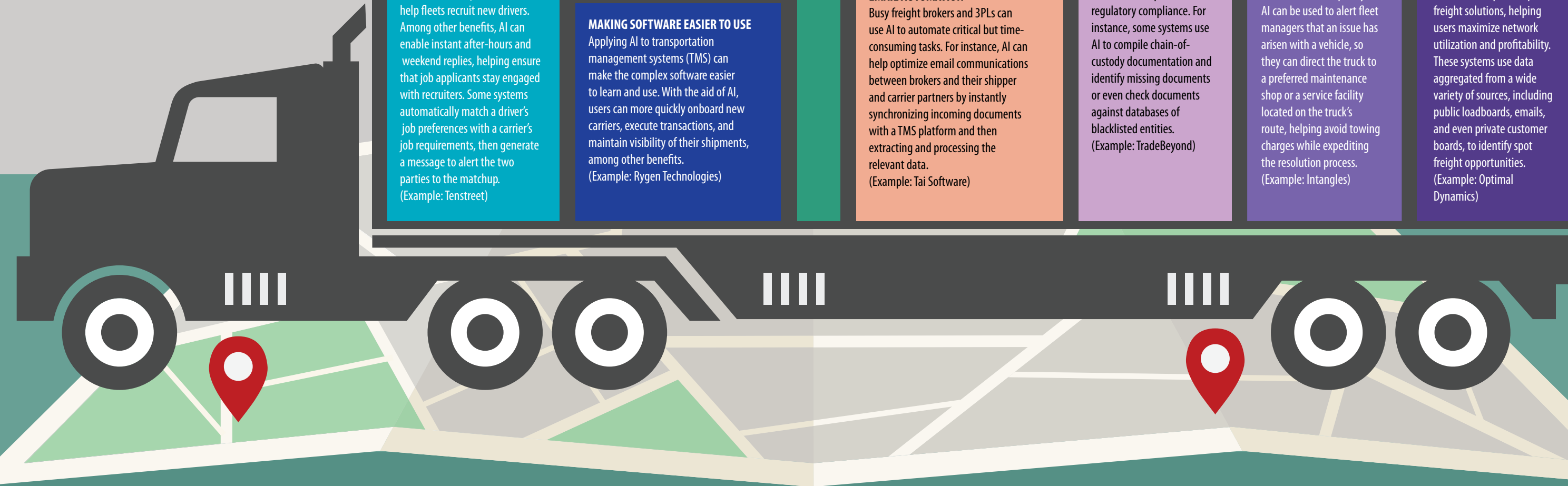


# How AI is transforming the business of trucking

Leaders across the logistics sector are hailing artificial intelligence (AI) as the technology of the future. But take a closer look at trucking operations today, and you'll find that AI is already here, playing a role at almost every step of a typical freight move. Here are 11 examples.

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## ROUTE OPTIMIZATION

AI algorithms can choose the most cost-effective, efficient routes for drivers. The systems work by collecting data on traffic congestion, inclement weather, and road closures in real time, then suggesting the fastest—and thus, most fuel-efficient—routes. (Example user: Logistics service provider Odyssey Logistics)

## RECRUITING NEW DRIVERS

Adding AI to human resources communication platforms can help fleets recruit new drivers. Among other benefits, AI can enable instant after-hours and weekend replies, helping ensure that job applicants stay engaged with recruiters. Some systems automatically match a driver's job preferences with a carrier's job requirements, then generate a message to alert the two parties to the matchup. (Example: Tenstreet)

## TRANSPORTATION PRICING

Shippers, freight brokers, and third-party logistics service providers (3PLs) can use AI to access predictive truckload pricing based on inputs like aggregated market data and transaction history. AI-enabled platforms provide freight market pricing intelligence by analyzing historical pricing information in relation to real-time market conditions to determine spot rates more accurately than traditional pricing methods can. (Example: the Truckload AI feature in Banyan Technology's Live Connect software, now integrated with Greenscreens.ai)

## MAKING SOFTWARE EASIER TO USE

Applying AI to transportation management systems (TMS) can make the complex software easier to learn and use. With the aid of AI, users can more quickly onboard new carriers, execute transactions, and maintain visibility of their shipments, among other benefits. (Example: Rygen Technologies)

## DOCUMENT MANAGEMENT

AI can help both shippers and carriers manage the reams of documents that accompany every transportation transaction. For example, one company is applying AI to the process of gathering proof of delivery (POD) documents for shippers—eliminating the need to chase down the PODs (which are required for payment verification and audit purposes) from diverse sources. (Example: TMS software and services provided by TMC, a division of freight broker/3PL C.H. Robinson)

## EMAIL AUTOMATION

Busy freight brokers and 3PLs can use AI to automate critical but time-consuming tasks. For instance, AI can help optimize email communications between brokers and their shipper and carrier partners by instantly synchronizing incoming documents with a TMS platform and then extracting and processing the relevant data. (Example: Tai Software)

## PREDICTIVE MAINTENANCE

AI-powered systems can predict when vehicles, trailers, and other machinery will require service by analyzing sensor data, time lapsed, distance traveled, engine hours, and engine fault codes, all in real time. This helps prevent roadside breakdowns, reduces costly unplanned repairs, and extends the life of the fleet's assets. (Example: ERoad)

## SHIPMENT TRACING

Integrating AI into track-and-trace systems can provide shippers with better visibility into their goods in transit and help with regulatory compliance. For instance, some systems use AI to compile chain-of-custody documentation and identify missing documents or even check documents against databases of blacklisted entities. (Example: TradeBeyond)

## EXPEDITING REPAIRS

Adding AI to truck maintenance platforms can help get vehicles that develop problems in transit back on the road quickly. AI can be used to alert fleet managers that an issue has arisen with a vehicle, so they can direct the truck to a preferred maintenance shop or a service facility located on the truck's route, helping avoid towing charges while expediting the resolution process. (Example: Intangles)

## SPOT FREIGHT PROCUREMENT

When contract truck service isn't available, AI-based platforms can recommend optimal spot freight solutions, helping users maximize network utilization and profitability. These systems use data aggregated from a wide variety of sources, including public loadboards, emails, and even private customer boards, to identify spot freight opportunities. (Example: Optimal Dynamics)

## DRIVER SAFETY AND TRAINING

AI-enabled cameras in a truck cab can provide both truck drivers and fleet managers with real-time information about the operator's surroundings while on the road. The systems use the data they collect to provide instant in-cab alerts that signal drivers to correct unsafe driving behaviors like distracted driving or speeding before they result in accidents. (Example: Netradyne)