of Europe should evaluate Alpega's implementation and support resources carefully.

- **Customer Experience:** Alpega TMS had lower customer satisfaction ratings when compared to other vendors in this Magic Quadrant. This was due in part to concerns about the user interface experience and lack of customization possibilities as supported by reviews from Gartner Peer Insights.

- **Geography Strategy:** Alpega's growth rate and customer base outside of Europe is low compared to other vendors in this Magic Quadrant. It continues making it a focus to add new customers in Asia/Pacific and North America. Organizations outside of Europe will need to evaluate its ability to provide service and support in their region.

BlueRock TMS

BlueRock TMS is a Niche Player in this Magic Quadrant. Its solution, BlueRock TMS, is mainly focused on transportation management and offers capabilities in the areas of shipment execution, operation planning and network optimization. BlueRock TMS operations are mostly focused in Europe, and its clients range from small to large organizations, with large transportation networks that operate in industries like logistics service providers, pharmaceuticals, industrial manufacturing and fashion. BlueRock TMS is innovating in areas such as modeling and analytics, providing end users with advanced simulations and optimization capabilities. It also provides logistics consulting services, complementing its TMS offer.

Strengths
- **Sales Strategy:** BlueRock TMS has expanded its direct sales organization outside its home region and increased its number of sales partners.

- **Business Model:** BlueRock TMS continues to leverage its in-house logistics experience to keep adding new features to its solution, as well as using its consulting expertise to acquire new enterprise TMS customers.

- **Vertical/Industry Strategy:** While BlueRock TMS provides a solution that can be used by shippers and 3PLs, the vendor has a strong focus on specific industry verticals, such as logistics service providers and network operators.

Cautions
- **Marketing Execution:** While BlueRock TMS continues to grow its customer base, brand recognition and customer familiarity with the vendor is still trailing most of its competitors in this Magic Quadrant.

- **Marketing Strategy:** Despite BlueRock TMS efforts to be active outside its home country, market visibility remains low when compared to peers. This could hinder future growth opportunities and limit its long-term investment.

- **Offering (Product) Strategy:** Although BlueRock TMS offers strong transportation modeling capabilities, the breadth of its product portfolio is rather short compared to its competitors. Potential buyers should carefully evaluate the full scope of its product capabilities to ensure it meets their requirements.

Blue Yonder

Blue Yonder is a Leader in this Magic Quadrant. Its product, Blue Yonder TMS, is mainly focused on transportation management while being a part of a broader set of supply chain execution capabilities, including modeling, logistics network, warehouse management and labor management. Its operations are geographically diversified, with North America as its largest customer base. Its clients tend to be large, higher-complexity enterprises primarily in the consumer products, manufacturing, retail and 3PL industries. Recent or planned innovations include advancements in pallet optimization via 3D load building, improvements in ocean booking management, sustainability dashboards and improvements to the user experience for fleet dispatch.

Strengths
- **Market Understanding:** Blue Yonder displayed a strong understanding of key trends influencing the decisions of TMS buyers, including its focus on sustainability, and a continued focus on transportation and overall supply chain convergence. Blue Yonder exhibits strong market knowledge and utilizes that knowledge in an attempt at product differentiation.

- **Operations:** Blue Yonder has shown the ability to deliver its capabilities in both regional and global environments. It also provides strong internal professional and implementation services while broadening its ecosystem of implementation partnerships.

- **Marketing Execution:** Blue Yonder has a strong brand name in the TMS market due to the effective utilization of various channels, including social media, special interest groups and industry-focused events.

Cautions
- **Sales Strategy:** Blue Yonder trails other vendors in this Magic Quadrant in terms of its number of TMS dedicated sales resources. Its overall sales strategy lacks a broader channel strategy and network of sales partners.

- **Customer Experience:** Blue Yonder customer feedback indicated some level of frustration. Areas that were cited included its lack of flexibility when negotiating final contracts and challenges with the ease of integration and deployment. Potential customers should examine potential implementation partners carefully.

- **Sales Execution/Pricing:** Blue Yonder reported a customer retention number that is slightly below average among vendors in this Magic Quadrant. Its growth in new customers was also below average.

C.H. Robinson (TMC)

C.H. Robinson (TMC) is a Challenger in this Magic Quadrant. Its product, Navisphere TMS, is mainly focused on end-to-end transportation management. In addition, it offers a fully managed transportation offering. It also offers a real-time transportation visibility platform, Navisphere Vision, that can be used as a stand-alone solution or with Navisphere TMS. Its operations are geographically diversified, with North America as its largest customer base. Its clients tend to be midsize and large enterprises primarily within industrial manufacturing, consumer products and automotive industries. Recent or planned innovations include less-than-truckload (LTL) rating automation, expansion of emissions and sustainability capabilities, and enhancements to the user experience.

Strengths
- **Operations:** C.H. Robinson (TMC) has exhibited the capabilities to deliver Navisphere TMS, both regionally and globally. It has a strong number of internal implementation resources that are distributed regionally to support customers.

