

Transportation Management System (TMS)

Vendor Comparison

Transportation Management Systems (TMS) are defined by Gartner as software that enables “multimodal planning and execution of the physical movement of goods across the supply chain,” delivered mainly as cloud services ¹. Leading TMS platforms span all transportation modes (road, rail, air, ocean, parcel) and geographies, and offer features across **planning, execution, optimization, visibility, analytics, carrier management, integration, and security**. Below we compare top TMS vendors on these categories, highlighting their target market, deployment model, tech strengths (e.g. AI/ML, mobile), and known limitations. Sources include official documentation and impartial reviews.

Oracle Transportation Management (OTM)

- **Target:** Large shippers and 3PLs (enterprise-scale). Supports global/multi-unit operations ².
- **Deployment:** Cloud-based (Oracle SaaS); also part of Oracle SCM on-premise suites.
- **Core Features:** Fully integrated platform covering planning through settlement. OTM provides **order & shipment planning** (supports multi-modal mode and lane selection), carrier & rate management, freight **procurement and bidding**, and load/load-building optimization ³ ⁴. It handles **execution** via shipment booking/tendering across TL, LTL, parcel, air, rail and ocean, with real-time **event management/visibility** for in-transit tracking ⁴. Built-in **optimization** (e.g. route/load optimization, 3D container loading) and “strategic and tactical analysis” of the network help cut costs ⁴. **Analytics**/BI dashboards and reports (including what-if simulations) support decision-making and network design. **Carrier management** is robust – centralized carrier/rate tables, contract management, tendering and freight audit/payment complete the picture ³ ⁴.
- **Advanced Capabilities:** Global network modeling (Supply Chain Network Modeling), private fleet planning, and environmental/sustainability optimization. Integration with Oracle’s ERP/WMS (and others) is native; OTM “can easily integrate with your finance and other SCM applications” ⁵. It also offers EDI, XML and REST APIs for carriers and partners. AI/ML features (e.g. predictive ETA, cost forecasting) are available via Oracle’s SCM suite and *Oracle Logistics Agents*. Mobile apps support on-the-go planning and tracking.
- **Security:** Enterprise-grade (Oracle Cloud security, role-based access, data encryption).
- **Strengths:** Comprehensive, global TMS – handles inbound/outbound/3PL flows in one system ². Exceptionally rich feature set across all categories (planning, execution, payment). Strong support for multinational multi-currency operations ⁶.
- **Limitations:** Complexity and cost are high; best for large enterprises. Steep learning curve and implementation time. Less suitable for SMB/limited-scope users.

SAP Transportation Management (SAP TM)

- **Target:** Large enterprises (often those already using SAP ERP/S/4HANA). Built for complex, global supply chains.
- **Deployment:** Part of SAP S/4HANA (on-prem or cloud); also available as a standalone offering. Integration with SAP ERP and EWM is deep.
- **Core Features:** Covers the full logistics life cycle ⁷. **Planning:** Supports multimodal planning – mode and carrier selection using real-world rates, 3D load optimization, and both manual and

optimizer-generated plans ⁸ . **Execution:** Creates shipping deliveries and documents (e.g. waybills, labels), interfaces with warehouse (SAP EWM) and connects to carriers for tracking/ Proof-of-Delivery ⁹ . **Optimization:** SAP TM includes algorithms for load building, consolidation, and route planning. **Visibility:** Basic tracking (SAP TM integrates with SAP Logistics Business Network and event management for shipment visibility). **Analytics:** Built-in reporting and dashboards (via SAP Fiori/BW) cover freight spend, carrier performance, and SLA compliance. **Carrier Management:** Freight agreements, rate tables and tendering are supported – SAP TM maintains carrier contracts and calculates accurate costs for planning and settlement ¹⁰ . **Settlement:** Automated freight cost calculation and payable settlement are integrated.

