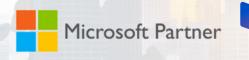




# THE FUTURE OF FREIGHT

MERGING STRATEGIC VISION WITH INNOVATION
TO OPTIMIZE D365 TRANSPORTATION
MANAGEMENT





2025 JULY



# FINDING THE FUNCTIONAL GAP

High-volume shipping means high stakes. With little room for error, unifying your company's strategic vision with innovative (and error-free) technology is now a requirement for simplifying supply chain complexity. This concept has rapidly transitioned from a competitive advantage to fundamental necessity for many businesses looking to simplify the complexities of modern logistics and supply chain management. As a result, more and more shippers are implementing robust Enterprise Resource Planning (ERPs) systems like Microsoft D365 Finance and Supply Chain (D365) as well as investing in state-of-the-art Transportation Management Systems (TMS) to help improve team collaboration, optimize transportation planning, and enhance overall supply chain performance. Without a dedicated connection linking these two systems, fusing strategic planning with logistics innovation is a more challenging endeavour. This disconnect can lead to crippling inefficiencies—caused by manual data entry, delayed decision-making, and limited visibility into transportation operations.

D365 is the ideal ERP for managing supply chain operations, offering an abundance of shipping features and warehouse management tools. It is also known for lacking critical TMS functionalities required to execute and manage high-volume shipping. Meanwhile, modern TMS platforms are being built to boost operational performance throughout a business' long supply lines, providing automation, Al-enhanced decision-making, and real-time visibility to enterprise-class shipping operations.

# Shouldn't these two systems be working together?

Integrating a robust TMS with D365 provides supply chain operators with the advanced analytics and predictive modelling tools needed for seamless, dynamic delivery models. Many organizations are engaging with key Independent Software Vendors (ISVs) in shipping solution development, investing in technology that can easily connect advanced TMS platforms to their existing D365 systems.

In an era where data is king, a solution which incorporates D365's flexibility with a TMS' real-time tracking and monitoring capabilities provides shippers with the essential tools needed to ship smarter, faster. It acts as a conduit between the two systems, enabling consistent connectivity between D365's financial and supply chain modules, while leveraging core TMS innovations such as automated freight operations, multi-modal visibility, and predictive insights—streamlining communications with carriers and stakeholders for unmatched efficiency, scale, and ease of use.

Such a partnership could ultimately transform supply chains to be more responsive—capable of meeting the demands of a dynamic industry.

# **HOW DID WE GET HERE?**

Historically, D365 users have integrated TMS solutions to address specific operational challenges and enhance their supply chain capabilities. Real-time visibility, for example, remains an ever-present requirement for shippers, providing unprecedented transparency across their supply chain. These advancements are not only simplifying processes but also empowering leaders to make informed, data-driven decisions. Key drivers for this integration include:

# Enhancing transportation planning and execution

A basic gap analysis can quickly identify limitations in D365's standard TMS module. While standard D365 systems offer a robust framework of modules for supply chain management, integrating with a dedicated TMS platform provides advanced features such as dynamic route optimization, automated load building, and real-time carrier communication—all essential features for managing complex logistics operations.

# Streamlining data exchanges

D365 is designed to facilitate intercompany communication and collaboration. At the same time, effective data management is crucial for optimizing a business's revenue—identifying areas for cost savings. When data is dispersed across multiple systems and modules, it often becomes siloed, hindering accessibility. As a result, many shippers struggle to access valuable data insights because of the difficulty in managing disconnected spreadsheets and systems.

# **Complex connections**

Shippers that opt for developing in-house D365 TMS integrations are often hampered by a host of technical challenges like integrating various modules and external systems, each with unique data formats and protocols. Ensuring uninterrupted omni-channel data flow and real-time updates requires meticulous configuration and constant monitoring, while maintaining security and compliance across these connections adds another layer of difficulty.

# Improved visibility and responsiveness

Without comprehensive, real-time visibility—and insights to go with it—into every stage of the supply chain, shippers miss critical opportunities to optimize fleet utilization and enhance productivity. The lack of timely status updates can force shippers to remain reactive in addressing bottlenecks, instead of proactively solving preventable issues. This can lead to increased operational costs and potential revenue losses.

# Fleet requirements and adaptability

Fluctuating delivery demands, seasonal surges, and unpredictable shipping volumes often challenge supply chain operators in aligning the appropriate number of drivers and vehicles for order fulfillment. Manually managing fleets, resources, and orders exacerbates these challenges, making it difficult to anticipate asset requirements accurately.

# **DRIVING CHANGE**

Supply chain complexity continues to drive innovation in a competitive market that caters to sustainable differentiation and cost savings. However, with newer technologies emerging and freight costs rising steadily, the need for unifying D365 Finance and Supply Chain with TMS platforms has never been greater.

# Al and automation

Recent years have seen AI, machine learning, and automation play a key role in simplifying operations for both shippers and carriers—revolutionizing operations, enhancing productivity, and reducing human error. Likewise, AI-enhanced decision-making is being widely used to help enhance predictive analytics by anticipating demand fluctuations, optimize inventory levels, and allocate resources more effectively, ensuring smoother operations during peak seasons or unexpected surges.

