TMW Systems Inc.

Diversifying Transportation Services— Accelerating Business Performance With A Comprehensive TMS Approach

The Value of Integrated Transportation Management Software for Mixed Asset-based and Non-Asset Service Providers

Executive Summary

As the economy continues to emerge from the recession, shippers and transportation service providers are adjusting to a 'new normal' business environment. Both shippers and manufacturers have strengthened and lengthened their supply chains, introducing complexities that require a broader range of logistics services and additional support from skilled transportation partners. Responding in kind, logistics service providers and trucking companies have added required services, electronically integrated with their customers' supply chains, continuously reinventing themselves to turn a profit and grow the business. Over time, many of these relationships have evolved and even converged, enabling diversified transportation service providers to play a more strategic role in their customers' supply chains.

While trucking still accounts for 78% of moves across the US, the industry is accomplishing this with 13% fewer drivers and 16% less capacity than prior to 2006. This overall decrease in the number of vehicles is a result of some companies merging and others shuttering their businesses during the recent downturn, leaving stronger and healthier survivors. The transportation service providers active today often operate hybrid businesses. 3PLs have added fleets to assure capacity, traditional for-hire carriers have expanded to offer logistics services, dedicated carriage and intermodal operations and private fleets are a valuable source of available trucks in a landscape of constrained capacity. These more resilient, multifaceted transportation companies find themselves facing unprecedented opportunities to expand their businesses.

A leading provider of transportation technology, TMW Systems is helping more than 2,300 transportation service providers—including 3PLs, private fleets, freight brokers and for-hire carriers—deliver outstanding services to their customers profitably. TMW's experience and expertise in surface transportation and diversified transportation companies is reflected in its portfolio of robust solutions that power the movement of freight across North America.

TMW offers a comprehensive TMS (transportation management system) technology platform, designed to support the diversity and mission-critical nature of the logistics service provider business. A fully integrated enterprise application suite, the TMW technology platform offers particular benefits in operations, where 'own fleet' assets can be simultaneously optimized during load planning along with those of carrier partners,

ultimately delivering transportation efficiencies and cost savings for each customer while driving incremental revenue and profits to the business.

Challenges

Meeting multiple tight delivery windows each day on behalf of multiple customers necessitates extensive coordination between dispatchers, fleet managers, drivers, commercial carriers and other trading partners. Managing this level of complexity requires not only detailed oversight to the precise movement of each shipment from pickup to delivery, but also efficient internal processes and ongoing collaboration among all parties.

Internal Efficiencies

Delivering to each customer's unique requirements and specifications requires the ability to quickly marshal and coordinate internal and external resources. The initial customer inquiry is responded to by the transportation provider committing its fleet and/or for-hire carriers; once all parties are in agreement on all points, freight is tendered for pick-up. As the shipment progresses, status updates are provided by the driver, including the purchase of fuel, accessorial and other costs; when the delivery is complete the POD (Proof Of Delivery) is transmitted for customer invoicing and carrier settlement. Many companies are handling these steps on an ad-hoc basis, often via phone and fax.

In a small company with few customers, reliance on the phone, emails and filing cabinets may suffice. However, as customers become more demanding and new services are added, meeting a myriad of requirements with ad hoc solutions soon becomes unmanageable. Gaining internal efficiencies will require that processes and data be standardized wherever feasible and that the management of assets and logistics be automated and controlled on behalf of the entire business.

Regulatory Compliance

In an effort to increase oversight, improve safety and reduce crashes, injuries and fatalities, the FMCSA (The Federal Motor Carrier Safety Administration) set the new yardstick for carrier safety measurement in 2010. Together with the U.S. Department of Transportation, the FMCSA enacted the Compliance, Safety and Accountability program (CSA) regulation to improve truck safety. The program measures and tracks seven safety improvement

categories to examine a carrier's on-road performance and potential crash risk based on criteria such as unsafe driving, hours-of-service, controlled substances/alcohol and vehicle maintenance.