- **Integration:** Native integration with SAP ERP, Ariba (for procurement), IBP, Finance (CO/FI), and EWM. Supports EDI/IDoc/XML with carriers.
- **Tech:** Runs on SAP HANA, enabling high-performance analytics. SAP is adding AI-driven features (e.g. machine-learned rates or exceptions) via its BTP platform. Mobile apps and Fiori UI enable on-the-go access.
- **Strengths:** Tight SAP-suite integration gives “centralized visibility, traceability and compliance” across orders, inventory and finance ¹¹ . Powerful for enterprises that want single-vendor solutions. Highly configurable to complex processes (especially global consolidated billing, multi-leg shipments, 3PL operations).
- **Limitations:** Long implementation and high cost. SAP TM is less flexible for non-SAP environments. Out-of-box functionality may require significant customization for non-standard workflows.

Blue Yonder (JDA) Transportation Management

- **Target:** Large enterprises and global LSPs. Favored by retailers, manufacturers seeking a **cognitive TMS**.
- **Deployment:** SaaS (cloud-native on Blue Yonder Luminate platform). Formerly on-prem but new releases are cloud.
- **Core Features:** Blue Yonder offers full **multimodal planning and execution**. Its optimizer is “always-on” with machine learning, dynamically re-planning routes to balance cost, service and emissions ¹² . **Execution:** Supports tendering and booking for all modes (truckload, LTL, parcel, air, ocean) and integrates with shipment tracking/TMS networks. **Visibility:** Leverages the Blue Yonder Network (carrier/collaboration network) for real-time status, including telematics and exception alerts ¹³ . **Optimization:** Strong AI-driven load building, mode/carrier choice and what-if modeling. New features include Sustainability Optimizer (optimizing for CO₂) and agentic Ops Assistant that suggests routing fixes before delays ¹³ ¹⁴ . **Analytics:** Embedded predictive analytics and dashboards from its Luminate Control Tower; KPI monitoring per role. **Carrier Mgmt:** Supports carrier sourcing (via Network), contract management and scorecards. The system ties into the Blue Yonder Network enabling easy collaboration on loads, appointments and e-AWB documentation.
- **Integration:** Tight synergy with Blue Yonder WMS and Order Management for end-to-end supply chain. Built-in EDI and API connectors to ERP systems. The platform is microservices-based, allowing quick new integrations (e.g. digital freight marketplaces) ¹³ .
- **Tech:** Heavy emphasis on AI/ML (“cognitive solutions”). Features include conversational AI (logistics agent), predictive ETA, and generative AI for planning insights ¹⁵ ¹⁴ . Cloud scalability enables “near-limitless” load volume handling ¹⁶ . Mobile-friendly UI and role-based dashboards.
- **Strengths:** Best-in-class optimization powered by AI/ML. Seamless **multi-enterprise network** integration gives superior real-time visibility and collaboration ¹⁵ ¹³ . Strong support for

sustainability goals (carbon tracking in planning) and continuous innovation (frequent AI-driven releases).

- **Limitations:** Expensive and complex. Primarily targeted at very large shippers and 3PLs; small companies typically don't utilize its full power. Vendor consolidation (the WiseTech/Blujay combination) adds integration uncertainty.

