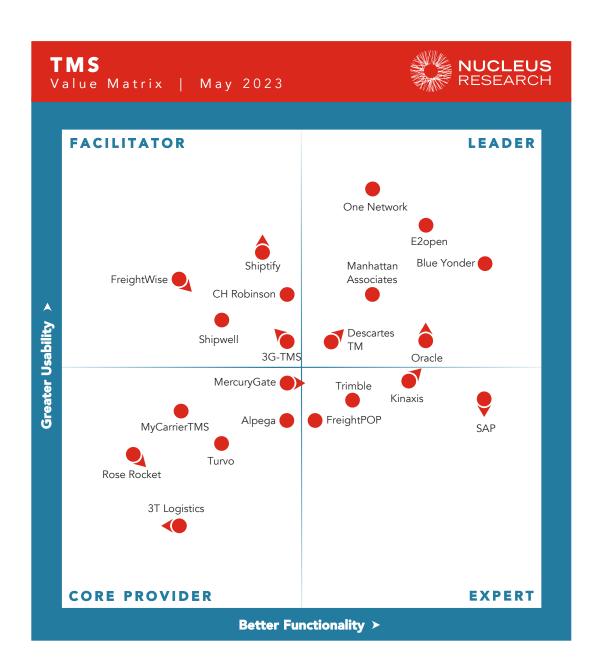


TMS TECHNOLOGY VALUE MATRIX 2023

ANALYST Charles A. Brennan

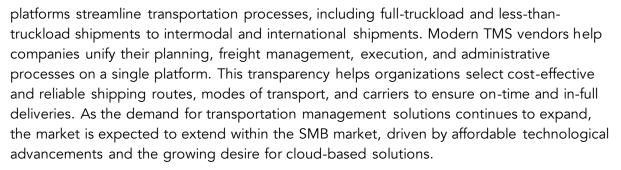
THE BOTTOM LINE

As supply chains become increasingly complex, transportation management systems (TMS) are a critical tool for companies to streamline logistics operations, optimize shipping routes, and improve customer service. The TMS market is rapidly evolving to meet these demands, with cloud-based solutions, AI-powered analytics, and real-time visibility becoming the norm. With a focus on enhancing end-to-end supply chain visibility and collaboration, TMS vendors are well-positioned to help companies navigate the current transportation challenges and drive operational efficiency.



OVERVIEW

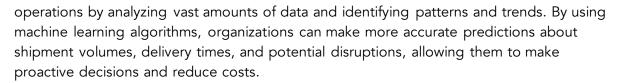
TMS platforms are software solutions used by organizations to manage and optimize their transportation and logistics operations. TMS solutions encompass many functional capabilities, including route planning and optimization, tracking and tracing shipments, managing carrier relationships, documentation filing, and transportation analytics. TMS



The transportation management market has become increasingly important due to the rise of e-commerce businesses such as Amazon and digital technologies. Customers now expect visibility into their shipments and fast delivery times in B2B and B2C markets. Businesses are investing in TMS solutions to meet the increasing demand for order lifecycle visibility and faster delivery times. This investment allows them to track shipments, provide accurate delivery times, and ensure compliance with regulations to avoid fines and penalties. However, in addition to meeting customer demands, there are other factors initiating the adoption of TMS solutions. One of these factors is transportation shortages, which have been exacerbated by the COVID-19 pandemic. With disruptions to global supply chains and limited capacity in the transportation industry, businesses are turning to TMS solutions to help them optimize their shipments and find available transportation options. By using TMS software, businesses can access real-time data on transportation capacity and availability, allowing them to make more informed decisions and avoid costly delays. Another factor driving the adoption of TMS solutions is labor shortages. With a shortage of truck drivers and other transportation workers, businesses are struggling to manage their logistics operations effectively. TMS solutions can help automate many of the manual tasks associated with transportation management, reducing the need for human intervention, and allowing businesses to do more with fewer resources.

To stay competitive in the growing TMS market, vendors are integrating their solutions with cutting-edge technologies. For example, some TMS vendors are integrating with autonomous vehicles, which can help reduce transportation costs and increase efficiency by eliminating the need for human drivers. Real-time visibility platforms are another technology that TMS vendors are integrating with, as they provide real-time data on shipment status and location, allowing operators to make data informed decisions. Vendors are integrating with Internet of Things (IoT) sensors to provide real-time information on key performance indicators such as shipment temperature and delivery times.

TMS vendors are also expanding their capabilities to include ESG reporting to help businesses track and report on metrics related to their transportation operations, such as emissions, fuel consumption, and waste reduction to identify opportunities for improvement and to comply with regulations and industry standards. Furthermore, vendors deploying machine learning algorithms have assisted organizations in optimizing their transportation



The Nucleus Research Transportation Management Systems Technology Value Matrix assesses the market based on how vendors deliver value to customers through the usability and functionality of their solutions (Nucleus Research v67 – Understanding the Value Matrix, April 2021). The research is intended to deliver a relevant snapshot of the Transportation Management technology market rather than serve as an empirical ranking of the vendors. The arrows indicate each vendor's perceived momentum and are informed through conversations with end users, recently released capabilities, features, and other investment areas.

LEADERS

Leaders in the inaugural TMS Technology Value Matrix include Blue Yonder, e2open, One Network Enterprises, Manhattan Associates, Oracle, and Descartes TM.

BLUE YONDER

Blue Yonder is a leader in the inaugural TMS Technology Value Matrix. Blue Yonder supports global businesses from SMB to tier one within, Automotive, 3PL, Consumer Products, Food & Beverage, Pharma, Manufacturing, Retail, and Transportation industries. Blue Yonders' TMS is part of a larger end-to-end supply chain platform for planning, commerce, and execution that includes WMS, labor management, supply chain planning, control tower, and order management. Blue Yonder's Transportation solution provides planning and optimization capabilities across all modes and leverages real-time visibility and machine learning to generate insights for carrier performance, transit time prediction, and load failure predictions. The TMS solution supports optimization and execution capabilities across private and dedicated fleet management, common carrier plans, and dynamic intercontinental planning to help organizations streamline first to last-mile delivery. With Blue Yonder TMS, organizations can reschedule the movement of assets at the execution level, split orders, and automate workflow management, allowing retailers, manufacturers, and distributors to improve efficiency, reduce costs, and minimize the usage of miles and driver hours. Integrated forecasting and replenishment capabilities from Blue Yonder can flow into advanced load-building capabilities that can help properly determine and help predict both carrier resource and fleet forecasted needs in advance, enabling shippers to secure capacity from third-party carriers or to increase fleet capacity needs, alongside

predicting the number, type, and placement of vehicles required in the future so that organizations can minimize detention and dwell times.

