LEK™

Proving AI's Value in Transport & Logistics

The transport and logistics sector faces persistent challenges, including rising costs, inefficiencies and increasing disruptions. AI offers a practical way to address these issues, enabling more informed decision-making and operational improvements across the industry.

In 2025, organisations must transition from piloting AI to demonstrating measurable outcomes. While AI's potential spans various operational areas – from supply chain optimisation to warehouse automation – fleet management exemplifies how these tools can deliver tangible results.

AI-driven predictive maintenance helps operators move beyond fixed servicing schedules by analysing real-time vehicle performance data. Anticipating issues before they occur reduces downtime, extends asset life and improves reliability. Meanwhile, dynamic route optimisation leverages live traffic, weather and road data to cut fuel consumption, improve delivery times and increase fleet efficiency.

Generative AI takes these capabilities further by synthesising unstructured data, such as supply chain disruptions or commodity prices, to provide actionable insights. This supports more agile and proactive decision-making, helping businesses navigate shifting conditions.

However, AI's value depends on strategic deployment. Organisations must focus on their most pressing challenges, invest in robust data systems and scale proven solutions. By doing so, they can bridge the AI Delta – the gap between its potential and poor execution.

In focus: AI applications across transport & logistics

1 **Predictive maintenance:** AI analyses live performance data to detect equipment or system issues early, enabling proactive servicing that reduces downtime, avoids costly disruptions and extends asset lifespans.

2 **Dynamic route optimisation:** AI refines routes in real time based on traffic, weather and road conditions, improving delivery times, fleet utilisation and fuel efficiency.

3 **Strategic foresight with generative AI:** By synthesising unstructured data, generative AI helps to anticipate challenges, strengthen resilience and improve planning.

4 **Improved customer engagement:** AI can enhance communications by structuring responses to queries, managing complaints efficiently and automating routine updates – improving service quality and customer relationships across the sector.

The global market for AI in transportation is projected to grow to

$10.3 bn by 2028

91%

of fleet managers expect to invest more in digital fleet technologies within the next five years

Implementing predictive maintenance can reduce equipment downtime by

25%

Sources: Allied Market Research, MarketResearch, Statista

Want to find out more?

Contact us to discover how L.E.K. helps transport and logistics firms bridge the AI Delta by addressing data gaps, prioritising the right challenges and scaling solutions that drive tangible impact. Explore our Look Forward series to learn why 2025 is the year AI transforms industries.

Explore the Look Forward series