- **Market Responsiveness/Record:** C.H. Robinson (TMC) has a demonstrated track record of delivering against business-outcome-based objectives and metrics. Organizations looking to justify investment in a new or replacement TMS may benefit from this capability.

- **Geographic Strategy:** C.H. Robinson (TMC) has displayed a strong commitment and strategy to support geographic expansion and growth. It has a very large number of direct sales resources that are distributed regionally to further growth opportunities and provide in-country resources to prospective customers.

Cautions
- **Innovation:** C.H. Robinson (TMC) did not exhibit the same level of innovation and future product roadmap vision as other vendors in this Magic Quadrant. This is supported by a below-average R&D budget when compared to all vendors in this Magic Quadrant.

- **Marketing Strategy:** While C.H. Robinson (TMC) has a strong brand name, the market visibility to Navisphere TMS trails other vendors and solutions in this Magic Quadrant. This could inhibit its future ability to attract new business.

- **Sales Execution/Pricing:** Navisphere TMS had one of the lowest growth rates of new customers among other solutions in this Magic Quadrant.

e2open

E2open is a Leader in this Magic Quadrant. Its product, e2open Transportation Management, is mainly focused on end-to-end transportation management while also being a part of a broader logistics suite that includes vehicle routing and scheduling, global logistics orchestration, and transportation forecasting. Its operations are geographically diversified, with North America as its largest customer base. Its clients tend to be midsize organizations primarily in the food and beverage, industrial, 3PL, and LSP/carrier industries. E2open acquired Logistyx Technologies, a multicarrier parcel solution, in March 2022. Recent or planned innovations include new carrier services, such as automated dock appointment scheduling, and highlighted and embedded spot rates.

Strengths

- **Sales Strategy:** E2open has invested and developed a large number of dedicated sales resources for TMS. It has also cultivated a strong network of partnerships that enable a broad sales channel strategy.

- **Market Understanding:** E2open displays strong product alignment to the key trends impacting TMS buying decisions. This includes its work on sustainability measurement, and transportation and supply chain convergence.

- **Overall Viability:** E2open had one of the highest year-over-year growth rates among vendors in this Magic Quadrant. It also boasts a large and diversified customer portfolio.

Cautions

- **Customer Experience:** E2open customer feedback indicated some level of frustration. Areas that were cited included its lack of flexibility when negotiating final contracts, and challenges with the ease of integration and deployment. The latter includes customers on previous versions of the e2open TMS who are looking to migrate to the newest offering. In this scenario, there is no simple migration; rather, it is a new implementation.

- **Market Responsiveness**: E2open trails other vendors in this Magic Quadrant in terms of its examples of delivering against business outcome-based objectives for large and highly complex shippers. Organizations that fall into this category should ensure they speak to multiple customer references to validate the vendor's capabilities.

- **Innovation**: E2open has grown via an acquisition-based strategy, choosing historically to buy innovation within the TMS application. To date, it has not shown the same level of organic innovation as other vendors in this Magic Quadrant. Organizations seeking a highly innovative TMS vendor should seek information regarding e2open's long-term vision and product roadmap.

Manhattan Associates

Manhattan Associates is a Leader in this Magic Quadrant. Its solution, Manhattan Active Transportation Management (TM), is mainly focused on end-to-end transportation management while being a part of the broader Manhattan Active Supply Chain suite that also includes warehouse management, yard management and labor management. Its operations are geographically diversified, with North America as its largest customer base. Its clients tend to be large enterprises primarily in the retail, grocery, distribution and manufacturing industries. Recent or planned innovations include recommended appointment times, sustainable carrier selection, machine learning powered rate and capacity lookup, and freight revenue management and profit calculations.

Strengths

- **Market Understanding**: Manhattan Associates displayed a strong understanding of key trends influencing the decisions of TMS buyers, including its continued focus on transportation and overall supply chain convergence. It was also bolstered by its move to a microservice product architecture.

- **Marketing Strategy**: Manhattan Associates has developed a clear and consistent brand narrative for its TMS product alongside its other Active applications. This has led to increased market visibility.

- **Offering (Product) Strategy**: Manhattan Associates' cloud-native microservice platform offers TMS buyers a differentiated technology architecture. It has also shown a strong level of investment in its product capabilities.

Cautions

- **Sales Execution/Pricing:** Manhattan Associates had one of the lowest year-over-year TMS customer growth rates of vendors in this Magic Quadrant. It has also not leveraged its microservices architecture to offer a more flexible pricing model.

- **Geographic Strategy:** Manhattan Active TM supports a small number of customers outside of North America. It has not demonstrated the level of commitment to resources outside of North America as other vendors in this Magic Quadrant. Organizations based outside of North America will need to evaluate the vendor's ability to support their operations.

- **Operations:** Manhattan Associates has a smaller number of implementation partners than other vendors in this Magic Quadrant. Organizations considering a global TMS deployment need to evaluate its global delivery capabilities.