Organizations often leverage Blue Yonder for its transportation modeling functionality that creates transportation scenarios that showcase the impacts on cost savings potential and improved service levels within that network. Insights from transportation modeling help organizations increase efficiencies in fleet utilization, improve overall routing and travel behavior, and reduce impacts on service levels based on modeled traffic flow and congestion levels at facilities, ports, and in transit. The Luminate Platform includes out-ofthe-box adapters for real-time visibility partners, such as project44 and FourKites, digital carrier marketplaces, and API and EDI-based multi-modal carrier integrations to track and trace assets across the order lifecycle. Organizations can streamline order management and supplier collaboration by having a singular platform for carriers and shippers to communicate and confirm POs, manage supplier compliance, monitor milestones, assign routing instructions, and generate reports. Blue Yonder's connected TMS for commerce and collaboration offers features such as dynamic price discovery, visibility, and IoT, with direct links to carriers from quote to pay. Blue Yonder's TMS is further enhanced by partners that provide IoT and Edge services, which provide real-time insights on load and asset progress. Finance and operations departments utilize Blue Yonder to gain visibility and control financial performance with hybrid approvals to push audits to carriers, manage to buy and sell rates, create customizable reports, and get a birds' eye view of daily workflow. Blue Yonder provides an open API ecosystem that expands partner integrations for increased value in the modernized landscape of digital transportation. As an example, Blue Yonder TMS provides connectors to dynamic and contracted rating services like SMC3, dynamic capacity and tendering services including Blue Yonder's Dynamic Price Discovery network of digital and carrier partners, and real-time visibility services to provide a single source of truth for transportation users across a broader landscape of service offerings.

Recent product updates and announcements include:

- Blue Yonder announced 2021.1, a carrier collaboration for Truckload and LTL features. Blue Yonder Network Enabled support for pre-onboarded truckload and LTL carriers and signals. The solution provides additional white glove capabilities for EDI-enabled carrier onboarding and more rapid time to value in a centralized Blue Yonder service offering. It provides a framework for connectivity between an onboarded carrier and multiple subscribing TMS instances and merges connectivity paradigms between BY products, including Luminate Control Tower.
- The Load Building Integration to Luminate Planning allows pre-defined integration flows to provide Load Building replenishment plans and return transportation constraint-aware adjustments for order consolidation and vehicle load plans.

- Updates to Blue Yonder Portal Planner UX Moder Experience have improved the simplicity paradigm for load planner visibility to KPIs and load plan adjustments, increasing time to resolution and improving customer service and cost. Prescriptive Resolution Recommendations allow pre-defined workflow resolution for some of the most common load plan editing tasks, including underutilized load efficiency and scheduling failures.
- Fleet Management enhancements allow WMS Operators to have TMS functions to split order quantities if splitting is an allowable operation, to split quantities into loadable sub-quantities based on the product characteristics and packaging.
- Transportation Manager now supports an ability to define a quantity measure on shipment splits to ensure that quantities are split in a manner that defines these split quantity measures. Split quantities of the right size can now be passed to WMS on load and shipment recommendations.
- Routing Guides now enable Planners to define priority rules for Carrier and Service combinations and provide substantial savings in tariff maintenance and upkeep of rates, including Parcel, restrictions, and geographic considerations.
- Updates to the Asset Assignment feature allow one to associate triplets of Domicile, Equipment Type, and Vehicle ID, or Domicile Vehicles, with one or more Assets. These associations automatically create Asset Assignments when the Optimizer uses the corresponding Domicile Vehicle Availabilities or manually creates resources for Loads, Trips, or Bookings.
- Bookings Management will support capturing events at the Booking level and generating corresponding event notifications. Planners can configure workflows using a job server based on the event notification.
- Transportation Smart Planner now provides the ability to Evaluate assigning Shipments to a Load and Evaluate reordering stops on a Load, thus enabling Planners to assess the impact before deciding to save the changes.
- Updates to the Transportation Archive Service allow customers to purge their data more frequently to a separate instance hosted on Snowflake. The usage of this service will help in reducing the size of the Operational production database. The archived data can be accessed via a Luminate platform-based Transportation Archive User Interface
- The Transportation Manager now supports direct integration to Carrier Collaboration for out-of-the-box Parcel Booking, Track and Trace, Delivery Confirmations, and Tracking. Also, UPS and FedEx connectivity is provided out of the box in Carrier Collaboration through BY Network service enablement.
- Blue Yonder updated Load Building to introduce Shipment Edit functionality, which provides flexibility for the planner to edit shipment quantities and add new items post-solve to enhance the load efficiency of the shipment for the transport equipment. Load Building also provides the flexibility to configure the packaging

level at the item level. The item quantities will be converted from the order to the configured packaging level and displayed on the UI. Auto-scaling of the Load Building optimization service provides newly improved efficiency and utilization based on the characteristics of the queued requests.

E2OPEN

E2open is a leader in the 2023 TMS Technology Value Matrix. E2open supports enterpriselevel organizations within the aerospace and defense, automotive, communication, construction, consumer goods, healthcare, life sciences, manufacturing, oil and gas, chemicals, professional services, retail, and transportation industries. E2open offers comprehensive TMS functionality, connected supply chain applications, and access to an enterprise network. E2open's TMS combines features for planning, forecasting, booking, shipping, real-time tracking, and freight auditing and settlement, supporting all modes of transportation, including ocean, air, rail, road, and parcel. The TMS platform provides modules for data analytics, collaboration tools, and customized workflows for shippers, logistics providers, freight forwarders, and carriers.

E2open's TMS is powered by a logistics community comprising over 37,000 rail and truck carriers, 80 ocean carriers, 100 air freight carriers, 25,000 freight forwarders, 1,300 intermodal carriers, 5,000 warehouse/reload operators, 1,000 drayage carriers. With e2open's connected supply chain network, customers can access logistics, suppliers, channels, and the global trade ecosystem to make decisions through both internal and external data streams. Transportation Forecasting with e2open helps users engage with multimodal carriers to reserve capacity and book tenders by lane, class, and day. E2opens global logistics orchestration feature leverages AI-driven prescriptive and predictive analytics to determine ETA's and recommend actions such as route changes, inventory adjustments, and expedited shipments. Equipment management functionality provides real-time data on asset utilization to reduce carbon footprints and automatically request drop-off and pick-up changes. The e2open audit and settlement application digitizes contracts to track rules set between both parties, compare bills of ladings, automatically submit payments and billing errors, and establish variances for rates and surcharges.

E2open uses its network data to publish a monthly Road Freight Rate index and a quarterly Ocean Shipping Index and integrates those insights into its TMS platform. In 2022, e2open announced an expanded partnership with a real-time visibility platform, Shippeo, enabling users to examine inside the truck or container to anticipate and implement optimal remedial measures in advance. Embedding Shippeo's visibility applications into e2open's platform allow users to eliminate data silos, promoting efficiency and sustainability throughout the partner ecosystem as organizations manufacture, transport, and market goods and services.

