How to improve ETA prediction with Artificial Intelligence and Machine Learning

The Challenge

Companies operating in sectors such as logistics, transportation, automotive, and manufacturing rely on Estimated Time of Arrival (ETA) in their service delivery. Large variance in ETA prediction will result in lost sales and adverse customer experience. Lack of visibility across multi-leg logistics operations, and limited control over the data, make it challenging to plan for seasonality, externalities, and supply-side fluctuations and constraints.

Alongside this, e-commerce has seen rapid growth over recent years and customer expectations have increased. Purchasing decisions are often made based on ETA terms and real-time visibility is demanded at every stage. A customer's ETA experience can dictate repeat business, and, on the flipside, unreliable ETAs mean that costs can quickly escalate with increased inbound and outbound interactions and lack of delivery optimisation.

So today, more so than ever, ETA is a critical success factor for companies and a differentiator for those looking to leapfrog the competition. Providing accurate and reliable ETA has become an essential component in delivering a quality customer experience and boosting sales while managing operating costs.

The Solution

Faced with these challenges many businesses are turning to Artificial Intelligence (AI) and Machine Learning (ML) solutions to better predict the estimated delivery.

AI and ML provide intelligent insight from identifying patterns in route completion data, historic and real time, across the various stages of a delivery lifecycle. This analysed data enables companies to better predict ETA, leading to customer service improvements and enhanced operational management.

Significant cost and efficiency gains are achieved by streamlining warehouse and ground operations. Improved, more accurate ETA information drastically reduces the volume of inbound and outbound interactions to the call centre and the reduction in missed deliveries and the associated costs delivers significant financial benefit.

For those regions where descriptive addresses are relied upon instead of more formal address management, AI and ML can have an even more significant impact, continually learning and updating address specifics as deliveries are made.

The benefits of AI/ML for ETA Predictions

Improved Customer Experience

Provide personalised, time-definite delivery information to end-customers. Improve the customer experience at scale by embedding millions of address and time-slot predictions per day.

Efficient Ground Operations

Increase first-time-right deliveries and improve the driver experience with more accurate addresses. One logistics operator saw a 74% increase in the accuracy of transit time predicitons.

Modernised Distribution Centres

Automate high volume, manually intensive sorting and routing activities in distribution centres. Predict seasonal fluctations and take proactive steps to manage increased volumes.

Optimised Contact Centres

Improve agent productivity and reduce calls from customers chasing deliveries. Embedding AI-powered delivery time estimates into a customer-facing web portal could reduce call volumes by 40%.

In a customer-centric world, with rising costs of delivery, its vital to stay competitive and meet customer expectations. In a matter of weeks Inawisdom can take data you already hold to drive valuable insights. Our AI and ML models will help you identify the patterns in your data to better predict your ETA to improve customer experience, drive sales, enhance business operations and increase cost efficiencies.