Resource Utilization

Transportation capability is constrained by capacity. The availability of trucks to move freight is affected by the efficient utilization of those rolling assets, as well as the availability of drivers. Non-asset-based logistics service providers can maximize available capacity with effective order management and load consolidation tools that function across their customer shipments and a range of modes. Commercial carriers, or diversified transportation providers with their own fleet assets, benefit even more from technologies that enable them to holistically allocate and manage assets beyond order and load consolidation, to reduce empty miles and make full use of driver hours-of-service. The ability to analyze freight networks and customer activity at the 'big picture' level also makes it easier to pinpoint new business opportunities and select partners and potential for-hire carriers to supplement capabilities in various regions.

Information Technology

Organic growth is a hallmark of the transportation service industry. Many companies started small and over time acquired new customers, which in turn drove investments in assets, employees and computer systems. While software written to meet the specific needs of an individual customer may function adequately, it should be assessed in light of the challenges faced in today's dynamic market environment. Heightened shipper expectations, rising supply chain complexity and an increased focus on bottom line profitability should drive logistics companies to examine both their market competitiveness and operations effectiveness across their customer base.

Most shippers appreciate the benefits being delivered by their own technology investments over the last decade and expect that logistics companies have made similar commitments. However, according to the 2012 CSCMP Survey, logistics companies are not meeting shipper expectations. The survey reports that 93% of shippers expect their logistics service providers to have IT capabilities, but only 54% are satisfied with the services provided by their current providers. These statistics are putting additional pressure on trucking companies and other logistics service providers to shore up their technology capabilities.

Technology from TMW Systems

For the past 30 years, TMW Systems has been helping logistics service providers meet their customers' requirements while delivering profits to the bottom line with its robust portfolio of TMS solutions. The company's 2,300 customers include commercial trucking companies and private fleets, along with non-asset-based 3PLs, freight brokers and shippers and a high number of diversified transportation providers with operations that span multiple categories. TMW Systems provides mission-critical enterprise solutions for logistics providers of all types, enabling their delivery of superior technology-enabled services. Recent developments in capability simultaneously optimize a firm's owned assets for load planning together with those of commercial carriers, to deliver the most cost effective solutions for each customer while satisfying service requirements and driving improved profitability for the business.

The TMW technology foundation supports the management of all inbound and outbound freight, from simple point-to-point, to complex movements including multi-leg, multi-modal, cross docks and consolidation. From handling hazardous commodities, to consumer goods and regulated merchandise, the system applies business rules to facilitate planning, asset assignment, dispatching, optimization, driver communications, partner collaboration and financial settlement.

The TMW Systems technology platform supports the end-to-end transportation process from quote to order to cash, beginning with strategic and tactical resource planning, controlling day-to-day operations, monitoring shipments and providing customer visibility and then settling financial transactions and closely tracking allocated costs. TMW aggregates all operational data from across the trading partner network into a single data repository, enabling a consolidated view of the business. This makes possible the ability to 'drill down' and analyze data for more informed tactical and strategic decision making at management and operational levels.

Resource Planning

TMW planning capability includes modeling supply chain networks, profiling assets, strategic analysis and 'what if' decision making. Planners use the modeling tool to define and visualize customers' supply chain components and information flows, including zones, DCs/warehouses, and routes. Planning also includes pinpointing available fleet and partner assets to be assigned to customer requirements. Its functionality includes:

- Integrated planning tool to model multi-tier customer networks
- Incorporation of third-party mapping tools
- Widgets to help define business rules, information flows
- Consolidation of company assets and contract carriers
- Ability to optimize assets using constraints such as cost and service level

TMW planning dashboards enable analysts to study the impact of potential network changes, compare multiple transportation network options and evaluate the costs and benefits of using their own assets vs. contract carriers, or shifting freight across more efficient modes.