Manhattan Active Transportation Management

- **Target:** Large and mid-market shippers/3PLs. Particularly suited for companies wanting an integrated **Manhattan Active** suite (WMS/OMS).
- **Deployment:** Cloud-native (SaaS, microservices architecture). Previously on-prem with limited upgrades (Active® version removes upgrade cycles).
- **Core Features:** Offers high-speed, multi-modal **planning** via its “industry’s fastest planning engine” ¹⁷. Users can model networks, run “what-if” scenarios, and auto-generate optimal loads across modes. **Optimization:** Continuous, self-configuring optimization adjusts plans for cost, distance and service; includes advanced route/load balancing (multi-compartment vehicles, cross-dock consolidation). **Execution:** Supports full tendering and shipment creation for all modes, carrier rate negotiation and dock scheduling. **Visibility:** End-to-end tracking and exception management through every shipment phase. Manhattan provides a **single user interface** for orchestration, letting planners monitor orders from procurement to delivery ¹⁸. **Analytics:** Provides dashboards on carrier performance, on-time delivery, and costs (often via embedded BI or integration with Tableau/Qlik).
- **Integration:** Seamlessly integrates with Manhattan’s WMS, OMS and Labor systems for supply chain execution. Also offers APIs and EDI for ERP and carrier connectivity. Its microservices make it easy to onboard new partners or data feeds.
- **Tech:** Built on modern cloud architecture, with machine-learning optimization (“self-tuning” algorithms) ¹⁷. Mobile and tablet applications support dock management and yard check-in. Real-time telematics (for private fleets) can feed into the system.
- **Strengths:** Very fast, dynamic optimization engine – handles frequent changes and complex networks efficiently ¹⁷ ¹⁸. Strong sustainability focus (load optimization reduces empty miles and carbon) ¹⁹ ²⁰. Fully cloud-native (continuous updates, no disruptive upgrades). Often praised for rich feature set combined with ease-of-use.
- **Limitations:** High total cost of ownership. Implementation can be lengthy. Primarily targets larger organizations; SMBs likely overkill. Some customers noted that full visibility features require integration into Manhattan’s broader suite.

Descartes Transportation Management

- **Target:** Medium to large shippers, freight forwarders and 3PLs with complex, global needs. Also offered as a freight broker TMS (Descartes Aljex) and carrier TMS.
- **Deployment:** Cloud-native SaaS on Descartes’ global platform.
- **Core Features:** Provides end-to-end **multimodal TMS** and visibility. **Planning:** Mode/carrier optimization with “performance optimization” tools to select the best carrier/mode for cost and service ²¹. **Execution:** Order/shipment management for road, ocean, air and parcel; electronic booking/tendering; customs/LTL rating. It includes **Dock & Yard scheduling** to automate inbound/outbound appointments. **Visibility:** Real-time tracking via the Descartes Global Logistics Network™ (GLN), a built-in carrier network. GLN connects shippers and carriers for status updates, EDI messaging, and IoT data. **Analytics:** Reporting & dashboards (BI tools) are included for transportation KPIs and freight spend analysis ²². **Carrier Management:** “Carrier Connectivity” module lets users connect, rate, route and track carriers through one network ²³.

It supports multi-carrier routing guides, consolidated invoicing, and freight audit/payment (Descartes Auditing is a related product).

- **Integration:** Strong built-in connectivity – virtually every carrier (small to mega) can plug into GLN. Standard EDI/XML/API links to WMS/ERP (SAP, Oracle, IBM etc.) are available. Descartes provides extensive partner ecosystem.
- **Tech:** Focus is on robust, dependable functionality rather than trendy AI. Some machine learning is emerging (e.g. in exception detection). Mobile apps exist for drivers and dock workers.
- **Strengths:** Uniquely large **connectivity network** (largest worldwide) – especially strong in trucking (MacroPoint visibility included). Excellent for global, multi-leg shipments and heavily regulated trade lanes. Very reliable and proven (shippers often cite ease of booking any carrier in one system).
- **Limitations:** Less flexible pricing/models. Mainly targeted at enterprise; small shippers may find it expensive. User interface is sometimes seen as less modern. Not a pure optimization powerhouse (other vendors lead in AI route planning).