MercuryGate

MercuryGate is a Challenger in this Magic Quadrant. Its solution, MercuryGate TMS, is broadly focused on providing both domestic and international functionality, and partnerships with digital freight models, to offer customers real-time pricing capacity. Its operations are primarily focused in North America and its clients spread relatively evenly from small-, mid- and large-size organizations. More than half of its customers are 3PL, carrier and brokerage sectors. Among shippers, MercuryGate has a strong presence in industrial, retail, manufacturing, wholesale, and food and grocery. Much of the innovation and roadmap includes improving customer experience, and focusing on incorporating customer feedback and needs into their development plans.

Strengths

- **Customer Experience:** MercuryGate continues to focus on improving the customer experience by gathering customer insight and priorities to incorporate for TMS improvement through a number of interactions, such as customer feedback sessions and user conferences. These efforts have led to improvements in customer satisfaction over recent years.

- **Vertical/Industry Strategy:** MercuryGate TMS has a broad customer base across a variety of shipper types, 3PL providers, and both carrier and broker segments. It is one of the few TMS vendors that spans a broad customer industry base. This remained true in 2022, and the industry breadth span remains above the average of the other vendors in this Magic Quadrant.

- **Offering (Product) Strategy:** MercuryGate TMS continues to provide both core and extended capabilities, and has solutions outside traditional TMS, such as vehicle routing and scheduling (VRS), last mile and drone delivery support.

Cautions

- **Sales Execution/Pricing:** MercuryGate's rate of growth in both numbers of customers and revenue, along with the number of new customers it onboarded, were below the average of the other vendors included in this Magic Quadrant.

- **Innovation:** Despite ongoing financial commitments for its technology, most of the innovations and roadmap are focused on improving customer experience of the past, further demonstrated by a lower-than-average R&D budget compared to the other vendors in this Magic Quadrant.

- **Product or Service:** As a result of the numerous acquisitions that MercuryGate has made, there is not a consistent user interface and user experience across the products. Potential buyers should evaluate the level of impact for their internal users.

One Network Enterprises

One Network Enterprises is a Visionary in this Magic Quadrant. Its product, One Network TMS, is mainly focused on end-to-end transportation management as part of a broader set of logistics and supply chain capabilities, including planning, procure to pay and visibility. Its operations are geographically diversified, with North America as its largest customer base. Its clients tend to be large enterprises in retail, consumer products, 3PLs, pharmaceuticals and life sciences. Recent and planned innovations include smart estimated time of arrivals (ETAs), coordinated dock scheduling between pickup and delivery, support for multiple global carbon calculators and utilizing environmental, social and governance (ESG) scores as a routing rule for carrier ranking.

Strengths

- **Market Understanding:** One Network Enterprises displayed strong product alignment to key trends influencing the decisions of TMS buyers, including focus on sustainability and on transportation, and overall supply chain convergence.

- **Overall Viability:** One Network Enterprises displayed significant investment toward research and development, and was one of the leaders among vendors in this Magic Quadrant. It highlighted several recent innovations, such as predictive appointment rescheduling and a good future roadmap.

- **Innovation:** One Network Enterprises demonstrated a high degree of innovation, including its use of artificial intelligence, machine learning and predictive and prescriptive analytics.

Cautions

- **Marketing Execution:** One Network Enterprises trails other vendors in this Magic Quadrant in terms of brand name recognition and customer familiarity with its TMS product. Better utilization of various marketing and sales channels are an opportunity for improvement.

- **Market Responsiveness/Record:** One Network Enterprises trails most other vendors in this Magic Quadrant in terms of total TMS customers. Potential buyers should ensure they are comfortable in the vendor's ability to meet business-outcome-based objectives and seek customer references.

- **Marketing Strategy:** One Network Enterprises has low visibility in the TMS market that limits its ability to attract new customers. This could inhibit its future growth and the ability to fund additional features and capabilities.

Oracle

Oracle is a Leader in this Magic Quadrant. Its product, Oracle Fusion Cloud Transportation Management, is mainly focused on transportation management as part of a broader set of logistics solutions that include warehouse management, global trade management and intelligent technologies. Its operations are geographically diversified. Its clients are distributed across enterprise size and industry, though it does have a higher concentration in the consumer goods, industrial manufacturing, LSP and high-tech industries. Recent or planned innovations include a rearchitected mobile app, machine learning ETA prediction, dock scheduling enhancements, and sustainability measurement and reporting.

Strengths

- **Market Understanding:** Oracle displayed a good understanding of key trends influencing the decisions of TMS buyers, including its focus on sustainability. It also exhibits strong market knowledge and displays thought leadership in the transportation management market.

- **Operations:** Oracle has a large ecosystem of partnerships with complementary software vendors and a robust set of systems integrator and implementation partners. Its implementation partners span both large, well-known vendors as well as boutique offerings, giving organizations considering a global TMS deployment multiple options.

- **Marketing Execution:** Oracle has strong brand name recognition and a high degree of customer familiarity with its TMS product. It displays effective utilization of various channels, such as social media, industry-focused events and online forums.

Cautions

- **Business Model:** While Oracle's commitment to supply chain products is unquestioned, the significance and alignment of Oracle Fusion Cloud Transportation Management to the overall business of this vendor remains small. Potential buyers should ask for detail on the extent of the product roadmap and on the level of investment in the TMS product.