Operations Control

In high-volume carrier operations, facilitating customer on-boarding can dramatically increase efficiencies. During the customer on-boarding process, CSRs (Customer Service Reps) use templates to setup new customer profiles including critical information such as locations, products and special requirements. The TMW operations control dashboard serves as the nerve center for operations and dispatch. CSRs, planners and fleet managers rely on this real-time workbench to receive orders, negotiate rates, combine loads and schedule shipments. The system automatically rates orders and subsequently adds line haul and accessorial charges based on predefined business rules depicting customer, commodity type, locations, etc. Its functionality includes:

- Customer on-boarding templates and proactive process
- Receives orders, applies contract requirements, negotiates rates
- Fleet routing and scheduling including special requests, instructions, etc.
- Books and tenders shipments and trips with your own fleet and carrier partners
- Schedules resources including tractors, trailers and drivers
- Supports TL, LTL, multi-stop, multi-tier networking (pools and cross-docks), multi-modal, intermodal, parcel

The TMW operations dashboard ensures that each customer order is entered and executed correctly. This includes scheduling the delivery of freight, optimizing the use of assets and minimizing logistics costs by continually balancing and managing shipments.

Execution Monitoring

TMW proactively monitors all activities, events and charges related to the movement of a shipment, including load planning, vehicle matching, transfers, consolidation and delivery to final destination, with all supply chain trading partners. Functionality includes:

- Monitoring of shipments from pickup to delivery
- Tracks milestones through to delivery of customer order
- Tracks equipment status, locations, maintenance, compliance, etc.
- Provides exception alerts to enable rescheduling
- Provides real-time delivery updates to dispatchers and customers
- Communicates with drivers via mobile applications and tracks vehicles with GPS technology
- Validates, confirms and notifies Proof of Delivery when received

Customers are automatically kept apprised of their shipments and advised of any delays or issues. Dispatchers, logistics coordinators and customer service representatives have visibility into each customer's freight movements as well as in aggregate, making it possible to visually monitor all shipments on a region by region basis. Automatic exception alerts make it possible to respond to schedule changes before they become major issues.

Financial Settlement

In addition to the fine-grained cost tracking and allocation capabilities expected in enterprise-class applications, TMW leverages the data captured throughout the order and shipment lifecycle to accurately generate customer invoices, driver payrolls, fuel tax obligations, carrier payments and 3rd-party commissions. These transactions are readily integrated to corporate ERP or financial systems for electronic billing and payments and general ledger entries. Functionality includes:

- Compiles charges and other data collected during transport
- Verifies completion of delivery through driver paperwork and POD
- Generates and transmits carrier invoice and creates settlements for drivers and subcontractors
- Pays driver, owner-operators, third party carriers for completed orders
- Extensive functionality for standard and ad-hoc reporting

Supports match and pay and auto-pay process for carrier payments

Financial settlement capabilities automate the processing of financial transactions, increasing the accuracy and decreasing the administrative burden in the back office. Driver settlement, customer invoices and partner payables are automatically and accurately generated with TMW's integrated data design.

Business Intelligence (BI)

Operational and financial data are gathered from across the trading partner network and aggregated into the TMS data repository and the available data warehouse. TMW Business Intelligence tools empower decision makers to gain insights by drilling-down and analyzing data such as cost components, customer profitability, asset utilization, etc. Additionally, TMW transportation experts can work with customers to uncover requirements and opportunities for business improvement with tailored solutions that:

- Put reporting and ad hoc inquiry ability in the hands of business users
- Support root cause analysis
- Facilitate corrective actions and strategic decisions across informational silos
- Track business performance in real-time relative to predefined KPIs
- Support 'what if' analysis with multiple scenarios for consideration

The TMW BI tools enable financial managers to locate, target, and reduce operating costs; sales managers to identify and act upon new opportunities; and executives to identify cost, performance and profitability drivers.

Value Proposition

TMW solutions help logistics and transportation service providers deliver superior customer service by bringing fleet and partner resources to bear; create shareholder value by optimizing the usage and life of company-owned assets; and build the operational framework required to profitably manage and grow the business today and into the future.

TMW customers have identified four primary areas where they realize significant Return on Investment (ROI).