MercuryGate TMS

- **Target:** Mid-size to large shippers, brokers and 3PLs. Many mid-market companies use MercuryGate; also some enterprises. Focused on ground transportation (LTL/TL) but also supports parcel, intermodal and mode mix.
- **Deployment:** Both SaaS (cloud) and on-premises options. Multitenant cloud version available for faster updates.
- **Core Features:** Full-featured TMS for **ground freight**. **Planning/Optimization:** Includes a powerful route and load optimizer that handles complex constraints. Users can perform multi-stop routing, dynamic load building, and network planning to minimize cost/time ²⁴.
Execution: Shipment tendering, real-time tracking, dock scheduling. Workflow automation for tender & award. **Visibility:** Real-time shipment and KPI dashboards; alerts for exceptions ²⁴.
Analytics: Interactive dashboards and reports on shipping performance, costs, service levels ²⁵ ²⁶. Also offers predictive analytics (what-if scenario modeling) ²⁶. **Carrier Management:** Rate and contract management module (central repository of carrier rates and accessorials), plus automated freight audit, payment and settlement. The TMS also has integrated tendering tools (RFP/bid solicitations).
- **Integration:** Robust EDI (ANSI, EDIFACT) and open REST API connectivity. Pre-built connectors to major ERPs (SAP, Oracle, Microsoft Dynamics, NetSuite etc.) ²⁷. Also integrates with telematics (CarrierLink) and 3PL/broker systems. Connects to Descartes GLN for additional carrier visibility if needed.
- **Tech:** Mobile-friendly (apps for drivers and planners). Emphasizes continuous updates in cloud. Uses some AI for freight rating and optimization.
- **Strengths:** Highly configurable and flexible – strong ground-transport specialization ²⁶. Good for companies that want deep tender/settlement tools and advanced analytics. The option to deploy on-prem or hybrid suits enterprises with strict data requirements.
- **Limitations:** Historically focused on domestic ground; its ocean/air capabilities are newer and less mature. Some users report less out-of-the-box integration with WMS/ERP (often requiring bespoke connectors). The UI has improved but was considered dated.

CH Robinson Navisphere

- **Target:** Shippers of all sizes, especially those seeking an integrated 3PL+TMS solution. Navisphere is used by everyone from SMBs to Global 500 firms.
- **Deployment:** Cloud-based platform (Navisphere®). Comes bundled with optional CH Robinson managed transportation services (4PL).

- **Core Features:** Combines a TMS with CH Robinson's brokerage engine. **Planning/Execution:** Supports full outbound/inbound shipment lifecycle – order entry, consolidation, multi-modal routing, and tendering ²⁸. Users can quote and book truckload, LTL, ocean and air through the same interface ²⁹. **Optimization:** Dynamic route and mode selection tools (including trailer utilization) help reduce miles and costs ³⁰. **Visibility:** Real-time shipment tracking for any freight managed by C.H. Robinson, with alerts for exceptions ³¹. It leverages data from CHR's huge carrier network. **Analytics:** Navisphere Insight provides benchmarking and analytics (e.g. on-time performance, spend trends, carbon emissions) using CHR's market data ³². Reports are delivered via dashboards and CSV exports.
- **Carrier Management:** Navisphere has an extensive carrier network (especially in North America). It handles both contracted and spot rates; carriers can be automatically rated and tendered. CH Robinson's experience is embedded (e.g. "capacity marketplace" sourcing).
- **Integration:** Connectors/APIs are available to major ERPs (Oracle, SAP, etc.) and WMS. Navisphere offers EDI/AS2 for orders and tracking, as well as a public API for rate quotes (e.g. TL spot rates) ²⁹. Its PO Management module integrates procurement-to-shipments for international orders ²⁸.
- **Tech:** Mobile app (Navisphere Carrier and Navisphere Shipper) for on-the-road visibility. Advanced use of IoT (sensor data) and machine learning for predictive ETA and freight insights.
- **Strengths:** Unique 3PL hybrid – one-stop shop for tech + brokerage. The platform has "the most connected logistics platform" (200k+ users) with the largest freight dataset ³³. Managed services (4PL) can be layered on. Frequent enhancements (e.g. Uber Freight API) keep it modern.
- **Limitations:** Because CH Robinson is both provider and carrier, some see a conflict-of-interest (e.g. bias toward CHR's own trucks) ³⁴. Shippers wanting a neutral TMS worry about rate transparency and independence. Navisphere historically emphasizes North America; its global carrier reach, while growing, is not as broad as some native global platforms ³⁴.