- **Customer Experience:** Some customers expressed challenges with the ease of integration and deployment of the TMS solution. Potential customers should carefully consider their selection of an implementation partner to aid them in the process.

- **Vertical/Industry Strategy:** Oracle has an industry-agnostic approach in the TMS market. This limits its ability to create industry-specific capabilities or products. Organizations seeking vertical or industry-specific specialization may need to evaluate its current and planned capabilities closely.

RateLinx

RateLinx is a Niche Player in this Magic Quadrant. Its TMS, ShipLinx, is focused on carrier compliance. RateLinx offers freight pay and audit as well as visibility to add onto ShipLinx, leveraging RateLinx's additional solutions, PayLinx and TracLinx. ShipLinx operations are primarily focused in North America, and its clients tend to be small and midsize organizations. Its clients span across a large number of industries with a focus on retail, manufacturing, pharmaceuticals and life sciences. The innovation focus continues to be offering one system to include TMS, multicarrier parcel management, transportation visibility and freight audit payment in one platform.

Strengths

- **Business Model:** ShipLinx is a part of a service set offered by RateLinx that allows customers to leverage more capabilities within one vendor. In addition, ShipLinx TMS customers can use it for rating, parcel management, PayLinx for freight payment and TracLinx for visibility. This remains a differentiator for RateLinx compared to many other vendors in this Magic Quadrant.

- **Sales Execution/Pricing:** RateLinx has been able to keep many of its customers year over year; it demonstrated an above-average customer retention rate in comparison to other vendors in this Magic Quadrant.

- **Product or Service:** Usability and simplicity remain a strength for ShipLinx TMS, allowing customers to easily manage and use the tools.

Cautions

- **Geographic Strategy:** RateLinx's customer base continues to operate primarily in the U.S. RateLinx has yet to significantly expand in other regions. Companies outside of North America should carefully evaluate its ability to support their operations.

- **Marketing Execution:** RateLinx trails many of the other vendors in this Magic Quadrant in its overall marketing strategy in terms of long-term product planning and its TMS as a platform for supply chain execution. It is known in the logistics technology market for its multiple solutions, but not as recognized among end users as a multimodal TMS product.

- **Innovation:** RateLinx did not exhibit the same level of innovation and future product roadmap vision as other vendors in this Magic Quadrant. Organizations seeking TMS vendors with a strong future vision and product roadmap will need to evaluate RateLinx carefully.

SAP

SAP is a Leader in this Magic Quadrant. Its product, SAP Transportation Management (TM), is focused on supporting transportation management by optimizing freight procurement, transportation planning, execution and freight settlement. SAP's operations are geographically diversified, and its clients tend to be larger enterprises from many different industries, including consumer products, retail, automotive and chemical. SAP continues its developments in advanced planning and optimization, and the expansion of SAP Logistics Business Network, adding new partners and capabilities like risk management. Additionally, SAP offers innovations in logistics application convergence, including advanced shipping, transportation demand forecasting and smart Incoterms features.

Strengths

- **Operations:** SAP continues to be one of the strongest vendors in this Magic Quadrant with regards to global solution integrators and partner ecosystems. It has numerous partners in all major regions as well as a large number of global partners.

- **Marketing Execution:** SAP TM benefits from the global reach of the SAP brand. Gartner has seen an increasing interest in SAP TM as part of a SAP upgrade or new deals related to its S/4HANA product.

- **Market Understanding:** SAP has responded to growing interest among TMS buyers by offering SAP TM as a public cloud solution embedded in S/4HANA cloud, facilitating the integration and leveraging S/4HANA capabilities in a seamless way.

Cautions

- **Customer Experience:** SAP TM has lower customer satisfaction ratings when compared to other vendors in this Magic Quadrant. This was due in part to concerns from users about the ease of deployment and pricing flexibility as supported by reviews from Gartner Peer Insights.

- **Sales Execution/Pricing:** Despite customer growth in the previous 12 months, SAP TM subscription and implementation costs remain at the high end when compared to competitors. Additionally, the solution continues to be mostly sold to customers within the SAP ecosystem.

- **Business Model:** While SAP commitment to supply chain products is unquestioned, the significance and alignment of SAP TM to the overall business of this vendor remains small. Potential buyers should ask for details on the extent of the product roadmap and on the level of investment in TM.

Shipwell

Shipwell is a Challenger in this Magic Quadrant. Its solution, Shipwell TMS, offers all TMS core capabilities and allows the automation of workflows in multiple modes of transportation. The TMS also offers additional capabilities, such as transportation RFP, load optimization and analytics while providing real-time visibility directly within the TMS, using a large integrated carrier network. Shipwell primarily operates in North America and is used by small and midsize organizations in the food and beverage, manufacturing, consumer packaged goods (CPG) and retail industries. Innovation will continue to focus on differentiation in the intersection of TMS, procurement and visibility in one solution while focusing on international and modal expansion.

Strengths

- **Customer Experience:** Shipwell continues to demonstrate strong customer satisfaction, scoring in the top half of vendors for customer experience. Reviews on Gartner Peer Insights supported this, showing above-average scores and 100% willingness to recommend.