Al is also better enabling real-time visibility across supply chains, providing shippers and carriers with up-to-the-minute updates on freight location, delays, and potential disruptions. This level of transparency allows for proactive decision-making, reducing downtime and improving customer satisfaction.

Some TMS solutions can intelligently match freight offers to drivers based on availability, location, and hours of service, ensuring optimal resource utilization. Even more robust TMS platforms can simplify and automate routine tasks using agentic AI to fulfill orders, plan routes, and help select carriers. Recognizing the substantial ROI, many D365 users are integrating TMS solutions to streamline processes connected to invoicing, billing, and settlements. These integrations not only reduce manual workloads but also enable seamless data sharing between systems, ensuring greater accuracy and efficiency across financial and supply chain operations. As AI continues to evolve, its ability to unify and enhance these systems will further empower businesses to operate with greater agility, precision, and resilience.

"For shippers and 3PLs, knowledge automation could vastly reduce the number of repetitive processes that have to occur regularly. Instead of having to input the same data fields and other time-consuming processes, knowledge automation will learn these methods and implement them for you."



# **Rising freight costs**

Geopolitical tensions, increased fuel prices, regulatory changes, as well as an overall increased demand for freight services have all contributed to rising freight costs, driving supply chain operators to seek innovative ways to optimize expenses. It's led many D365 shippers to seek out robust TMS integrations as it allows them to automatically receive and address freight invoices as they appear in real-time.

By analyzing various factors such as traffic conditions, fuel prices, and delivery windows, shippers can utilize a TMS solution to send D365 orders, leveraging TMS features to identify the best routes, minimizing transit times and fuel consumption. This ensures that shipments are consolidated efficiently, reducing the number of trips and associated costs.

# IoT innovations

For TMS platforms, integrating Internet of Things (IoT) technology is quickly becoming the answer to improving shipment visibility. By enabling real-time tracking of shipments and monitoring critical conditions like temperature, humidity, and shock, IoT ensures goods are transported under optimal conditions, reducing the risk of damage or loss. This heightened visibility empowers businesses to make proactive, data-driven decisions, improving operational efficiency and customer satisfaction.

When bundled with both D365 and an advanced TMS, IoT integration also enhances compliance with safety standards by providing detailed logs of shipment conditions, which is particularly valuable for industries like food and beverage or pharmaceuticals. Additionally, Alpowered analytics can process IoT data to identify patterns, predict potential disruptions, and recommend corrective actions, further mitigating risks and streamlining workflows.

Beyond operational gains, IoT-driven insights support sustainability goals by optimizing routes and reducing fuel consumption, contributing to lower carbon emissions and a greener supply chain.

And, with D365's array of data-centric modules, it's no wonder shippers are looking at ways to merge these two systems together—consolidating dense TMS data and shipping metrics onto a centralized system.





# WHAT TO LOOK FOR...

An ISV-built D365 shipping solution that seamlessly integrates with an advanced TMS should bring everything together in one, user-friendly interface. Likewise, the TMS itself should include a comprehensive list of innovative tools and designed to enhance your supply chain efficiency and produce near-instant ROI.

#### The ideal D365 TMS solution should:

- Enhance the native D365 experience by providing added functionality that goes above and beyond standard TMS functionality via seamless connectivity parameters
- Simplify the shipping process from start to finish on one platform within D365
- Integrate as an out-of-the-box solution with configurable system settings that can be outfitted to fit
  your business' specific needs, enabling configurable workflows for Sales, Purchase, and Transfer
  orders
- Break down data siloes across your organization, including financial systems, shipping, and inventory management
- Be developed by an experienced, responsive ISV who understands the supply chain landscape, and provides valuable insights that can lead to enhanced shipping capabilities

# The checklist for integrating with the perfect TMS:

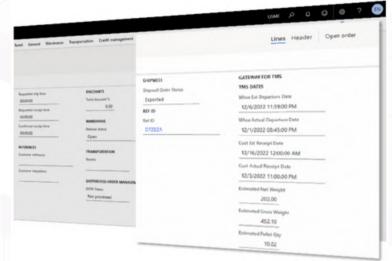
- Capable of addressing, aligning, and scaling with your current supply chain challenges
- Known for having an easy-to-use interface, making navigation, data input, reporting, and all embedded features self explanatory
- Provide real-time visibility into transportation operations, allowing team members to identify and resolve issues quickly
- Streamline communications with carriers and stakeholders, ensuring transparent and efficient information sharing throughout the shipping process
- Provide real-time visibility into shipment status, location, milestone capture, track and trace, proof of delivery (POD), and accessorial tracking across all modes
- Able to request and receive carrier rates using webhooks, enabling seamless integration with Microsoft D365 Finance and Supply Chain
- Automated and optimized routing guides to tendered shipments without manual intervention





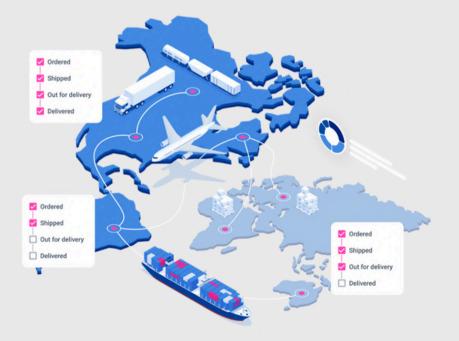
Gateway for TMS is a market-leading Microsoft D365 Finance and Supply Chain platform that connects to Shipwell's advanced TMS, providing added functionalities that go above and beyond standard D365 TMS functionality, centralizing control of all modes of transportation. The solution offers an end-to-end holistic approach to transportation management in one workflow.