Trimble/TMW (and Kuebix)

- **Target:** Shippers and carriers in the transportation sector, especially truck/3PL companies. Kuebix (acquired by Trimble) targets SMB/mid-market.
- **Deployment:** Mixed – Trimble's traditional TMS (TMW.Suite, Innovative) can be on-premise or hosted; Kuebix is cloud-based SaaS.
- **Core Features (TMW):** Focus on **private fleets and carriers**. Includes route planning/dispatch, driver management, hours-of-service compliance, and fleet telematics integration. Provides tendering and brokerage tools as well. Strong on invoicing, load tracking and claims (by carriers). **Optimization:** Basic route/load optimization for fleets. **Visibility:** Live driver location and ELD data feed into the system. **Analytics:** Mainly operations-focused (on-duty time, compliance, cost-per-mile).
- **Core Features (Kuebix):** Emphasizes ease-of-use for freight quoting and shipment control. Multi-modal support (TL, LTL, intermodal, parcel). Carrier rating guides with real-time quoting (via APIs/EDI) for major carriers ³⁵. Simple load planning and consolidation tools. **Visibility:** Basic tracking updates. **Analytics:** Dashboard with spend, transit times, carrier scorecards. Predictive analytics and yard/dock management available in higher editions.
- **Carrier Mgmt:** Trimble solutions handle both private and for-hire carriers; Kuebix has built-in network of "well-respected" U.S. carriers, and allows NVOCC/parcels. Rate and contract management present but simpler than others.
- **Integration:** Strong ELD/compliance integration (WEX, telematics). ERP/WMS connectivity is more limited historically; often 3rd-party connectors needed. Kuebix highlights API connectivity to major carriers ³⁵ and offers ERP plugin options (e.g. NetSuite).

- **Tech:** Trimble owns data-driven technologies (real-time truckload pricing feeds, telematics, gas/fuel price data). Kuebix Cloud provides a user-friendly UI and APIs. Both offer mobile/driver apps.
- **Strengths:** Deep logistics domain knowledge – especially for carriers/trucking (driver compliance, ELD). Kuebix's low barrier to entry and large carrier network suit fast ROI for SMBs. Robust compliance and financial controls.
- **Limitations:** TMW solutions are considered legacy technology (long upgrade cycles, complex UI). Less focus on 3PL workflows or intermodal compared to others. Kuebix's free/mid-tier solutions lack some advanced optimization. Both were historically on-prem, so cloud transition is ongoing.

3Gtms (and Redwood Logistics)

- **Target:** Small-to-mid-sized carriers and shippers (SMB). Particularly trucking companies or shippers with simple networks.
- **Deployment:** Cloud-based SaaS. 3GTMS is offered by Redwood Logistics (which acquired Pacejet).
- **Core Features:** Covers basic TMS needs. **Planning/Optimization:** Route/load optimization for truckload and LTL, including 3D load building and backhaul identification ³⁶. It can handle mixed-modal shipments (road, rail, parcel) to some extent. **Execution:** Shipment tendering and booking, pickup/delivery scheduling, and rating. **Visibility:** Real-time shipment tracking and ETA notifications. **Analytics:** Standard reporting on shipments, costs and service levels.
- **Carrier Mgmt:** Simplified tendering and carrier selection tools. Freight audit and payment automation.
- **Integration:** Native connectors for popular mid-market ERP/WMS (e.g. Acumatica, Infor). EDI and APIs for top carriers are provided ³⁶. Lacks deep global or niche carrier network beyond common North American carriers.
- **Tech:** Mostly "standard" TMS tech. Emphasizes ease of use and quick deployment (can go live in weeks).
- **Strengths:** Very user-friendly and quick to implement. Good value for SMB budgets. Eliminates the need for spreadsheets in basic routing and quoting. Offers an "Uber-like" load marketplace to match extra capacity.
- **Limitations:** Not designed for large or highly complex operations. Lacks advanced features like yard management, multi-lingual support, and advanced analytics out-of-the-box ³⁷. Does not support very large international freight or complex multi-party billing.