- **Product or Service:** Shipwell continues to differentiate through the full offering of TMS and real-time transportation visibility built into the TMS, as well as managed services.

- **Innovation:** Shipwell has shown a strong level of commitment to its TMS solution and continues to have a robust product roadmap for future innovation, as supported by an above-average R&D budget in comparison to other vendors in this Magic Quadrant.

Cautions

- **Product or Service:** Although Shipwell does support multimodal transportation activity and most modes, international functionality and capabilities trails that of the leaders in this Magic Quadrant. Organizations with high levels of complexity should gauge its capabilities carefully.

- **Geographic Strategy:** Shipwell's growth and expansion of customers outside North America still remains minimal compared to other vendors in this Magic Quadrant. Organizations seeking a global TMS solution should carefully consider the vendor's capabilities to implement and support them outside of North America.

- **Operations:** Shipwell has demonstrated strong growth year over year in both customer number and revenue; however, it remains in the bottom third of vendors in this Magic Quadrant related to revenue. This is supported by over half its customers being small and midsize businesses.

Uber Freight

Uber Freight is a Challenger in this Magic Quadrant. Uber Freight acquired Transplace, including its TMS solution, in 2021. Its product, Uber Freight TMS, is mainly focused on providing self-service transportation management technology to shippers. In addition, Uber Freight offers a fully managed transportation option. Its operations are mainly focused in North America. Although the majority of its clients are small to midsize organizations, it does support large enterprises. Its customers are across industries with a focus on consumer products, chemical and industrial manufacturing. The innovation and roadmap is focused on transparency into pricing, visibility to shipment progress and capacity, and sustainability.

Strengths

- **Market Understanding:** Uber Freight continues to differentiate through the full offering of TMS, real-time transportation visibility built into the TMS, stand-alone digital freight network as well as managed services.

- **Product or Service:** Uber Freight continues to exhibit strong capabilities in the areas of performance management and analytics as well as visibility. Its inclusion of real-time visibility as part of its core product is a differentiator.

- **Marketing Execution:** Uber Freight brand is well-recognized in the transportation and logistics market; the acquisition of Transplace helps to bring more awareness to the TMS.

Cautions

- **Customer Experience:** There is some concern among customers related to service and support because of the Uber Freight acquisition of Transplace. This is supported by Gartner Peer Insights reviews.

- **Operations:** Uber Freight does not have partnerships with implementation and systems integrators. Customers should evaluate Uber Freight's local implementation and integration capabilities.

- **Innovation:** Uber Freight did not exhibit the same level of innovation and future product roadmap vision as other vendors in this Magic Quadrant.

Vendors Added and Dropped

We review and adjust our inclusion criteria for Magic Quadrants as markets change. As a result of these adjustments, the mix of vendors in any Magic Quadrant may change over time. A vendor's appearance in a Magic Quadrant one year and not the next does not necessarily indicate that we have changed our opinion of that vendor. It may be a reflection of a change in the market and, therefore, changed evaluation criteria, or of a change of focus by that vendor.

Added

One Network Enterprises was added as it met the Magic Quadrant inclusion criteria this year.

Dropped

Trimble (Kuebix) was dropped as it announced that it is retiring the solution.

Inclusion and Exclusion Criteria

To qualify for inclusion, providers need:

TMS product:

- A credible, holistic multimodal TMS product that must support all six core capabilities (freight sourcing and procurement, planning, execution, settlement, visibility and analytics).

- The TMS must support at least seven of the following transportation modes: truckload (TL), LTL, private fleet, dedicated fleet, parcel, air, ocean, intermodal and rail. Gartner will not consider stand-alone solutions in any of these areas.

- The TMS must be available commercially via cloud deployment. This can be achieved with an offering of one or a combination of single or multitenant cloud.

- TMS software is sold as a stand-alone, self-serve application and used independently of other products or services (including outsourced or managed services) offered by the vendor.

Vendor momentum and viability criteria based on revenue, subscription, or customer growth:

- The vendor must meet one of the following criteria:

  - At least $10 million TMS revenue for the previous fiscal-year, composed of license and/or subscription fees. Revenue must come from stand-alone technology sales to TMS customers only and not from other products, services or implementation fees.

  - A three-year compound annual customer and revenue growth rate of at least 20% from stand-alone technology sales to TMS customers only.

Current TMS customers:

- The definition of a customer is a single legal entity paying for stand-alone TMS technology.

- The vendor must meet all following criteria:

    - At least 25 live TMS customers.

    - At least 10 new-named TMS customers in the previous 12 months.

    - At least five live TMS customers headquartered outside the vendor's home geographic region.

    - At least one new-named TMS customer headquartered outside the vendor's home region in the previous 12 months.

    - At least 10 new-named TMS customers were implemented in the previous 12 months.

Global presence:

- The vendor must have TMS customers in at least two of the following geographic regions: North America, South America, Europe, the Middle East and Africa (MEA), Australia and New Zealand, and Asia.

Cross-industry presence:

- The vendor must have existing or new TMS customers in at least five industries. Examples include 3PLs, government, healthcare providers, manufacturing and natural resources, retail, energy and utilities, and wholesale.

