MPO is Leader in SPARK Matrix: Transportation Management Systems, 2022
MPO is Leader in SPARK Matrix: Transportation Management Systems (TMS), 2022

A transportation management system (TMS) is a software application designed to plan, execute, and optimize the transportation of goods. A TMS can help reduce the cost of shipping, improve customer service, and increase the efficiency of the supply chain. The goal of a TMS is to reduce the cost of transportation while ensuring that goods are delivered on time and in good condition. A TMS can provide many benefits to a company, including reducing transportation costs, improving customer service, and reducing the need for manual processes.

The increasing demand for TMS solutions and services is driven by the need to reduce transportation costs, improve customer service, and increase the efficiency of the supply chain. A TMS is typically comprised of three main components:

1. A Transportation planning module: This module is used to create transportation plans.

2. An Execution module: This module is used to execute the transportation plans.

3. An Optimization module: This module is used to optimize transportation plans.

Quadrant Knowledge Solutions defines “Transportation management system (TMS) as the logistical solution that allows users to plan logistics, coordination, and management of both inbound and outbound transportation resources and information.” A TMS provides improved customer service levels with the ability to monitor on-time performance. Also, with the ability to locate where shipments are and the distance from the destination. The solution helps organizations to schedule, implement, and optimize their transportation operations by automating and streamlining tasks such as quoting, routing, tracking, and billing. The broader goals of using a TMS are to improve shipping efficiency, reduce costs, gain real-time supply chain visibility, and ensure customer satisfaction.
A TMS can provide many benefits to a company, including reducing transportation costs, improving customer service, and reducing the need for manual processes. A transportation management system (TMS) can be a great asset to any organization, providing many benefits such as improved efficiency, cost savings, and better customer service. While there are many different TMS on the market, they all have the same goal: to help companies better manage their transportation needs. When choosing a TMS, it is important to evaluate the specific needs of the company and choose a system that will best suit those needs.

Quadrant’s research on the Transportation Management Systems market focuses on exploring the current market scenario, market dynamics, and short-term and long-term growth opportunities across various industries and geographical regions.

The market drivers for Transportation Management Systems market growth include Natural Language, Machine learning and AI, external ecosystem integration capabilities, external ecosystem collaboration app, external data sources and flexible architectural configuration.

Quadrant Knowledge Solutions’ SPARK Matrix: Transportation Management Systems, 2022 research includes a detailed analysis of the global market regarding short-term and long-term growth opportunities, emerging technology trends, market trends, and future market outlook. The study provides a comprehensive market forecast analysis of the global market in various geographical regions and the overall market adoption. This research provides strategic information for technology vendors to better understand the market supporting their growth strategies and for users to evaluate different vendors’ capabilities, competitive differentiation, and market position.

The evaluation is based on primary research with expert interviews, analysis of use cases, and Quadrant’s internal analysis of the overall Transportation Management Systems (TMS). This study includes an analysis of key vendors, including 3G, 3T Logistics and Technology group, Alpega Group, Blue Yonder, BlueRock TMS, C.H Robinson (TMC), E2open, Infor, Manhattan Associates, Mercurygate, MPO, Oracle, Ratelinx, SAP, Shipwell, Tesisquare, Transplace, Trimble.
Market Dynamics and Trends

The following are the key research findings of Quadrant Knowledge Solutions Transportation Management Systems research:

- TMS solutions robust value propositions are driving increased adoption and making them an integral part of supply chain planning processes. TMS vendors are focusing on increasing the value of their technology by unified demand and supply planning visibility, support aggregate level planning, reconcile plans, and seamlessly integrate with various supply chain planning aspects (such as inventory, demand & supply) to ease the planning process and drive profitability. Several leading vendors are also improving their technological value proposition to provide a unified and integrated eCommerce platform and solutions.

- Organizations should look for the option of consolidating orders to create efficient shipments that optimize all modes of transportation, including ocean, rail, intermodal, truck, air, and parcel, based on rates, asset availability, and other business constraints. It also manages continuous moves, backhauls, and cross-docks that ensure efficient transportation-related activities, such as picking, loading, returns, service and maintenance, quality management, inspections, and stock counting. Leading vendors should focus on assisting carriers and suppliers with compliance programs and guidelines that allow shippers to improve trading partner collaboration and communication across transportation operations.