Transplace TMS

- **Target:** Shippers (mid-to-large) focused on U.S. logistics, often those also purchasing managed TMS/4PL services.
- **Deployment:** Cloud-based (Transplace Control Tower platform).
- **Core Features:** **Planning:** Includes lane optimization, mode selection and bid scenarios. Some vertical-specific logic (e.g. dedicated contract routes for retailers). **Execution:** Shipment tendering (though Transplace historically required an external platform for tender acceptance ³⁸), dock appointment management, and freight settlement. **Visibility:** Strong real-time control tower with alerts for exceptions and predictive insights. **Analytics:** Robust dashboards and KPI tracking (e.g. freight spend, transit times). It offers predictive analytics (e.g. congestion, risk assessment). **Carrier Mgmt:** Digital bidding/auction capabilities and carrier scorecards. Freight audit/payment built-in.
- **Integration:** API connectivity to ERP/WMS, TMS, and carrier systems. Real-time data flows (shipper's EDI orders in, status out). Mobile apps for drivers.

- **Tech:** Built with visibility in mind (Transplace acquired 3rd-party tech early). Uses AI-driven ETA and risk prediction. Cloud architecture with continual updates.
- **Strengths:** Known for excellent customer support and flexible solutions (they tailor to industry needs) ³⁹. Deep expertise in freight audit/payment and managed transportation services. Integrates well with other systems (supports APIs) ⁴⁰.
- **Limitations:** TMS UI/UX and basic functionality are not as advanced as some pure-play vendors. The platform does *not* natively support carrier tender acceptance (users must print/email bids) ³⁸ ⁴¹. Some users note occasional performance or login issues (e.g. password not saving) ⁴¹. Primarily focused on North America.

Transporeon (Trimble)

- **Target:** Large shippers and forwarders (especially in Europe, but expanding globally) who need collaborative freight sourcing and tracking.
- **Deployment:** Cloud-based network. Transporeon is now part of Trimble.
- **Core Features:** A *networked* TMS platform with modular “Hubs.” **Freight Sourcing (Transport Assignment):** Digital carrier tendering/auction for FTL/LTL, including transparent bidding and portal-based communication. **Execution/Visibility:** Real-time shipment tracking across truck, ocean and air. (Transporeon Visibility Hub aggregates GPS/IoT data for live location and AI-driven ETA ⁴².) It automates ETAs and delays across all modes. **Dock & Yard Management:** Appointment scheduling and yard visibility for inbound/outbound at facilities. **Audit & Payment:** Freight audit and invoice management module. **Analytics:** Hubs for market data, freight spend analysis, and CO₂ tracking (Sustainability Hub).
- **Carrier Mgmt:** Manages onboarding of carriers onto the platform. Scorecards and performance dashboards. Network of >150K carriers globally ⁴³.
- **Integration:** Companies connect their ERP/WMS to Transporeon for order transmission and updates. All workflows are EDI/API-driven. Transporeon’s system serves as a central integration point (all carriers connect once to the network). The platform seamlessly integrates with Trimble TMS products (e.g. TMW, Innovative) ⁴⁴.
- **Tech:** Utilizes AI for ETA predictions (Visibility Hub), and analytics across the network. Mobile-friendly web portals. Global network leverages crowd-sourced data for “network effect” benefits ⁴³.
- **Strengths:** Massive collaborative network – “largest global freight network” with 1,400+ shippers and 150,000+ carriers ⁴³. Every module is cloud-native and easily deployable; integration is plug-and-play for both shippers and carriers. Modular approach allows companies to pick just what they need (sourcing, execution, visibility, etc). Real-time multimodal visibility (including intermodal handoffs) is a standout capability ⁴⁵.
- **Limitations:** Historically European-centric (though US presence is growing). Most functionalities are best-of-breed but may require multiple modules (e.g. some companies still use separate 3PL audit). Not as suited for companies not willing to move to a unified network model.

