How Pando is Using Agentic AI to Revolutionize Logistics Technology

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In North America, the shipper-focused Transportation Management Systems (TMS) space is dominated by a cohort of enterprise solution providers including **Oracle**, **Blue Yonder**, **Manhattan**, and **SAP**. For over 25 years, they've developed robust transportation management solutions whose capabilities span modes of transport, industry verticals, and geographies.

When you consider that these providers also have supply chain planning and distribution capabilities, a large and invested install base, and brand recognition, they each have sizable moats. For up-and-coming log-tech providers, targeting large, sophisticated shippers is a daunting and often fruitless endeavor.

A New Entry in the Logistics Technology Market

Pando, founded in 2018, is a relatively new entry into the log-tech market. While they are represented in the Gartner TMS Magic Quadrant, we would hesitate to call them a "traditional" TMS. They can and do provide a comprehensive set of core TMS capabilities, but their strategy and technical approach differ from both the legacy providers and most new entrants into the log-tech space.

Firstly, they are not going after smaller shippers as we typically see from new entrants. The shippers Pando pursues include the who's who of corporate America, with many of their clients' freight spends exceeding $1 billion annually.

Secondly, they are not offering a niche solution that addresses an efficiency improvement opportunity, such as cross-shipper collaboration, appointment scheduling, or real-time visibility. Instead, their strategy is focused on augmenting the TMS that is already in place with advanced capabilities powered through Agentic AI, natural language processing, and machine learning.

Pando's focus on areas that are typically a core capability of the TMS, namely freight procurement and freight bill audit and pay, set them apart from other newer players seeking to enhance the overall logistics competency of the organization.

From the outside, this strategy makes sense if your objective is to tap into large shippers given the following assumptions:

❯ TMS systems are notoriously "sticky." **Selecting and implementing a new system is a large investment** in both time and money, and the number of enterprises that look to replace their TMS is relatively low and only occurs when shippers are deeply dissatisfied with their provider

❯ Freight settlement and rates procurement processes are not the strongest capabilities of the legacy TMS providers, with significant gaps in modes such as parcel, courier, dedicated fleet, and ocean

❯ The use of Agentic AI, which Pando is aggressively pursuing, is best suited to processes and tasks that are subject to autonomous decision-making and the ability to string together multistep processes, making both rates procurement and freight bill audit good candidates for automation

Essentially, Pando, while having a complete TMS, is also gaining access to large, innovative shippers by focusing on workforce productivity improvements and cost reductions in areas where the leading TMS providers often struggle.

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What Sets Pando Apart?

The foundational differentiating aspect of Pando, and why the company views itself as an "AI First" company, is its proprietary Logistics Language Model (LLM). Raw data are imported into the LLM from both internal enterprise sources (e.g. ERP, WMS, TMS, etc.) as well as over 30 pre-established external data sources such as news feeds, industry reports, financial data, and geopolitical risk assessments.

A semantic layer and Pando's Supply Chain Knowledge Graph sit between the raw data and the LLM. Its primary role is to translate technical data structures (e.g. OTM Shipment JSON, Manhattan SWFO, SAP OData) and unformatted information (e.g. non-digital freight documents, news feeds, email-based rate changes) into business-friendly terms and concepts that can be understood by both humans, using Natural Language Processing (NLP), and Agentic AI.
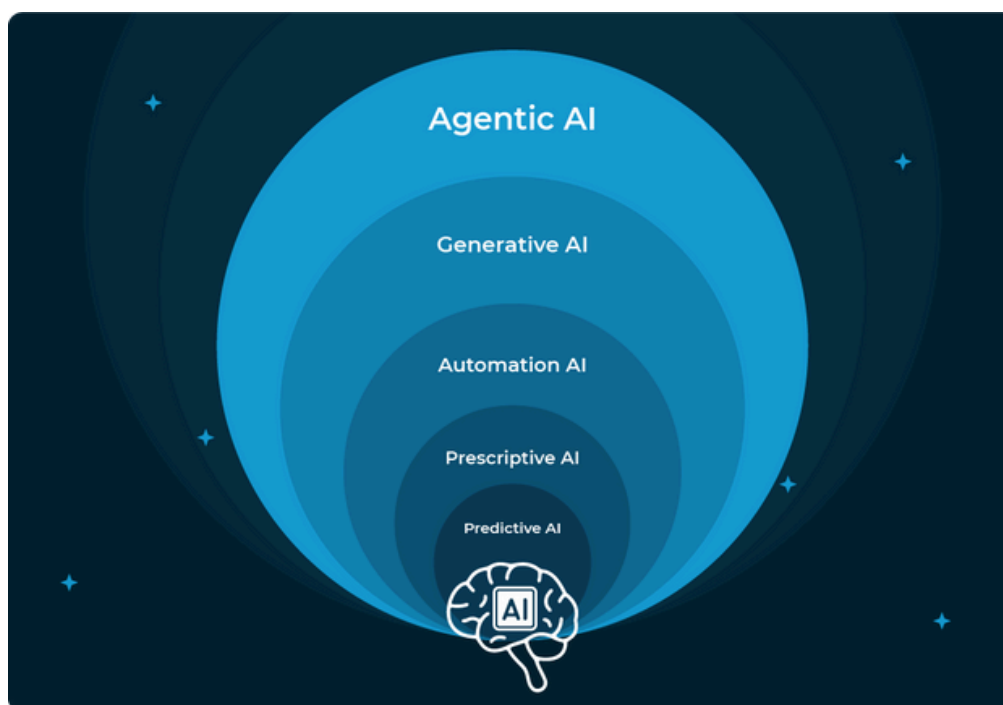
The journey of artificial intelligence in logistics has unfolded through 5 distinct evolutionary stages, with Agentic AI being the most recent.