- The supply chain industry is undergoing a rapid transformation, compelling TMS vendors to expand their R&D budget and make continuous enhancements to their software value proposition to serve futuristic customer banking needs. Users should evaluate TMS vendors that offer a robust technology strategy and roadmap for enhancing their software features & functionalities and SaaS strategy aligned with the emerging transformational trends. The vendor’s ability to accommodate emerging technology trends, including artificial intelligence (AI), machine learning (ML), and a truly open & unified platform, is crucial for delivering a sophisticated TMS platform.
• Leading organizations are working on optimizing supply chain metrics and assessing the supply chain for demand planning, transportation optimization, and order fulfilment. OTIF also saves capital by incentivizing correct and timely delivery. OTIF also assists organizations in improving demand forecasts, defining routing replenishment guidelines to avoid out-of-stock concerns, and providing alternatives via integral deep learning models. Organizations need to closely monitor their performance across the supply chain so they can optimize their processes and increase efficiency. OTIF assesses whether organizations can deliver every item in the order or before the expected delivery date. OTIF metric is mainly used as a delivery KPI, although it can also be applied throughout the supply chain.

While most Transportation Management Systems may provide all the core functionalities, the breadth and depth of functionalities may differ by different vendors’ offerings. Driven by increasing competition, vendors are increasingly looking at improving their technological capabilities and overall value proposition to remain competitive.

Some of the key differentiators include breadth and sophistication of functional aspects of Transportation Management Systems, the geographical reach of local market expertise, innovative process transformation strategy models and frameworks, ease of configuration and customization, the sophistication of AI and ML capabilities, extent of category expertise, data management security and dynamic slot management and many more.
**SPARK Matrix Analysis of the Transportation Management Systems Market**

*Quadrant Knowledge Solutions* conducted an in-depth analysis of the major TMS vendors by evaluating their service portfolio, market presence, and customer value proposition. TMS market outlook provides competitive analysis and a ranking of the leading vendors in the form of a proprietary SPARK Matrix™. SPARK Matrix analysis provides a snapshot of key market participants and a visual representation of market participants. It provides strategic insights on how each vendor ranks related to their competitors based on their respective service excellence and customer impact parameters. The evaluation is based on primary research including expert interviews, analysis of use cases, and Quadrant’s internal analysis of the overall TMS market.

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<thead>
<tr>
<th>Technology Excellence</th>
<th>Weightage</th>
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<tbody>
<tr>
<td>Sophistication of Technology</td>
<td>20%</td>
</tr>
<tr>
<td>Competitive Differentiation Strategy</td>
<td>20%</td>
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<tr>
<td>Application Diversity</td>
<td>15%</td>
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<tr>
<td>Scalability</td>
<td>15%</td>
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<tr>
<td>Integration &amp; Interoperability</td>
<td>15%</td>
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<tr>
<td>Vision &amp; Roadmap</td>
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<tr>
<th>Customer Impact</th>
<th>Weightage</th>
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<tbody>
<tr>
<td>Product Strategy &amp; Performance</td>
<td>20%</td>
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<tr>
<td>Market Presence</td>
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<tr>
<td>Proven Record</td>
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<td>Ease of Deployment &amp; Use</td>
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<tr>
<td>Customer Service Excellence</td>
<td>15%</td>
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<tr>
<td>Unique Value Proposition</td>
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According to the SPARK Matrix analysis of the global Transportation Management Systems market, “MPO, with a robust comprehensive capability, domain specific rich expertise and global coverage has secured strong ratings across the performance parameters, customer impact and has been positioned amongst the technological leader in the 2022 SPARK Matrix of the Transportation Management Systems market.”
Figure: 2022 SPARK Matrix™ Transportation Management Systems_2022
(Strategic Performance Assessment and Ranking)
Global Transportation Management System Market

SPARK Matrix™: Transportation Management System (TMS), 2022

Aspirants

Challengers

Technology Leaders

- Blue Yonder
- SAP
- Oracle
- Manhattan Associates
- 3G
- TESISQUARE
- MPO
- Shipwell

Technology Excellence

Customer Impact

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MPO

Founded in 2000, headquartered Boston, Massachusetts, as of July 2022, MPO became a Kinaxis company, MPO but continues to operate as a standalone company. MPO is a unified SaaS platform that offers global visibility into all inventory, orders, and transportation across multiple parties in dynamic business networks. MPO also seamlessly connects to a vast service provider and carrier network, providing visibility and collaboration across all transport modes and geographies. MPO’s transportation management capabilities – also referred to as the “TMS Plus” is a key component of their Multi Party Orchestration platform, allowing businesses to streamline and optimize logistics operations across multiple carriers, from order planning & execution monitoring to financial control & performance measurement. The MPO’s transportation management system offers key features and functionalities, including real-time visibility, dynamic carrier selection & network partnership, cost management, transport planning & execution, analytics and reporting.