Recent product updates and enhancements include:

- E2open launched ESG impact visibility, the capability surfaces emissions data to help organizations make ESG-informed decisions that consider cost, lead time, and CO2 at the time of booking, determining transportation modes that reduce carbon and price, and smart turns of containers and trailers to improve equipment availability and cut dead miles.
- E2open Carrier Marketplace enhancements include carrier KPIs and scorecards for intelligent analytics and decision-making. E2open's logistics ecosystem has tripled through acquisition-related expansion.
- Enhanced Carrier Services enable carriers to interact with the TMS in an end-to-end integrated workflow via APIs – replacing and replicating all actions that can be performed within the UI. Some examples include Document Upload & Retrieval, Rate Change Requests, Appointment Scheduling, Spot Market Bidding, Load Notes, Check Calls, and Arrivals/Departures.
- In 2022, e2open announced a technology partnership with real-time visibility platform provider, Shippeo that leverages AI/ML-based ETA algorithms allowing clients to quickly anticipate problems with ETA accuracy fueled by over 200 parameters and real-time quality data.
- E2opens' Global Logistics Orchestration provides integrated multi-modal logistics planning that connects shipment booking functionality to gain efficiency through autonomous decision-making. Integrated views of transport plans help intelligently route shipments considering client-specified requirements to meet delivery commitments at the lowest cost and carbon footprint.

ONE NETWORK ENTERPISES

One Network Enterprises (ONE) is a leader in the 2023 TMS Technology Value Matrix. One Network supports global enterprises within the Aerospace and Defense, Automotive, Manufacturing, Consumer Goods, Healthcare, Pharmaceutical, High Tech, Food and Beverage, Logistics, and Retail industries. One Network's Logistics Solution is a cloud-based logistics suite that provides end-to-end supply chain data with modules for transportation planning and optimization, transportation execution, and financial reconciliation. Organizations utilize One Network TMS to provide a centralized platform that synchronizes the data feeds of all its distributors, suppliers, and logistics providers across all modes to represent its supply chain network digitally. Customers can also deploy additional out-of-the-box TMS services such as global trade processing, parcel shipment, yard, fleet, and dock scheduling to enhance their logistics operation.

One Network's NEO Platform enhances transportation planning and execution by factoring delivery windows, carrier capacity, shipment volume, Department of Transportation constraints, site dock and yard capacities, site hours of operations, throughput constraint, costs, service level, and inventory level, optimizing transportation routes and mitigating

costs. The NEO Platform facilitates communication between stakeholders, including carriers, shippers, customs brokers, suppliers, and other logistics providers. The NEO Platform is an application platform as a service (aPaaS) designed for multi-party network ecosystems, enabling two or more parties to participate in the same transaction. NEO utilizes real-time internal and external data streams to optimize freight based on commodity types, inventory levels, and demand. With One Network's analytics, companies identify the most suitable transportation mode, route, and carrier while offering self-regulating and adaptive policies with autonomous planning, execution, and real-time visibility.

Recent product updates in the past 12 months:

- One Network launched Transportation Forecasting in a unified model that combines planning and execution into a centralized operations platform. Provides the ability to forecast Transportation Equipment (TEU) by absorbing Order Forecasts, Orders, and Shipments. Workbench supports the Equipment forecasting by lanes accounting for different modes of transportation.
- In 2022, the vendor announced ESG capabilities across most facets of evolving enterprise requirements. This includes capabilities around carbon tracking and footprint-based decision-making. Network capabilities were also enhanced to report on safety, sustainability, and circularity.
- One Network also introduced ScenarioChains and LiveChains. LiveChains are the actual transactions that will be executed without user intervention. ScenarioChains are what-if scenario analyzers that enable any aspects of the supply chain to be modeled, planned, and executed via user interaction with NEO. Users gain increased confidence in NEO and expand NEO's autonomous guardrails, thus increasing process automation and efficiency across the supply chain. The TMS allows for dynamic adjustments for transportation plans, routing, mode selection, and execution without re-running the entire plan.
- "Bring your own intelligence" (BYOI) was released, enabling companies to leverage insights from elsewhere in their decision-making on the Digital Supply Chain Network™. One Network extended these capabilities so that users can bring in their own AI, which allows for a more enriched experience while accelerating the operational value. NEO enables BYOI with ML "plug-points," so customers can extend the solution based on their analytics.
- One Networks Machine Learning capabilities now include learning successful prescription sequences that generate optimal outcomes to offer those patterns in similar contexts in the future. The combination of the digitized supply chain network and smart prescriptions enables continuous and incremental planning on a near realtime basis.
- Over the past year, the SaaS vendor launched an Optimized Execution module that unifies planning and execution on one platform. Optimized Execution has

sophisticated forecasting tools, real-time insights, decision support, and execution. It can run autonomously, based on KPI "guardrails" and user-defined business rules, or present exceptions, problems, and potential issues to users via the workbench. Users can review and interact with NEO's smart prescriptions and collaborate with relevant trading partners to determine the best path forward.

- With the new Ocean Events and Intelligent Port Analytics feature, organizations can access Ocean Events and Port Intelligent data, predicting Gate-Out times and accounting for real-time port congestions. This will allow shippers to collaborate with their carriers to schedule port pick-ups and DC appointments, reducing dwell time and prioritizing the right container.
- Customers can now leverage the NEO Platform to fully enable logistics and transportation planning through telematic networks, driving both APS and optimized planning and execution. This also provides the reporting required for solutions that require cold chain capabilities, such as pharmaceutical or serialized tracking for hightech.

MANHATTAN ASSOCIATES

Manhattan Associates is a leader in the TMS Technology Value Matrix. Manhattan Active Supply Chain supports mid to large-sized global enterprises within the Aerospace and Defense, Automotive, Communications, Consumer Goods, Distribution, Healthcare, Life Sciences, Manufacturing, Oil and Gas, Chemicals, Professional Services, Retail, Transportation, and Utilities industries. Manhattan Active Supply Chain is a cloud-native solution that combines Manhattan Active Warehouse Management, Manhattan Active Labor Management, and Manhattan Active Transportation Management on a centralized platform. Manhattan Transportation provides comprehensive support for all modes of transportation covering the entire logistics network, such as private fleet and common carrier management. It enables strategic analysis, procurement, operational planning and execution, visibility, freight payment, and claims management.