While many log-tech providers have released NLP-driven generative AI solutions to supplement their platforms, Pando's use of Agentic AI raises the stakes—it is not a feature of the platform, but the core component. This approach enables shippers to move from reactive, prompt-based generative AI to proactive Agentic AI.

Instead of users asking the system questions, Agentic AI autonomously acts driven by predefined goals, adapting over time as it learns via the introduction of new data and feedback.

Filling the Hype to Reality Gap

While there is a large gap between hype and reality, JBF believes that Agentic AI will provide a significant, non-incremental benefit to organizations that thoughtfully embrace this technology. However, no enterprise will hand over its logistics operations to autonomous agents without a significant and rigorous break-in period.

Pando knows this, and in response, have developed a variety of agents that can be deployed to automate specific atomic micro-processes. They include agents that perform data correction, AI Optical Character Reading (OCR), email interrogation, customer/supplier/stakeholder messaging, negotiation, and anomaly detection. Initially, this was all done with significant manual oversight.

Over time, and as system confidence increases, agents can be strung together to automate broader processes, such as planning, procurement, analysis, and payment.
To remove the "magic" surrounding Agentic AI, Pando's technology provides detailed auditability as to how each decision or recommendation was made, scoring the result based on the system's calculated confidence level. This enables shippers to proactively train and refine the model based on their specific needs.

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High-Value Use Cases

Pando recently presented a series of high-impact AI-driven use cases. Among the most compelling examples discussed are:

❯ **Invoice Anomaly Handling**: Pando illustrated how, upon receipt of a freight pay invoice via email, their AI OCR could extract and digitize data from the PDF, then identify exceptions such as a missing lumper receipt—automatically prompting the carrier for follow-up through the freight payment portal.

❯ **Smart Rate Benchmarking**: Their team described an automated agent capable of continuously comparing shipper rates to benchmark standards, factoring in unique contract terms. In cases where rates exceed the expected threshold, the agent would alert the procurement team for further review.

❯ **Parcel Weight Reconciliation**: Pando also showed how an AI agent could detect discrepancies between carrier-billed weights and anticipated shipment weights, flagging these anomalies to the master data team for source system correction.

Key Takeaways

Since its founding in 2018, Pando has developed an intriguing and competitive end-to-end shipper-centric TMS using Agentic AI as the foundational premise of the solution.

Unlike virtually all new entrants to the TMS space who go after SMBs, Pando's focus is on large, innovative shippers in the world. They are directly competing with the legacy titans and using Agentic AI as the fundamental differentiator to win business.

Their pragmatic approach allows shippers to gradually adopt AI-driven automation while maintaining the necessary oversight and controls that minimize risk to the business.

While we are well aware of the excessive hype we see in the market vis-à-vis AI, we are very impressed with what Pando has developed in a short period of time and see Pando as one of the pioneers in the adoption and implementation of advanced AI in logistics operations.

Reach out to JBF or email us at **contact@jbf-consulting.com** today to see if Pando.AI's technology is the right fit for your logistics needs.
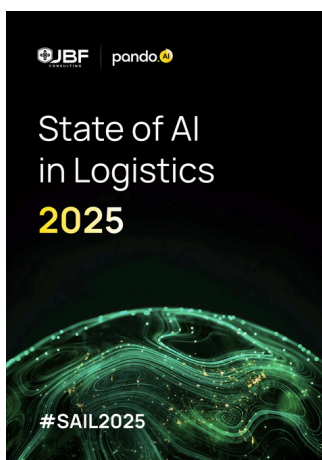
State of AI in Logistics Report 2025

AI in logistics isn't a binary of hype vs. results. It's a spectrum, and where you sit on it matters more than ever.

Pando and JBF's State of AI in Logistics 2025 Report explores how most adaptive logistics organizations are going AI-first in mindset, infrastructure, and scale.

Download it today!

About Mike Mulqueen

Mike Mulqueen is the Executive Principal of Strategy & Innovation at JBF Consulting. Mike is a leading expert in logistics solutions with over 30 years managing, designing and implementing freight transport technology. His functional expertise is in Multi-modal Transportation Management, Supply Chain Visibility, and Transportation Modeling. Mike earned his master's degree in engineering and logistics from MIT and BS in business and marketing from University of Maryland.

About JBF Consulting

JBF Consulting is a leading logistics strategy advisory and technology integration firm that partners with shippers to transform their logistics and supply chain execution operations. We empower clients to achieve operational efficiency and scalable, sustainable value through strategy development, roadmap orchestration, unbiased technology selection, expert implementation, data-driven insights, and ongoing managed services. For over two decades, our client-centric approach and alliances with best-of-breed solution providers have ensured that every strategy and solution we deliver drives measurable impact, long-term success, and customer satisfaction. For more information, visit **www.jbf-consulting.com**.