MPO’s transportation management system offers a real-time visibility capability that helps the organization with total order control with API or Web services technology, transparent data flow between stakeholders, and improved supplier & carrier availability & selection. The platform also offers consistent on-time in-full (OTIF) delivery to ensure initiative-taking notifications such as milestones, statuses, & alerts, boosts customer satisfaction, and increases margins by allowing teams to analyze financial performance & consolidate internal & external costs.

MPO’s transportation management system offers analytics and reporting capability that offers organizations partner scorecard, predictive analytics, and financial performance. The platform also offers dynamic dashboarding that assists organizations monitor KPIs and sustainability metrics via real-time analytics on CO2 emissions for all orders.

MPO’s transportation management system offers a cost management capability that assists the organization to reduce costs and grow revenue. The platform also offers abilities like automated and optimized flows with ideal carrier selection to reduce transport costs. Additionally, the platform assists the organization’s logistics teams to reduce operating costs by using precise rating, intelligent planning, and minimizing 3rd party fees, detention penalties, and demurrage fees with visibility, alerts, and pro-active issue resolutions directly within the application.
MPO’s transportation management system offers a dynamic carrier selection capability that assists organizations with selecting the lowest cost carrier based on each order’s rules including least sustainability/GHG/CO2 impact. The platform also assists with dynamic network partnership streamlined to enable consistent order flow optimization. Furthermore, the platform also provides benefits, such as order-level reporting, enhanced transparency & control over the shipping process to support multi-modal, multi-leg freight.

**Analyst Perspective**

Following is the analysis of MPO’s capabilities in the global Transportation Management Systems market:

- MPO’s transportation management system enables organizations to streamline, optimize, and effortlessly link to a vast carrier network, allowing visibility and coordination across all transport modes on a single platform. Furthermore, the platform also enables the orchestration of orders between multiple manufacturing sites, distribution centers, & sales channels, effectively monitoring the process, as well as managing carrier costs & performance across inbound, outbound, & reverse order flows. The platform offers various key differentiators such as returns management, inventory management, operational performance, prebooking and order centric TMS.

- MPO’s transportation management system offers capabilities such as Order-Centric TMS capability that helps the organization with dynamic as well as actionable visibility integrated with automation & smart business rules to accommodate all constraints & service level requirements. The TMS platform also incorporates smart returns management capability to support the organization's circular economy with repair flow management, replacement services, and controlled recycling. The platform also offers capabilities such as inventory management which optimally matches supply with demand through real-time inventory visibility across multiple sites & parties and intelligent allocation planning. Additionally, the platform also offers pre-booking capabilities that enable the organization to create service orders in anticipation of customer or shipping orders to plan transport execution effectively by booking to capacity.
• MPO offers a cloud technology platform with a native TMS architecture for scalability and continuous optimization of every order. MPO supports various use cases including Exports/Imports/Domestic Logistics and Transportation, Dynamic Order, Logistics and Transport Management, Inbound management, and Shipments from suppliers worldwide to plants worldwide, Parcel deliveries of critical parts, Dynamic ETA & Visibility, and many more. Additionally, the platform offers add-on features and functionality other than key capabilities such as labor management, slot optimization, yard management, dock scheduling, parcel management, billing management, appointment scheduling, analytics, and inventory management.

• From the geographical presence perspective, MPO has a strong presence across the European and North America, followed by EMEA and the APAC region. From the vertical perspective, MPO has a presence across Aerospace & Defense, Automotive, Building & Construction, Chemicals & Petrochemicals, CPG & Retail, Electric Power, Energy & Utility, Food & Beverage, High-tech & Electronics, Industrial Machinery & Equipment, Mining & Metals, Oil & Gas, Pharmaceutical & Biotech, Pulp & Paper, Water & Wastewater, logistics, and many more industries.

• The primary challenges of MPO include the growing competition from emerging vendors with innovative technology offerings as well as continued competition from well-established vendors. However, with its strong domain expertise, robust functional capabilities, and extensive customer base, MPO is well-positioned to expand its market share in the TMS market.

• Considering product strategy and roadmap, MPO intends to continue improving its solutions by incorporating leading technologies such as extension of Integral Deep Learning Models for Transportation Management, Dynamic ETA. Furthermore, the company is also planning to incorporate Configurable Mashup Dashboards of Logistics & Transport Visibility, Analytics social media, IoT, and integrations to Transport Community Data providers. Additionally, it is also focusing on Innovative Configurable User Experience & Dynamic Order Flow Graphics and Transportation Resource Capacity Planning to accommodate multiple options.