Unified Logistics Control is a key capability within Manhattan Active Transportation Management that offers an intuitive, visual experience for managing every aspect of transportation operations, from rates and routes to nodes and loads. With Unified Logistics Control, users can access real-time shipment visibility, allowing for quick execution of changes and faster decision-making. Manhattan's fleet management platform uses machine learning algorithms to recommend routes, drivers, and assets, minimizing miles and optimizing service hours, availability, compliance, seniority, and service needs. With scenario modeling and side-by-side comparisons, Manhattan TMS helps businesses adjust ranges for variables to achieve optimal outcomes, respond to disruptions and demand surges, and anticipate the impact of changes in the number of DC and store locations. Manhattan's Transportation Procurement feature automates contract sourcing and reduces transportation costs for all modes of transportation. It evaluates bid responses using benchmark data, allows alternative pricing, and optimizes contract award combinations with scenario management. Other capabilities include in-app messaging for quick communication, configurable interface panels for personalized planning, simple and fast search and filter options, and proactive alerting for changes and exceptions.

ORACLE

Oracle TMS is a leader in the 2023 TMS Technology Value Matrix. Oracle Fusion Cloud Transportation Management (OTM) supports global enterprises within Automotive, Communications, Consumer Goods, Federal Government, Healthcare, High Tech, Life Sciences, Industrial Manufacturing, Oil and Gas, Restaurants, Retail, Transportation, and Wholesale Distribution verticals, among others. OTM provides a single platform for companies to manage all transportation activity across all modes through transportation operational planning, transportation sourcing, cooperative routing, fleet management, logistics network modeling, logistics digital assistant, and logistics machine learning capabilities. Key capabilities within OTM include transportation procurement, order management, carrier and rate management, fleet and driver management, shipment booking and tendering, visibility and event management, freight audit and payment, tactical analysis, and reporting. The application also supports multiple languages, currencies, units of measure, and business functions.

OTM offers access to algorithms and optimization engines that optimize orders and shipments based on cost, service level, and asset utilization. The solution enables lifecycle support for cross-border shipments and allows for easy user configuration and customization. It includes document management capabilities, allowing for the necessary trade documents and certificates to be produced and validated, with missing fields populated using auto-assignment logic. OTM also includes a supply chain event management and workflow engine to control and execute complex cross-functional logistics processes.

Recent product updates and announcements include:

In 2023, Oracle released a series of updates to OTM, including the following: New Oracle Logistics Digital Assistant Capabilities allow users to gain insight into the status of their shipments with simple voice commands. Enhanced Workbenches enable users to combine data from multiple sources into a single view to streamline operations and improve decision-making. New templates for driver management, dock scheduling, work assignments, shipment, spot bids, and restricted party screening are included. The new Oracle Transportation Management Mobile App lets customers send assignments to drivers, capture arrival and departure events, and communicate in-transit status and location information. The highly configurable

and intuitive app synchronizes offline app data and allows users to execute tasks efficiently from any location. ETA Predictions with Machine Learning provide realtime updates and shipment tracking to create accurate predictions for arrival times based on a customer's unique business operations.

- In December 2022, Oracle announced an enhancement to its Ocean module in the Transportation Management (OTM) system. This update brings a set of capabilities for integrating OTM with external voyage schedule providers and improves access to external voyage schedules with OTM. The update also introduces a new Order Release action, enabling users to assign external voyage schedules from external sources or voyage information to the order release for voyage schedules loaded into OTM.
- Oracle has introduced two new operational reports, Fleet Asset Position Report and Fleet Asset Status Report, allowing fleet managers to track their fleet's status and position. The Fleet Asset Position Report provides visibility to customers for loaded en-route assets, including information about the loaded product, estimated time of arrival, and latest position.
- On November 21st, 2022, Oracle added the Documents SmartLink feature to a broader range of objects, which includes Demurrage Transactions, Drivers, Equipment, Power Units, Rate Records, Rate Offerings, SKUs, Tracking Events, Work Assignments, Work Invoices, Bond, Campaign, Campaign Line, Declaration Line, Item Classification, Item Origin, Item Qualification, License Line, and Transaction Line. This new feature enhances the accessibility and visibility of assigned documents for each object. With Documents SmartLink, users can easily access and view relevant documents associated with an object, providing greater transparency and efficiency in the overall workflow.
- In 2022, Oracle extended its Logistics Machine Learning Project Objective Modeling Type options to include the original Planned ETA Prediction option, a new Planned and Event-based ETA Prediction option that extends both the prediction model development and the shipment predictions provided to include in-transit tracking event information. The Planned and Event-based ETA Prediction option gives organizations an ETA prediction solution that responds to event-related input tracking.

DESCARTES TM

Descartes Transportation Management is a leader in the inaugural TMS Technology Value Matrix. Descartes supports global mid to large-sized companies within the verticals of Aerospace and Defense, Automotive, Consumer Goods, Distribution, Manufacturing, Retail, and Transportation. Descartes Transportation Management is a solution on the Descartes Global Logistics Network (GLN) that combines routing, telematics, transportation management, e-commerce fulfillment, global trade intelligence, broker enterprise systems, customs, and regulatory compliance on one unified platform. Descartes provides a templatized approach that allows organizations to plug and play different modules within the GLN without additional IT burdens.

Organizations typically begin with Descartes' standard capabilities, encompassing rail, intermodal, ocean/air, LTL, truckload, freight audit, carrier booking, contract management, and routing guides. They can plug and play with advanced capabilities, including retail distribution, parcel, dedicated fleet, import and export documentation, dock/yard management, restricted and denied party screening, global visibility and analytics, and optimization. Organizations often choose Descartes for its end-to-end supply chain visibility capabilities, from PO inception through final Warehouse Receipt. This includes visibility to pre-shipment activities, in-transit statuses and location updates, post-shipment receipts, and customs statuses for international moves. Descartes MacroPoint is a real-time freight visibility platform that leverages location-based data from various sources, such as GPSenabled devices and telematics systems, to track the location and status of shipments in real-time. With this information, organizations gain insights into supply chain performance, optimize operations, and improve the customer experience. The Descartes Analytics feature is built on top of Microsoft Power BI data models, dashboards, and reporting templates, which integrates with Descartes Transportation Management and other data sources to provide visibility and reporting KPIs, such as carrier performance, delivery times, shipment volumes, and cost analysis.

Recent product enhancements in the last 12 months:

- In 2022, Descartes enhanced multimodal visibility for service providers worldwide, including vessel operators, ports, airlines, forwarders, and customs agencies.
- A new dashboard feature and updated UI improves the user experience and efficiency for approaching daily activities.
- Expansion of API functionality and data management capabilities, further streamlining operations and maintenance of transportation functions.
- Advanced dock scheduling capabilities enable flexible commodity (product type)/packaging/equipment level constraints within a self-service, automated scheduling environment.

EXPERTS

Experts in the inaugural TMS Technology Value Matrix include Kinaxis, SAP, Trimble, and FreightPOP.