Comparison Summary

The table below summarizes each vendor’s positioning, deployment, integration and key strengths/limitations:

Vendor	Target	Deployment	Integration	Key Capabilities	Limitations
Oracle OTM	Enterprise (global)	Cloud (SaaS)	ERP (Oracle/SAP), WMS, EDI/XML, APIs ⁵	End-to-end multi-modal planning/execution; advanced load/route optimization; global visibility and freight audit ⁴	Complex; high cost; heavy for SMB
SAP TM	Enterprise (SAP users)	On-prem/ SAP S/4HANA Cloud	Deep SAP ERP/EWM integration; EDI, APIs	Integrated SAP suite; freight planning/settlement; 3D load building; global multi-leg support ⁸	Long implementation; SAP lock-in
Blue Yonder TMS	Enterprise/retailers	Cloud (Luminate platform)	Integrated WMS/OMS; Blue Yonder Network; APIs	AI-driven optimization; cognitive agent (Ops); multi-enterprise network visibility ¹⁴ ⁴⁶	Expensive; complex; focus on large users
Manhattan Active TM	Large/mid shippers	Cloud-native (SaaS)	Manhattan WMS/OMS; open APIs/EDI	Fast continuous optimization; multi-modal load planning; end-to-end visibility; sustainability focus ¹⁷ ¹⁸	High cost; best for complex global operations

Vendor	Target	Deployment	Integration	Key Capabilities	Limitations
Descartes TMS	Mid/large shippers/ 3PLs	Cloud (SaaS)	Global Logistics Network (carrier network); ERP/WMS connectors	Multi-modal TMS with built-in real-time visibility (GLN); dock scheduling; extensive carrier connectivity <small>47 23</small>	Premium pricing; narrower focus; UI dated
MercuryGate	Mid/large shippers/ 3PLs	Cloud or On-premise	ERP (SAP, Oracle, etc); EDI, REST API <small>48 27</small>	Strong ground-transport (LTL/ TL) TMS; flexible tender & settlement; analytics; yard mgmt <small>24 26</small>	Limited international; less WMS integration
Navisphere (CHR)	All sizes (esp. large)	Cloud (Navisphere)	ERP connectors; EDI/API; CHR carrier network	TMS + 4PL hybrid: full life-cycle execution; carrier rating/ tendering; massive visibility data; managed transportation services <small>28 32</small>	CHR-centric (perceived bias) <small>34</small> ; less open
Trimble/ TMW	Carriers/ 3PLs	On-prem/ Hosted + SaaS	ELD/ telematics; ERP via 3rd-party; APIs	Advanced carrier compliance (ELD/HOS); dispatch & fleet management; basic TMS for carriers	Legacy codebase; weaker UI; less focus on shippers

Vendor	Target	Deployment	Integration	Key Capabilities	Limitations
Kuebix (Trimble)	SMB/mid shippers	Cloud (SaaS)	Carrier APIs/EDI ³⁵ ; ERP/WMS plugins	User-friendly TMS with broad carrier network; quick onboarding; free-to-start tier; basic route/load optimization	Lacks advanced features (supply chain modeling, yard mgmt) in lower tiers
3Gtms (Redwood)	SMB shippers/carriers	Cloud (SaaS)	ERP (Acumatica, Infor, etc.) via connectors ³⁶ ; EDI	Basic TMS: LTL/TL/Parcel routing and quoting; load optimization; real-time tracking ³⁶	Not for large/international operations; basic analytics ³⁷
Transplace TMS	Mid/large shippers	Cloud (SaaS)	ERP/WMS APIs; EDI	Control-tower visibility; freight bidding (no auto-tender) ³⁸ ⁴⁹ ; predictive analytics	No in-app tender acceptance ³⁸ ; some UX quirks ⁴¹
Transporeon (Trimble)	Large/global shippers	Cloud (network)	ERP/WMS API/EDI; Trimble TMS integration ⁴⁴	Modular TMS: digital freight sourcing; execution; visibility (real-time GPS); dock scheduling; audit ⁵⁰ ; AI-driven ETAs ⁴²	Euro-centric; requires adoption of network model

Sources: Vendor product literature and credible industry analyses were used. Citations (above) reference official documentation and independent reviews ² ⁷ ¹⁵ ¹⁷ ⁴⁸ ⁴⁷ ²⁸ ⁴⁹ ⁵⁰. These highlight supported features per category and relative positioning of each TMS solution.

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