We do not include other stand-alone, transportation-related software applications, such as fleet-based routing and scheduling solutions, multicarrier parcel manifesting, global logistics or global visibility solutions, freight forwarding, or carrier-centric TMSs in this Magic Quadrant.

Evaluation Criteria

Ability to Execute

Gartner analysts evaluate vendors on the quality and efficacy of the processes, systems, methods or procedures that enable provider performance to be competitive, efficient and effective, and to positively impact revenue, retention and reputation. Ultimately, vendors are judged on their ability and success in capitalizing on their vision.

Criteria for product or service, market responsiveness/record, customer experience and operations are weighted high. These are often the primary drivers for vendor selection with potential buyers. Buyers express the most interest in product functionality, the vendor's ability to deliver against objectives, overall satisfaction with the vendor, and the vendor's ability to provide implementation, support and consistent delivery.

Criteria for overall viability and sales execution/pricing are weighted medium. This is to ensure vendors have sufficient investment and growth in their TMS product, support a diverse set of customer requirements and have a track record of maintaining long-term customer relationships.

Criteria for marketing execution is weighted low. While not heavily weighted, a vendor's ability to build brand-name recognition and effectively utilize various brand channels may become more important in the future due to an increasingly competitive market.

Table 1: Ability to Execute Evaluation Criteria

Evaluation Criteria ↓	Weighting ↓
Product or Service	High
Overall Viability	Medium
Sales Execution/Pricing	Medium
Market Responsiveness/Record	High
Marketing Execution	Low
Customer Experience	High
Operations	High

Source: Gartner (March 2023)

Completeness of Vision

Gartner analysts evaluate vendors on their ability to convincingly articulate logical statements about current and future market direction, innovation, customer needs and competitive forces, and how well they map to the Gartner position. Ultimately, vendors are rated on their understanding of how market forces can be exploited to create opportunities for the vendor.

Criteria for market understanding, offering (product) strategy, innovation and geographic strategy are weighted high. In terms of vision, these criteria are the most impactful in a buyer's decision. Buyers are looking for vendors that understand the trends and changing dynamics in transportation, offer depth and breadth in their product portfolio, have a strong product roadmap, and can support their business needs across a diverse set of geographic locations.

Criteria for business model and vertical/industry strategy are weighted medium. This is to ensure that vendors have shown the ability to adapt or evolve their business model as needed, that this market is significant to their overall business, and that they have consistent vertical focus.

Criteria for marketing strategy and sales strategy are weighted low. This is to ensure that vendors have a strategy to improve market visibility, provide clear and consistent messaging, and have adequate sales channels and resources to continue to grow their business.

Table 2: Completeness of Vision Evaluation Criteria

Evaluation Criteria ↓	Weighting ↓
Market Understanding	High
Marketing Strategy	Low
Sales Strategy	Low
Offering (Product) Strategy	High
Business Model	Medium
Vertical/Industry Strategy	Medium
Innovation	High
Geographic Strategy	High

Source: Gartner (March 2023)

Quadrant Descriptions

Leaders

Leaders have the ability to execute their vision through their TMS products and demonstrate solid business results in the form of revenue and customer growth. Leaders have significant successful customer deployments in a wide variety of industries, across multiple geographies, and with multiple proofs of deployments. They offer functionally rich solutions that are especially beneficial to larger organizations with a high level of transportation complexity. They are often the vendors against which other providers measure themselves.

Challengers

Challengers are often larger than Niche Players and demonstrate higher volumes of new business. They have the size and product capabilities to compete worldwide, but they might not be able to execute equally well in all geographic areas. They often achieve strong customer experience satisfaction scores. They may lack a strong functional vision or may have failed to deliver compelling new product enhancements during the past 12 months.

Visionaries

Visionaries are typically seeking to deliver a unique or differentiated approach to the market. They may be thought of as thought leaders and tend to be on the leading edge of emerging concepts and technologies. Visionaries may have a smaller number of live customers and/or lack a substantial market presence. These vendors usually have deficiencies in their Ability to Execute, particularly in areas such as market visibility, growth, track record or operations. Vendors in this category can be established TMS vendors who have yet to mature into leading positions in the market, or they can be innovative vendors who are more specialized with unique views of where the market is heading.

Niche Players

Niche Players offer a TMS product that lacks breadth and depth of capabilities, or may not demonstrate the ability to consistently handle deployments across multiple geographies, or may lack strong sales. These vendors may offer a complete TMS for a smaller number of specific industries, but face challenges in one or more of the areas necessary to support cross-industry requirements. They may have an inconsistent implementation track record or may lack the ability to support the requirements of large or higher transportation complexity enterprises. Even so, Niche Players sometimes offer the best solutions for the needs of particular organizations, considering the price/value ratio of their solutions.

Context

Gartner continues to see expansion in the sophistication, functional breadth and depth, and geographical scope of the TMS market. However, as shipper requirements grow, notable differences remain across solutions. These differences include the capability to address the most complex requirements, a vendor's ability to deploy outside its home region and the TMS's native support for modes other than over the road. In addition, the challenges that organizations have faced in orchestrating end-to-end processes have increased the importance of transportation and supply chain execution convergence.