KINAXIS

Kinaxis is an expert in the 2023 TMS Technology Value Matrix. Kinaxis supports mediumsized to large enterprises within the logistics, wholesale distribution, manufacturing, retail, high-tech, and healthcare industries. With Kinaxis TMS, customers connect to a large multimodal carrier and forwarders network, including ocean, air, truck, rail, last mile, and parcel, to streamline and optimize orders across multiple manufacturing sites, distribution centers, and sales channels. Users can also connect with ERP, WMS, eCommerce, real-time visibility, telematics, route optimization, ocean booking, and currency exchange networks. Kinaxis Standard TMS capabilities include on-demand reporting, event management, multi-leg planning, multi-modal rating, freight auditing, service rate agreements, and invoicing matching features. Organizations can ensure on-time and in-full delivery through real-time alerts and in-app exception management, allowing for last-minute order and route changes and optimization of last-mile delivery. Kinaxis enables businesses to control transportation costs with real-time cost optimization and dynamic invoice matching, ensuring that execution aligns with agreed service levels. Kinaxis also provides a cost-to-serve determination tool for all transport and logistics costs, including handling, detention, warehousing, and customs duties. Kinaxis TMS+ capabilities encompass inventory performance, inventory planning, warehouse capacity, multi-order planning, financial control rules, reverse logistics, anomaly detections, and supplier order performance on top of the standard TMS functionality. Kinaxis provides real-time visibility across the entire order lifecycle and surfaces disruptions as they occur so logistics teams can adjust and adapt to execute fulfillment with knowledge of the financial, inventory, and transportation capacity. Kinaxis also offers the ability to automate exception management with stock transfers, expedited orders, and alternate supplier selection.

New announcements in the last 12 months:

On August 16th, 2022, Kinaxis announced its acquisition of MPO to deliver end-toend supply chain concurrency across multiple business networks, from business planning to last-mile execution. With the addition of order management, transportation management, a logistics control tower, and multi-enterprise visibility to existing functionalities, such as S&OP/IBP, supply and demand balancing, and inventory management, Kinaxis is driving a unified user experience that will enable concurrent planning and execution for end-to-end supply chain orchestration.

SAP

SAP TMS is an expert in the inaugural TMS Technology Value Matrix. SAP TMS supports global enterprises within the Aerospace and Defense, Communications, Construction, Real Estate, Consumer Packaged Goods, Distribution, Federal Government, State and Local Government, Healthcare, Leisure and Recreation, Hospitality, Life Sciences, Manufacturing,

Media, Oil and Gas, Chemicals, Professional Services, Retail, Transportation, and Utilities industries. SAP's TMS system integrates with other applications like Extended Warehouse Management (EWM) and SAP Business Network, using IoT, machine learning, and blockchain technologies to align logistics processes with a company's operations. With features for freight procurement and capacity management, SAP TMS enables organizations to efficiently manage freight capacity and create agreements. It also allows transportation requirements to be obtained from various order management systems, facilitating accurate order receiving and processing. SAP TMS provides a visual load planning feature that allows users to examine freight at the pallet level, while its execution features help streamline logistics operations with direct integration to SAP EWM for real-time freight document synchronization and truck arrival and departure information sharing. Organizations can also benefit from advanced freight charge calculation, mode-specific charging, and tariff management, allowing accurate freight cost allocation and settlement across orders and materials. To support smarter decision-making, SAP TMS includes decision support tools such as dashboards, KPIs, and real-time reporting capabilities. It also offers document templates for road, sea, and air shipments, compliance with trade regulations through integration with SAP Global Trade Services, and instant summaries of logistics processes.

Recent product updates relevant to supply chain planning in the past 12 months include:

- In 2022, SAP TMS enhanced the processes of receiving orders and deliveries from SAP ERP and saved them as transportation requirements, which can serve as the foundation for subsequent transportation processes. Furthermore, SAP TM can recommend deliveries generated by SAP ERP.
- SAP ERP can now split outbound deliveries based on planning changes in SAP TM and update key dates such as goods issue, loading, transportation start, and delivery dates based on changes in SAP TM. These changes are returned to SAP TM, updating the delivery-based transportation requirements.
- SAP provides a new scheduling service used when creating, changing, or rescheduling sales orders in SAP ERP. This service considers the transportation situation reflected in SAP TM during order processing in SAP ERP to calculate feasible dates and quantities for order items.
- SAP TM can now integrate scheduling agreements from MM and Sales in SAP ERP through delivery schedules. The agreements contain delivery quantities and dates within a specified time, which are then entered as schedule lines. The integration is based on eSOA services and can be triggered by the creation or a change of delivery schedules. A batch process can be used to manage the future transfer of delivery schedules.

TRIMBLE

Trimble is an expert in the 2023 TMS Technology Value Matrix. Trimble Transportation Management supports SMBs to large enterprises throughout North America and Australia. Trimble's TMS products include TL2000, TMW.Suite, and TruckMate offer functionality for load planning, route optimization, dispatch, tracking, driver and equipment management, invoicing, payroll, settlements, document management, accounting, and integrations such as ELD, maintenance, EDI, fuel cards, and visibility. Trimble TMW Suite supports a full range of industry segments, including Auto Hauler, 3PL/Dedicated Logistics, Energy & Fuel Supply, Intermodal, Private Fleet, Flatbed, Truckload, FinalMile, LTL, Brokerage, and Bulk. Additionally, the TMW Suite provides organizations with document management, driver recruiting, carrier onboarding and monitoring, fleet management, mapping and mileage, accounting, and asset tracking functionality. Trimble's Enhanced Rating feature allows users to calculate shipping costs ahead of time and select the best carrier while helping brokers, 3PLs, and others to plan loads, reduce transportation spending, and manage contracts. The Advanced Load Planning feature leverages proprietary algorithms to optimize load planning and minimize transportation expense by using different modes and carriers, multiple stops, and distribution pools, among other factors. This creates a cost-effective and efficient route selection process with the TMW.Suite Fuel Dispatch organizations enhance the efficiency of tanker fleets and petroleum jobbers by automating data entry. The solution integrates with carriers, ordering parties, consignees, and delivery planning teams, making monitoring tank levels, forecasting consumption, and determining rack pricing easier.

Community Load Match from Kuebix connects carriers and brokers with shippers from a community of over 20,000 shippers. The matching capabilities match shipment requirements with available assets and carriers' designation of preferred lanes. The system offers rate assessments to optimize logistics operations and source new capacity. Additionally, Trimble Transportation offers D2Link, a proprietary mobile communications application that supports key features such as bar code scanning, mobile imaging, signature capture, geofencing, and forms/messaging. Trimble Transportation provides a variety of business intelligence solutions, including The Reveal Series, which is comprised of a Data Warehouse, Visual Analytics Dashboards, ETL capabilities, and database optimization, which enable businesses to generate actionable intelligence across all operations, benchmark performance against industry peers, and gain insights in a matter of weeks. Engage Bid is a web-based application that simplifies the conversion and analysis of shipper RFP documents. It allows businesses to develop bids that align with their competitive strategies and cost structures. Moreover, Trimble Transportation's business intelligence tools are powered by Microsoft Power BI, which facilitates data visualization, trend analysis, report building, error detection, and diagnostic, predictive, and prescriptive analytics to enhance profitability.

