Leverage automation, AI, machine learning and behavioural science Artificial intelligence (AI) provides the technological advancements to move beyond historical data analytics for improved predictive abilities and better outcomes in the spot freight market.

While previous digital load boards relied on historical lane and load data to determine an average price, Al utilises machine learning to compare the same historical data against actual human behaviour to develop real-time pricing strategies. Machine learning combines traditional data science, whereby numbers alone guide decisions, with behavioural science, which acknowledges the existence of biased, alterable human behaviour in decision making. In the spot freight market, machine learning informs AI by overlaying statistical analytics with behavioural analytics to predict spot market rates and guide autonomous procurement.

Predicting spot market freight rates is a difficult practice, due to the sheer complexity of global supply chains and ever-changing market conditions. Traditional freight brokerage prediction strategies relied on historical lane history data and an individual's expertise and knowledge of current market trends to calculate a rate. As data technology evolved, brokers had a more robust view of lane history and trends, but continued to rely on human decision-making to ultimately set prices. **Modern Al technology can now fully automate spot rate prediction and pricing without any human input.** But can it be trusted to do so?

The power of prediction in the spot freight market is immense, particularly when supported by AI and machine learning. These technologies are designed to perform complex mathematics and statistics at a rate that humans cannot – they simply find solutions more quickly, efficiently and accurately. This level of predictive processing provides more than a single spot rate to be used for broadcasting on load boards. **AI prediction technologies calculate customised spot rates, based on individual carrier profiles and truck positioning and are the backbone of autonomous procurement.** 



Understanding how and why carriers accept spot market loads is crucial for minimising spot freight costs. Carrier profiling technology applies behavioural and data science to determine the needs and decision-making patterns of individual carriers, and creates a personalised and relevant user experience. **Al carrier profiling identifies the carriers most likely to accept a spot load at a particular rate and drives customised offers to secure capacity quickly.** By eliminating the use of load boards and bid systems, carrier profiling ensures the best possible spot freight outcomes for procurement teams, and a streamlined process for carriers booking spot loads.

Autonomous Procurement is an AI-powered, automated approach to spot market procurement that leverages advanced machine learning and behavioural science to navigate the balance of predicted price and capacity. The autonomous procurement solution uses a catalogue of tendering strategies to strike a balance between speed, cost-savings and the ability to secure capacity. It then automates the tendering process to carriers with the best predicted outcomes.

There are several key differences between Autonomous Procurement and traditional spot procurement:

• Shippers are making offers, not asking for bids. Autonomous procurement utilises advanced market knowledge and carrier profiling to present customised offers rather than relying on carriers to dictate rates.





- The offers are instantly accessible. Carriers do not have to wait for acknowledgment on a spot freight bid, Autonomous procurement confirms the shipment immediately.
- Offers have a high degree of differentiation. Unlike digital boards, which present a singular rate across the network, smart tendering customises rates based on carrier preferences and history.
- Offers and prices evolve over time. Autonomous procurement takes into account current market conditions and adjusts carrier offers accordingly to ensure that capacity is secured for the best rate, at any given moment.

With machine learning, shippers are not just broadcasting broadly to carriers and hoping someone accepts. **Their tenders are more targeted and offer a 'match-now' price that provides both sides with instant feedback and faster results.** Tender rejections, in the standard sense, are significantly reduced, as pricing becomes a fluid, on-going series of dynamic offers. This yields the following benefits:

- Easy identification of your preferred carriers
- Faster negotiation cycles and matches to capacity
- Ability to accurately target a wider range of carrier partners with relevant loads
- Deeper, mutually beneficial relationships with carriers
- Strategic Orchestration + AI is greater than tactical management

Carriers also benefit from machine learning and an AI-based approach. They are trying to plan their day and optimise routes. They're getting deluged with quote requests and want to accept only the freight-hauling opportunities that best fit their strategic plans. It takes time to evaluate and provide quotes for each request, but accepting a reasonable offer is as easy as clicking a button. If the carrier wants to negotiate, machine learning makes that easy as well. If it's a reasonable bid that cannot be beaten, the machine accepts the offer on behalf of the shipper.



Autonomous Procurement is a dynamic, evolving solution that answers the biggest challenges in spot freight market procurement, assignment and execution – providing cost-savings and improved operational efficiencies for shippers and freight brokerages. It eliminates the need for traditional pricing strategies and carrier negotiations, by matching the right loads to the right carriers at the right price.



## Key takeaways

Al revolutionises spot freight management by leveraging machine learning for predictive pricing and autonomous spot procurement and assignment. Unlike traditional methods, Al analyses both historical data and human behaviour in real-time, offering customised spot rates based on carrier profiles. Autonomous Procurement, an Al-powered approach, replaces bid systems with instant, differentiated and tailored offers for each carrier/load, reducing tender rejections, ensuring quick matches, and fostering deeper relationships between shippers and carriers. This dynamic solution enhances efficiency and cost-savings in spot freight market procurement and assignment.