This allows for greater visibility across the entire transportation network and enables shippers to scale infrastructure and business processes while improving service offerings. It automates TMS processes within D365, enhancing dispatching, reducing the amount of work your team spends interacting with multiple interfaces.



# SHIPWELL TMS

Shipwell gives shippers and their teams the tools to run smart, resilient supply chains. Their Al-integrated TMS combines power and ease of use to lower costs, improve customer experience and keep businesses agile. With real-time visibility, seamless connectivity, and dynamic automation that extends capabilities beyond legacy platforms, Shipwell specializes in making the complex easy and delivering unmatched results for their customers and partners.





# NMB GATEWAY FOR TMS

# **POWERED BY SHIPWELL**



# Native D365

NMB Gateway for TMS brings smooth data exchanges and an enhanced user experience by consolidating shipment, stop status, invoice, and freight charge details onto a single page. Locate and manage Shipwell data transactions for orders, locations, financials and more.



# Freight reconciliation

Import freight invoices automatically based on carrier-triggered statuses that have been actioned within Shipwell's TMS. Fully-integrated invoice reconciliation processes allow freight rate management handling, ensuring accurate pricing and cost control.



# Configurable, scalable, flexible

NMB's out-of-the-box solution includes comprehensive TMS integration parameters enabling highly configurable workflows for Sales, Purchase, and Transfer orders, with specialized features for managing high transaction volumes and complex logistics — compatible with both WHS and WMS warehouse setups.



# Seamless webhook connectivity

Never miss an update. Shipwell uses webhooks to notify D365 any time an event happens, like when a shipment is 'in transit', or when a customer goes over credit. NMB Gateway for TMS leverages Shipwell's webhooks to provide state and API responses to services like replication, analytics, alerting, or customer success.



### Centralized dashboard

Achieve peak efficiency in end-to-end logistics operations through an intelligent, centralized dashboard—ensuring complete transparency and control across the entire supply chain.



# Integrated powerhouse

Experience the combination of predictive analytics, Al-driven automation, and robust data sharing on a unified platform—breaking down barriers for effortless collaboration and eliminating information gaps.



# Central hub for inbound freight management

Unlock seamless collaboration with suppliers, transforming the way you manage inbound freight. Supplier portal gives you a flexible, collaborative environment that saves you time and maximizes the effectiveness of your inbound operations.



# View, navigate, track, and integrate

Effortlessly plan, price, and book shipments across carriers with Shipwell TMS. Track shipments on road, rail, ocean, or parcel, share tracking and ETAs. Unlock advanced analytics to track and analyze carrier performance or internal efficiencies, empowering data-driven decision-making for enhanced overall performance—all managed conveniently from anywhere with our native mobile app.





# A POWERFUL PARTNERSHIP

Shipping expectations and complexity continue to rise. Shipwell is on a mission to empower supply chain efficiency at scale across every company size, stage, and industry. Supply chain solutions tend to be disconnected, rigid, and difficult to use, but Shipwell's platform combines everything customers need in a user-friendly interface that adapts as the market and business demands change.

#### **DID YOU KNOW?**

Shipwell has appeared five consecutive times in the Gartner Magic Quadrant for Transportation Management Systems, exemplifying their commitment to continuous innovations for shippers—providing an all-in-one platform to manage complex supply chains.

Backed by AI and machine learning capabilities, Shipwell's Gartner-recognized TMS platform integrates seamlessly with existing business applications, partners, and workflows, reducing implementation time and allowing customers to go live in as little as 8-10 weeks. And with data-driven technology that provides automation, comprehensive tracking, exception management, and advanced analytics at every point in the supply chain, allowing customers to proactively address delays and reduce spend.

"At Select Chemistry, optimizing our logistics supply chain is critical to delivering value to our customers while managing costs effectively. By integrating Shipwell's TMS with Microsoft Dynamics 365 Finance and Supply Chain, facilitated by NMB Solutions, we've unlocked significant efficiencies across our operations. This seamless integration provides real-time visibility, enhanced automation, and advanced analytics, enabling us to streamline our logistics processes from end to end. The result is not only a more efficient supply chain but also improved customer satisfaction and a lower total cost of ownership."

**JUSTIN KOONS**, Director of Corporate Logistics Select Chemistry

# Want to Learn More?

If you're interested and want to learn more, or if you would like to see a demo of NMB's Gateway for TMS, please visit our website at NMBsolutions.ca or email us at Info@nmbsolutions.ca.