FREIGHTPOP

FreightPOP is an expert in the 2023 TMS Technology Value Matrix. FreightPOP is a transportation management software designed to support mid-sized to large organizations managing their transportation and logistics processes on one centralized platform. FreightPOP covers all aspects of shipping and logistics, including parcel, LTL, FTL, Ocean, and Air, with the ability to shop the best rates, ship within the platform, track inbound and outbound shipping, audit carrier invoices, and analyze warehouse activity. With connections to 1,500+ carriers, ERP, WMS, and rate marketplaces, organizations can access optimal rates and streamline the shipping process. FreightPOP transportation management automates various shipping processes, such as creating documents and printing labels, invoices, and BOLs, while feeding shipment data into the appropriate business systems. The Freight RateHACKER tool is an algorithm-backed matchmaker that pulls in all possible combinations from all your available carriers to find the best way to get your shipment from point A to point B. FreightPOP's Auto Dispatch tool utilizes AI to streamline shipping without sacrificing control over preferred routes, carriers, and pricing. Sales and purchase orders are automatically converted into shipments that are auto-processed based on parameters set by the user, all the way down to the accessorial.

Product updates in the last 12 months:

- In 2022, FreightPOP announced an integration partnership with FedEx IPD. FedEx IPD was built for shippers looking to consolidate multiple shipments for easier processing through the border and customs for international shipments.
- In 2022, FreightPOP now grants shippers added visibility into their containers during drayage. This new update also allows users to track per diem and demurrage charges.
- On November 11th, 2022, FreightPOP announced a partnership with Cubiscan, a worldwide freight dimensioning solutions provider. The partnership aims to provide customers with the necessary data and tools to avoid chargebacks and increase efficiency in the logistics process by pushing 100% accurate dimension information into the FreightPOP portal. The combination of Cubiscan's dimensioning hardware and FreightPOP's software provides shippers with a full suite of solutions that integrate seamlessly with their current warehouse management and shipping software, saving labor, carrier chargebacks, and reclassification fees.
- On September 22nd, 2022, FreightPOP announced a partnership with in-transit visibility provider Tive to deliver an enhanced shipping experience for manufacturers, distributors, 3PLs, and logistics service providers. The two solutions combine to eliminate traditionally disparate systems for an end-to-end view of supply chain operations.

 Other product updates include auto dispatching, single sign-on functionality, UPS paperless documentation, custom broker address capabilities, and eBay direct integration.

FACILITATORS

Facilitators in inaugural TMS Technology Value Matrix include CH Robinson, Shiptify, Shipwell, 3G-TMS, and FreightWise.

CH ROBINSON

CH Robinson is a facilitator in the inaugural TMS Technology Value Matrix. CH Robinson supports SMB to large enterprises in North American and European regions, supporting verticals within Consumer-Packaged Goods, Professional Services, Retail, and Manufacturing. CH Robinson's TMS helps organizations automate and optimize shipment lifecycles for various modes including truckload, LTL, ocean, and air. With nearly 200,000 shippers and carriers integrated within Navisphere, CH Robinson offers end-to-end shipment visibility. Organizations can leverage Procure IQ to create personalized routing maps for procurement, utilizing shipping data, CH Robinson's integration network, and data science. Procure IQ offers bid analysis to increase savings and service reliability by mapping the density and direction of shipping regions, benchmarking performance data, and providing insights into the cost volatility for each lane. Users can drill down with Procure IQ maps to view region density and reduce transportation spending while improving service levels. Digital connectivity with the Navisphere API and EDI integrations saves time and money while providing instant quotes, shipment tracking, and tendering. Navisphere Vision provides real-time visibility into inventory across all modes and transportation providers. Organizations can automate route guides across carriers and forwarders while giving access to transactional and contractual rates for various modes and regions to enable multiple freight tendering and spot bidding. For small businesses, CH Robinson offers Freightquote and Freightview, designed to simplify and automate the shipment quoting and booking processes. Organizations can create custom reports that track freight, fuel charges, taxes, and accessorial, allowing users to improve their supply chain efficiency and reduce transportation expenses. Emissions IQ enables users to view and benchmark carbon footprint by calculating and presenting emissions based on mode, location, and retailer.

SHIPTIFY

Shiptify is a facilitator in the 2023 TMS Technology Matrix. Shiptify supports European SMBs to large enterprises within the Consumer Goods, Retail, E-commerce, Logistics, Distribution, Food and Beverage, Manufacturing, and pharmaceutical industries. Shiptify Transportation Management Control Tower combines order management, transport planning, dispute manager, spend optimization, and control tower technology on a unified platform that supports all modes of transport. Shiptifys' transportation planning module simplifies configuring and updating transport plans. Organizations can view multi-carrier quotes and see recommended carriers based on different criteria such as geographic area, department, or customer, and even vary the carriers based on the mode of transport. The planning feature provides decision support for operations and distribution teams, presenting recommended carriers based on costs, lead times, and quality of service. Shiptifys' shipment tracking module offers shipment management with Shiptify APIs, geo-tracking, and alerts for delays or anomalies. Organizations can provide automated carrier feedback and the ability to upload transport information to ERP systems. Real-time proactive litigation notifications are sent in case of any detected anomalies, with the option to receive them via email, web notifications, or personal dashboards. Collaborative dispute management with carriers is also available to speed up the dispute resolution process, while the feedback from docks and customers provides a reliable measure of carrier service quality.

SHIPWELL

Shipwell is a facilitator in the inaugural TMS Technology Value Matrix. Shipwell supports small to midsized organizations within the Aerospace and Defense, Automotive, Consumer Goods, Distribution, Manufacturing, Oil and Gas, Chemicals, Professional Services, Retail, and Transportation industries. Shipwell is a transportation management solution hosted in the cloud and built to optimize the entire supply chain process for logistics, carriers, and shipping companies. With a centralized platform, users can get real-time quotes, book shipments, and track them using ELD, API, and EDI integrations. Shipwell offers built-in integrations with payment and billing tools to streamline financial processes and ensure accurate payment. It also provides shipment protection by ensuring carrier compliance, analyzing carrier performance, and offering predictive lane pricing to help businesses save on freight costs. Shipwell's real-time tracking technology enables end-to-end visibility for various shipments, including FTL, LTL, ocean, container, drayage, and parcel shipments. Users can track shipments through 2 million ELD-connected units and 850,000 drivers integrated into the platform. The Compass Dashboard surfaces all shipment issues and statuses in one place, eliminating the need for manual checks across multiple platforms. Shipwell also streamlines financial processes and ensures accurate payment through built-in integrations with payment and billing tools. The platform allows you to execute back-office



financial processes through native support of TriumphPay, NetSuite, and QuickBooks, track line-item level financials, and accessorial fees in one location to ensure accuracy.

