

Motive Showcases Breakthrough Al—Wider Fleet Management Industry Needs to Follow Suit and Focus on the Benefits of High-Precision Al

Motive Launches New AI Products

NEWS

Motive has announced a new set of Artificial Intelligence (AI)-based products and platform enhancements purpose-built for a wide range of industries, including transportation and logistics, field services, construction, utilities and telecommunications, energy, food & beverage, and the public sector. Following are some of the integrated operations platform provider's new AI computer vision-based video announcements:

- **Fatigue Index:** As a part of Motive's AI-based video offerings, the company has introduced a Fatigue Index that analyzes over 10 fatigue indicators like yawning, eye rubbing, lack of movement, and abnormal speed changes to detect and provide alerts on drowsy driving before a crash.
- Lane Swerving Detection: Different from lane departure detection, the lane swerving detection capability flags repeated swerving over time. This is often a sign of fatigue or distraction.
- Unsafe Parking Detection: This capability alerts managers in real time when a vehicle is pulled over or parked in a high-risk area, helping to prevent highway shoulder parking collisions.

In addition, Motive has introduced AI Coach, which is the first (and only) Generative Artificial Intelligence (AI) avatar to automatically deliver personalized driver coaching. Powered by Large Language Models (LLMs), this solution delivers personalized video feedback curated to a specific driver's needs based on their performance.

On the Agentic AI side of things, Motive has announced its AI Assistant that sits across its platform. This AI assistant is meant to simplify day-to-day operations by surfacing critical, contextual insights, alerting time-sensitive issues such as bad weather and fault codes, and suggesting the best actions to address them in every aspect of Motive's product. Rounding things out, Motive Analytics has been introduced to enable organizations to gain AI-powered visibility into their comprehensive physical operations data using natural language questions in a single, unified view.

Al to Address Pain Points for Physical Operations and Fleets

IMPACT

Last year, the National Highway Traffic Safety Administration (NHTSA) reported that fatigue significantly contributed to a large share of crashes. In fact, driver fatigue was deemed the top reason for over 31% of fatal large truck crashes. Studies from the NHTSA and the Federal Motor Carrier Safety Association (FMCSA) have also found that around 65% of commercial vehicle operators often drive while tired, in addition to mobile device distraction being a continued concern. To address these persisting challenges, leading enterprises across industries are turning to Al-based monitoring solutions and deploying Al to monitor behavior in real time to curb distracted driving. What's more, commercial vehicles parked on shoulders or in high-risk spots are "sitting ducks" for secondary crashes and computer vision systems detecting those instances can potentially be a big deal for positively impacting employee safety.

Leveraging innovations such as Motive's AI Coach can also help address workforce management. Currently, fleets face a severe driver gap. In the United States, the American Trucking Associations (ATA) reported a shortage of over 60,000 drivers in 2023, projecting up to 160,000 by 2030. Canada faces similar pressures in long-haul and last-mile delivery. Al solutions can help here by not only making the job safer, but also increasing driver participation via driving coaches that give feedback tailored to individual drivers.

From an overall fleet management perspective, Al "digital assistants" can now proactively help make decisions. This can lead to reduced downtime and improved efficiency. Organizations can tighten the feedback loop and break down silos in fleet operations, enhancing both efficiency and employee morale.



Accurate AI Will Be Important to Derive Maximum Value

RECOMMENDATION

For enterprises looking to make AI investments, it is important to note that false positives can erode trust and lead to notification overload for frontline workers. Conversely, when AI fails to detect actual risky behavior, it can cause critical errors that could have been avoided. With this in mind, having a "human-in-the-loop" to filter out false positives and false negatives can add an extra layer of visibility that can reduce noisy data and ensure that accident prevention alerts are accurate. Motive looks to achieve this level of high-precision AI though its in-house safety team to review and validate footage in real-time, which is a differentiator in the market.

High-precision AI ensures that only meaningful and actionable events are flagged, translating to more accidents prevented, more time saved in reviewing incidents, more targeted driver coaching, and stronger buy-in from frontline workers who feel like they're being assessed fairly and not micromanaged. For enterprises with fleets and other physical operations that are looking to get the best value out of the solutions they choose, combining AI with human review workflows is key. This hybrid model ensures trust in automation while maintaining oversight, especially during early deployment stages. Motive is also a strong proponent of industrywide AI benchmarking to help establish industry standards and encourage head-to-head trials in the buying cycle so end users know how the technology performs in the real world. Enterprises must also bear in mind that data are coming from disparate sources vehicle telemetry, maps, and video. Combining these data points is the key to yielding maximum value to power business change. Enterprises need to ensure that data go through the funnel, and AI can help them become more proactive, improving data completeness and accuracy, which will be crucial.

Precise AI will be an important consideration for wider marketplace and ecosystem players as well, especially on the transportation execution side of things. High-precision fatigue detection, unsafe stops, or erratic driving behavior feeds directly into Hours of Service (HOS) compliance tools, which can enable more accurate rest-time recommendations, and audit readiness. Similarly, there is a need for Transportation Management Systems (TMSs) and route optimization providers such as HERE Technologies, Blue Yonder, Descartes, Kaleris, TMW (Trimble), etc. to take notice of this and leverage this push toward high-precision Al. Through this, there is a potential to minimize more risks by providing more accurate load rerouting and dispatch management based on the incoming real-time data.



Written by Adhish Luitel, Principal Analyst

Adhish Luitel, Principal Analyst at ABI Research, provides global supply chain management research coverage, including on fleet management, warehousing and fulfillment, retail technologies, and connected assets. He leads research on emerging areas such as telematics technologies, Al Video, aftermarket ADAS, autonomous trucks, material handling automation, and digital solutions implementation.