Reduced Operating Costs

TMW customers have driven down the cost of operating the business in several ways:

- Reduced transportation costs of 4-6% by increasing utilization of trailer capacity and optimizing routes, especially for last mile deliveries;
- Reduced cost of fuel by 4-7 cents per gallon by guiding fleets to the least cost locations within a trip; typically savings of \$1,000 per tractor per year;
- Reduced administrative costs, including a 10% staff reduction and data quality improvement of 30% by directly integrating customer data;
- Reduced driver turnover by 50% through better communications and assignments;
- Reduced overall asset maintenance costs by 10% through direct access to repair histories, costs, compliance reports, etc.

Operational Efficiency

TMW customers have increased revenue and driven additional cost reductions with:

- Increased revenue by 5% by selecting least cost carriers, thus allocating resources more effectively;
- Reduced empty miles, typically by 10%, by improving load assignment decisions;
- Reduced the costs associated with on-boarding new customers due to standard templates;
- Decreased back office expenses by 15% by automating routine tasks such as customer invoicing, driver payroll, and collections;

Improved administrative productivity by 20% due to increase in productivity.

Service Improvement

TMW solutions have helped improve the satisfaction of its customers' customers by increasing on-time deliveries and lowering transportation costs. Other specifics include:

- Improved on-time deliveries by up to 20% or more;
- Improved visibility across the supply chain and to in-transit shipments:
- Improved planning of inbound and outbound shipments;
- Electronic communications with customers, fleet drivers, carriers.

Business Growth

TMW solutions provide an integrated platform from which logistics service providers manage customer communications, assign and manage assets, and settle payments by:

- Streamlining core business functions (quoting through settlement);
- Enhancing decision making by providing universal access to information;
- Enabling competitive differentiation based on technology;
- Promoting collaboration among all stakeholders;
- Enabling strategic participation in customers' supply chain.

Looking Forward

Increasingly sophisticated customer supply chains have driven transportation providers to broaden their service portfolios, offering additional services such as express, last mile, warehousing, reverse logistics and more. Over time, many have re-aligned employees to proactively participate in key customer supply chain functions such as planning and IT. These partnerships have helped uncover opportunities to standardize data elements, to streamline EDI transactions and work processes and drive out costs while improving efficiencies for all participants.

Realigning their businesses to better serve customers, all forward-thinking transportation providers are re-evaluating internal operations and technology infrastructure. Increasing demand for shipment visibility is driving growth for online web access to shipment status and progress, as well as service provider performance tracking over time. Meeting stakeholder revenue and profitability goals requires transportation resources be managed holistically and even more intelligently than ever before. Internal operations must be run efficiently and effectively, with automation and technology-driven workflows driving out inaccuracy, delays and redundant activities to improve cost containment and business responsiveness and reduce DSO.

TMW Systems is helping its customers meet these goals with broad and well-integrated technology solutions that are configurable for virtually any business size or level of complexity. From freight brokers to intermodal carriers, 4PLs to dedicated fleets and from commercial carriers to demanding private fleets, TMW solutions offer business efficiency, complex process automation with greater management insight, detailed cost tracking and powerful load planning that makes the most of available resources.

Whether you operate a fleet or rely on the assets of others, run a tightly focused transportation company or have multiple lines of business, you now have access to a single TMS technology platform that meets all of your needs to create sustainable competitive advantage.

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TMW Systems is the leading Transportation Management Software (TMS) provider to for-hire and private fleets, brokerage and 3PL organizations. Founded in 1983, TMW has focused exclusively on providing mission-critical enterprise software to the transportation industry, including asset-based and non-asset-based operations as well as heavy-duty vehicle service centers.

With offices in Cleveland, Dallas, Indianapolis, Nashville, Oklahoma City, Raleigh and Vancouver, the company serves over 2,300 customers, including many of the largest, most sophisticated and complex trucking companies in North America. TMW customers collectively manage over \$70 billion in annual freight spend, direct more than 500,000 power units and maintain more than 1.7 million assets worldwide, including North America, Europe, Latin America and Australia-New Zealand. For more information, visit www.tmwsystems.com or call (800) 401-6682.



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