This research focuses on solutions that address the needs of companies that routinely use multiple modes of shipping, such as FTL, LTL, intermodal, rail, air, ocean, small package, and private or dedicated fleets. Emphasis in this research is on solutions that support primarily for-hire transportation, where shippers contract with carriers for freight movements. This research does not focus on specialized solutions targeted at fleets, although a TMS vendor's ability to support a fleet is evaluated. Likewise, parcel labeling and manifesting are evaluated as part of a TMS vendor's capabilities, but stand-alone parcel solutions are not included in this research.

All solutions in this Magic Quadrant support, at a minimum, the six core capabilities previously outlined. All solutions in this Magic Quadrant have the capability to support organizations of various sizes (in terms of volume and freight spend), geographies and levels of transportation complexity. Differentiation among solutions include factors such as:

- Breadth of TMS functionality beyond core capabilities; some solutions may support most or all extended TMS capabilities.

- Depth of TMS functionality, particularly in functionality for transportation planning and optimization.

- Usability and simplicity that are of increasing importance to all organizations, but particularly those classified as small and midsize shippers.

- Analytics that go beyond standard reporting to include predictive and prescriptive capability.

- Sustainability capabilities, including emissions and carbon calculations, and the ability to provide meaningful data and reporting.

- Partnership ecosystems that include complementary transportation technologies and capabilities, as well as implementation resources.

- Global reach, both in terms of ability to support global operations across modes and geographies, and in ability to provide implementation and support services.

- Convergence strategies that include transportation, supply chain execution and a vision for end-to-end supply chain convergence.

Market Overview

There was one new entrant and two vendors were dropped from the Magic Quadrant this year. There was also significant movement across the quadrants this year with e2open moving into the Leaders quadrant and Shipwell moving into the Challengers quadrant. One Network Enterprises entered the Magic Quadrant this year in the Visionary quadrant. While there were no other major changes, other vendors experienced shifts in Ability to Execute and Completeness of Vision based on their market results, product enhancements and innovation.

The TMS market has continued to evolve over the past 12 months. Gartner has continued to see high levels of interest from prospective buyers for TMS applications. This includes organizations which have previously relied on legacy, homegrown applications and those with on-premises solutions from vendors. In addition, there continues to be strong interest from organizations which have never utilized a TMS solution or that previously might have relied on an outsourced transportation management provider.

Acquisition activity and other developments also have impacted the market. Trimble announced that it was retiring the Kuebix TMS solution. This has led existing Kuebix customers to start exploring migration paths and alternate solutions in the market. Uber Freight completed its rebranding of Transplace in late 2022. E2open continued to be active by acquiring Logistyx Technologies in March 2022. Trimble announced an agreement to purchase Transporeon in December 2022.

The TMS market continues to be highly fragmented due to the presence of many vendors, particularly in the United States and Europe. Several vendors have been offering solutions for many years, but new vendors continue to enter the market. TMS startups, as well as existing supply chain management vendors that have acquired a TMS solution, continue to extend the vendor landscape.

TMS vendors continue to invest in expanding the breadth and depth of their TMS products as well as their global footprint. The evolutionary expansion of the depth and breadth of TMS offerings improves the value proposition for a TMS. Enhancements in freight procurement, analytics, artificial intelligence/machine learning (AI/ML), automation, support for more modes of transportation (e.g., intermodal, parcel, rail, air and private/dedicated fleets), and visibility have added to the value of a TMS.

Gartner estimates the annual spend on supply chain execution software to exceed $8.8 billion through 2026, up from $5.3 billion through 2021 (see Forecast: Enterprise Application Software, Worldwide, 2020-2026, 4Q22 Update). This reflects a five-year compound annual growth rate (CAGR) of 10.9% in constant currency terms (base 2020). The derived forecast for the TMS software markets estimates the annual spend on TMS software as a share of the spend on supply chain execution (SCE) market. Gartner estimates that the share of TMS software spend will be approximately 26% of that on SCE, or $2.2 billion. The forecast indicates that the annual spend on TMS will grow at a five-year CAGR of 8.9% in constant currency terms (base 2020), led by a five-year CAGR of 12.7% in North America, which is estimated to account for nearly 62% of the global spend by 2026.

Continued interest in the TMS market has also led to a variety of trends that will impact prospective buyer decisions. Organizations that are currently evaluating potential TMS solutions or that have plans to do so in the near future should consider the relevance of these trends. These trends include increasing capabilities for supporting sustainability goals and initiatives, shifts toward a microservices architecture and API connectivity connecting to internal and external applications. And finally, the usage of technologies such as AI/ML to drive more predictive and prescriptive capabilities.