Product updates in the last 12 months:

 On September 15th, 2022, Shipwell and NMB Solutions partnered to provide a cloud-based solution for the Microsoft D365 community. This collaboration combines Shipwell's technology and experience with NMB's Microsoft Certified Dynamics 365 finance and supply chain integration modules.

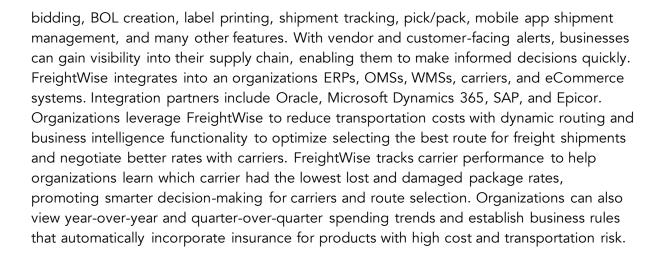
3G-TMS

3G-TMS is a facilitator in the 2023 TMS Technology Value Matrix. 3G-TMS provides cloudbased end-to-end transportation management software for various businesses, including ecommerce companies, 3PLs, freight brokers, and omnichannel shippers. The comprehensive TMS suite covers all aspects of transportation management, from electronic order capture to vendor and customer collaboration, routing guide management, and mode and service level selection. 3G-TMS provides advanced planning and optimization capabilities through its embedded optimization engine, which generates executable loads and recommends the best delivery options. The engine can adjust routes and recommend new options as conditions change, with continuous pool optimization and multi-variable inputs to handle complex routes like multi-stop, multi-leg, LTL, and pool distribution. Additional features include dynamic pooling and cross-docking, "what-if" planning analysis, and integrated map views.

Messaging capabilities allow for ETA communication and delay notifications to customers and partners, while the cloud-based platform offers exception management and reporting, including essential documentation like Proof-of-Delivery. 3G-TMS provides standard reports on delivery performance, carrier metrics, and compliance, along with the option for customized ad-hoc reports that suit an organization's specific needs, embedded in the application framework and accessible according to user permissions. The software also includes status tracking and automated alerts, freight audit, eMatch and Pay or Auto-Pay, and operational and scorecard reporting. 3G-TMS's advanced shipping software, PaceJet, supports multiple carriers and helps customers meet complex shipping requirements.

FREIGHTWISE

FreightWise is a facilitator in the inaugural TMS Technology Value Matrix. FreightWise supports US companies within the logistics, retail, and distribution industries. FreightWise TMS platform enables businesses to streamline transportation operations across all major domestic modes, including TL, LTL, and Parcel. The platform manages the entire order-to-ship-to-pay process in a single system, providing vendor portal access, rate quoting, spot



CORE PROVIDERS

Core providers in the inaugural TMS Technology Value Matrix include MercuryGate, Alpega, MyCarrierTMS, Turvo, Rose Rocket, and 3T Logistics.

MERCURYGATE

MercuryGate International is a core provider in the 2023 TMS Technology Value Matrix. MercuryGate supports small, midsized, and enterprise-level companies within the US and France and supports verticals within Food and Beverage, Healthcare, Pharmaceuticals, Retail, Manufacturing, and Wholesale Distribution. MercuryGate's TMS offers a unified transportation platform to streamline and consolidate freight transportation management, allowing shippers, brokers, carriers, and 3PLs. MercuryGate International supports all modes of transportation, including ocean, air, rail, truckload, LTL, last mile, parcel, and intermodal, with over 100,000 carrier integrations. Organizations improve transportation planning and forecasting with MercuryGate features for multimodal optimization, dynamic routing, load planning, advanced rerouting, street-level optimization, carbon impact, dock scheduling, and scenario-based modeling. Organizations gain control over their transportation operations through MercuryGates digital freight, document generation, fleet management, multimodal rating, rate repository, spot market, transportation order, carrier management, compliance and governance, and customer rating management features. By utilizing MercuryGates, Ocean Container, and Vessel Ledger filters, users can quickly determine the location of a product's vessel and container, ETA, shipment details, and quantity. MercurcyGate TMS grants users access to freight management features, including drone, dynamic rerouting, final mile, native parcel, reverse logistics, white glove services, courier,



digital proof of delivery, and drayage to increase throughput times, enhance operational efficiency, and drive data-informed decisions. MercuryGate TMS provides business intelligence features to provide users with access to transportation intelligence data that combines customer and carrier scorecards, freight rate index, planning metrics, predictive analytics, predictive ETA, advanced reporting, and carbon footprint to improve inbound and outbound distribution decision-making.

Product updates in the last 12 months:

- On November 8th, 2022, MercuryGate acquired Clear Track Information Network, a cloud-hosted and on-premises system that stores and tracks information related to the activity and movement of goods in transit. Expected customer impacts include improved decision-making, enhanced logistics visibility, and increased operational efficiency. The acquisition will supplement MercuryGate's existing TMS capabilities with improved ocean freight procurement and transportation solutions.
- The vendor added new REST APIs, allowing organizations to efficiently run integrations with suppliers' and customers' systems and connect workflows inside and outside the organization.
- On May 12th, 2022, MercuryGate International partnered with Amazon Freight, a freight transportation service powered by Amazon. This partnership allows shippers of all sizes to utilize Amazon Freight's logistics network and service offerings to move their full truckload freight through the MercuryGate platform. Shippers onboarded with Amazon Freight can view competitive rates and book spot loads through the MercuryGate TMS. Amazon Freight will offer a complimentary lane-match analysis to MercuryGate shippers, identifying opportunities for shippers to save money and optimize their network.

ALPEGA

Alpega TMS is a core provider in the inaugural TMS Technology Value Matrix. Alpega supports mid-sized to large European and Asia-Pacific companies within the agricultural, automotive, chemical, packaging, food and beverage, 3PL, pharmaceuticals, manufacturing, and mining and materials industries. Alpega TMS is a cloud-based transportation management system that optimizes logistics operations, including transportation sourcing, planning, execution, settlement, and analytics, transforming supply chains into collaborative ecosystems. Alpega TMS offers a range of solutions, such as Smart Booking to improve the warehouse slot booking process, Reusable Packaging Management to trace high-value packaging, and TenderEasy to save time and money in freight procurement. Alpega's planning and execution software allows businesses to adjust and optimize utilization and

costs in response to changing market conditions while working towards long-term strategic goals. Alpega's logistics software includes a 3D load planning feature, which enhances operational and tactical planning with 3D visualization and supports the planning workflow. This allows for selecting optimal transportation services, bundling individual shipments, and handling short-term changes cost-effectively and sustainably. Organizations can analyze historical and forecast transportation data with Alpega to determine the best way to control costs and capacity throughout their network, bundle shipments, optimize strategies, reduce costs and service time, and increase asset utilization. Alpega's Real-Time Visibility Network provides shippers and carriers with real-time order location tracking, allowing users to quickly react to and mitigate unexpected events such as traffic jams and incidents. Alpega's Analytics suite provides visual reports that cover major transport metrics, allowing users to gain a detailed view of their performance, freight costs, and individual carrier scorecards.

Product updates in the last 12 months:

 On September 9th, 2022, Alpega Group acquired Road Heroes, a specialized job site that links truck drivers with prospective employers from Pinetco. The acquisition addresses the driver shortage issue, a supply chain bottleneck. Road Heroes is a European-wide platform that provides hiring companies and prospective drivers with a competitive edge to fulfill market needs.

MYCARRIER TMS

MyCarrierTMS is a core provider in the 2023 TMS Technology Value Matrix. MyCarrier is a transportation management system (TMS) provider designed for small to medium-sized businesses (SMBs) in the shipping industry. MyCarrier TMS provides users a quoting functionality to compare LTL/FTL shipment rates and transit times. The quoting process features include saved addresses, location lookup powered by Google, and a personal product list, which enables users to create quotes faster. The quoting capability lets users compare rates and transit times across carriers, helping them make informed decisions and optimize their shipping processes. With MyCarriers dispatching feature, users can dispatch shipments, and frequent order details are auto-filled to help increase employee productivity and operational efficiency. MyCarrier assigns pro numbers, generates BOLs automatically, and enables users to share all shipment documents across different departments with a single click to help simplify dispatching. MyCarrier Data Intelligence Cloud provides insights into an organization's shipping performance to help optimize transportation processes, reduce costs, and improve service levels.

Recent product announcements include:

• On October 22nd, 2022, MyCarrierTMS enhanced its transportation management platform. The release brings several new updates, including improving the

onboarding experience for new platform users, adding new carriers via a single-click quick connect configuration process, and adding ERP Lite integration support. The ERP Lite support enables organizations to integrate into most ERP systems quickly, without the specialized resources and associated costs. The release also adds automation for consignee-routed shipments and enhances multi-modal support by integrating core functional elements necessary to support parcels.

 On September 13th, 2022, MyCarrierTMS raised \$22M in a Series B round. The funding will allow the organization to handle multimodal shipping needs.

TURVO

Turvo is a core provider in the inaugural TMS Technology Value Matrix. Turvo supports SMBs within the logistics and distribution industries. Turvo TMS platform combines order management, shipment execution, appointment schedules, analytics, and integration hub suites on a single, unified platform. Turvo's control tower features help organizations evaluate partner performance, optimize routes, execute contracts, monitor driver performance, and optimize turnaround times. With Turvo's order management features, businesses can minimize shipment rerating and expedite order processing by quickly reviewing carrier rates, tendering shipments, and scheduling pickups. Their shipment execution and document management features allow critical shipping documents to be uploaded, shared, and edited within the platform, improving shipment visibility for external partners. Turvo's dock management feature streamlines the process of managing carriers by offering context scheduling, real-time updates on truck status, and self-service appointment booking. Organizations can also use Turvo Analytics: Supply Chain 360 to create customizable dashboards and build specific reports to help users focus on high-margin customers, carriers, lanes, and supply chain partners, allowing them to recognize topperforming ones and improve planning for the seasonality of freight.

Notable product updates from the past year include:

- On March 21st, 2023, Turvo announced a strategic partnership with carrier identify management platform Highway to improve transparency and carrier onboarding. Integrating Highway's carrier identity engine into Turvo's system will allow Turvo's customers to automate carrier identity management and compliance. With Highway's carrier compliance framework, freight brokers and 3PLs can source and vet capacity.
- On November 29th, 2022, Turvo and DAT Freight & Analytics announced a strategic partnership to enhance freight matching and supply chain orchestration for freight brokers, 3PLs, shippers, and carriers. Turvo's customers will have access to the largest truckload marketplace in North America via DAT integrations, allowing them to post loads within seconds and without leaving their Turvo portal.

- On November 17th, 2022, Turvo joined the MuleSoft Technology Partner Program and released a MuleSoft Certified API specification. This collaboration will contribute to the partner ecosystem as a custom MuleSoft Certified Connector for Turvo.
- On August 23rd, 2022, Turvo and project44 partnered to provide shippers, logistics providers, and carriers engaged in full and LTL shipments.

ROSE ROCKET

Rose Rocket is a core provider in the inaugural TMS Technology Value Matrix. Rose Rocket is a trucking TMS vendor for carriers and brokers in the logistics and distribution industries. Carriers gain access to order management, tracking, transportation planning, profitability planning, driver scheduling, invoicing, and integration capabilities to streamline operations and reduce costs. Brokers often leverage Rose Rockets order filtering, dispatching, quoting, electronic rate cons, and billing functionality. The system includes automated order entry through Customer Portals, EDIs, APIs, and Google address auto-fill technology. Rose Rocket offers quick quote generation, dispatching, and order tracking capabilities through intelligent automation, real-time visibility, and integration partners. Organizations leverage Rose Rockets tools for order management and document tracking, drivers' mobile applications, and signature capturing to streamline cross-departmental collaboration and enhance operational efficiency. Additionally, Rose Rocket creates custom-branded invoices and integrates with accounting software, QuickBooks, and Xero to minimize invoicing time and improve cash flow. Rose Rocket provides integrations with visibility platforms project44 and Descartes Macropoint, including ELD platforms Samsara, Geotab, and Thermo King.

3T LOGISTICS

3T Logistics is a core provider in the 2023 TMS Technology Value Matrix. 3T logistics support SMBs within the consumer goods, food and beverage, automotive, construction, logistics, and distribution industries. 3T Logistics Platform is a cloud-based TMS solution that streamlines logistics operations and manages all aspects of transportation from a single dashboard, including shipment planning, execution, and tracking. Planning and operations services provide operational control over carriers, customer service, and PODs. Carrier management services offered by 3T include carrier procurement, carrier performance management, single-point invoicing, and carrier payments. Organizations leverage 3T logistics account management capabilities for transportation forecasting and analysis, budgeting, reporting, and performance management. 3T logistics leverages AI technology to examine logistics scenarios at multiple levels. Advanced analytics and reporting capabilities provide insights into an operation to identify trends, analyze performance, and make data-driven decisions.