Another key trend that has been ongoing for some time now is the growth of various TMS vendors partnership ecosystems. As advanced as some TMS solutions are, many still have gaps or lack depth of functional capability in areas of increasing interest from prospective customers. This includes more advanced parcel capabilities, real-time transportation visibility and integration partners, for example. In response, TMS vendors have increasingly become receptive to building partnerships with vendors that offer these types of solutions or capabilities. An organization that is evaluating potential TMS vendors should consider their current transportation technology strategy and determine if additional solutions and capabilities are needed beyond a TMS. If that is the case, a closer examination of a potential TMS vendor's partnership ecosystem should become a priority.

Evidence

The following were used to collect information about the vendors and their TMS offerings:

- **Vendor presentations and demonstrations to the Gartner analyst team:** Specifically, to support this research, each vendor is allotted time to present information about its company and solutions. Each vendor is allotted the same amount of time for this research, but Gartner also conducts interactions with vendors throughout the year as part of normal and ongoing relationships with user and vendor clients.

- **Research and data collection:** Each vendor is also asked to fill out a survey that investigates, in more detail, factual information about its company and TMS offering. Also, as part of this exercise, Gartner reviews customer references on Gartner Peer Insights submitted in the last 12 months.

Evaluation Criteria Definitions

Ability to Execute

Product/Service: Core goods and services offered by the vendor for the defined market. This includes current product/service capabilities, quality, feature sets, skills and so on, whether offered natively or through OEM agreements/partnerships as defined in the market definition and detailed in the subcriteria.

Overall Viability: Viability includes an assessment of the overall organization's financial health, the financial and practical success of the business unit, and the likelihood that the individual business unit will continue investing in the product, will continue offering the product and will advance the state of the art within the organization's portfolio of products.

Sales Execution/Pricing: The vendor's capabilities in all presales activities and the structure that supports them. This includes deal management, pricing and negotiation, presales support, and the overall effectiveness of the sales channel.

Market Responsiveness/Record: Ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customer needs evolve and market dynamics change. This criterion also considers the vendor's history of responsiveness.

Marketing Execution: The clarity, quality, creativity and efficacy of programs designed to deliver the organization's message to influence the market, promote the brand and business, increase awareness of the products, and establish a positive identification with the product/brand and organization in the minds of buyers. This "mind share" can be driven by a combination of publicity, promotional initiatives, thought leadership, word of mouth and sales activities.

Customer Experience: Relationships, products and services/programs that enable clients to be successful with the products evaluated. Specifically, this includes the ways customers receive technical support or account support. This can also include ancillary tools, customer support programs (and the quality thereof), availability of user groups, service-level agreements and so on.

Operations: The ability of the organization to meet its goals and commitments. Factors include the quality of the organizational structure, including skills, experiences, programs, systems and other vehicles that enable the organization to operate effectively and efficiently on an ongoing basis.

Completeness of Vision

Market Understanding: Ability of the vendor to understand buyers' wants and needs and to translate those into products and services. Vendors that show the highest degree of vision listen to and understand buyers' wants and needs, and can shape or enhance those with their added vision.

Marketing Strategy: A clear, differentiated set of messages consistently communicated throughout the organization and externalized through the website, advertising, customer programs and positioning statements.

Sales Strategy: The strategy for selling products that uses the appropriate network of direct and indirect sales, marketing, service, and communication affiliates that extend the scope and depth of market reach, skills, expertise, technologies, services and the customer base.

Offering (Product) Strategy: The vendor's approach to product development and delivery that emphasizes differentiation, functionality, methodology and feature sets as they map to current and future requirements.

Business Model: The soundness and logic of the vendor's underlying business proposition.

Vertical/Industry Strategy: The vendor's strategy to direct resources, skills and offerings to meet the specific needs of individual market segments, including vertical markets.

Innovation: Direct, related, complementary and synergistic layouts of resources, expertise or capital for investment, consolidation, defensive or pre-emptive purposes.

Geographic Strategy: The vendor's strategy to direct resources, skills and offerings to meet the specific needs of geographies outside the "home" or native geography, either directly or through partners, channels and subsidiaries as appropriate for that geography and market.

Document Revision History

Magic Quadrant for Transportation Management Systems - 29 March 2022

Magic Quadrant for Transportation Management Systems - 30 March 2021

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Magic Quadrant for Transportation Management Systems - 13 April 2010

Magic Quadrant for Transportation Management Systems - 6 April 2009

Magic Quadrant for Transportation Management Systems, 2007 - 2 January 2008

Magic Quadrant for Transportation Management Systems, 2006 - 18 July 2006

Recommended by the Authors

Some documents may not be available as part of your current Gartner subscription.

How Markets and Vendors Are Evaluated in Gartner Magic Quadrants

Critical Capabilities for Transportation Management Systems

Gartner's Model for Holistic Multimodal Transportation Management Systems — Part 1: Core Capabilities

Gartner's Model for Holistic Multimodal Transportation Management Systems — Part 2: Extended Capabilities

How to Lead an Effective TMS Vendor Demonstration and Consistent Evaluation Process

Tool: TMS Vendor Demonstration Evaluation Scorecard

How to Calculate and Measure the ROI for a Transportation Management System

Magic Quadrant for Real-Time Transportation Visibility Platforms

Market Guide for Multicarrier Parcel Management Solutions

Tool: TMS Integrator Finder

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Source: Gartner (March 2023)

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