



Amazon Could Become the Next Big Player in Autonomous Driving

Insights

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Is Amazon becoming a car company? Not quite, but it may become the next big player in autonomous driving. As reported in several news articles like [Forbes](#) and [The Street](#), Amazon has been heavily investing in autonomous vehicle technology to both save money and make money.

AV technology can help Amazon deliver more of its goods itself, thereby saving the company money. Signs of this ambition can be seen as early as 2013 when the company began seriously investing in one type of autonomous transport technology: the use of drones to deliver packages. Further, in the past few years, it built out its supply chain and logistics network. Amazon is leasing approximately 40 planes and has bought thousands of branded truck trailers, which are a likely target for implementing widespread driverless technology because they regularly drive the same stretches of highway.

Amazon could use autonomous vehicle technology to enable easier drop-offs and last-mile deliveries of goods. For example, drones could communicate or pair up with driver vehicles to coordinate deliveries. Implementation of autonomous technology could lower the company's long-haul shipping costs by as much as 50 percent. Considering that Amazon's shipping costs are expected to grow to approximately \$75 billion by 2022, it stands to save a substantial sum of money by investing in autonomous vehicle technology.

As a corollary to saving money, Amazon could also be investing in AV technology as a way to protect its retail businesses from companies that work with competitors in the autonomous-vehicle arena. One such company is Waymo, the autonomous car company owned by Google parent Alphabet. While Waymo is not necessarily a threat to Amazon's Prime service at the moment, deeper integration between Google Shopping and Waymo autonomous cars could make it possible to deliver retailers' in-store or warehouse inventory to consumers in a matter of a few hours. Should that come to fruition, Waymo could effectively offer retailers an inexpensive way to compete with Amazon's Prime Now.

The company is not only investing in driverless technology but also looking to provide the platform that makes driverless vehicles possible to other companies through its cloud segment, Amazon Web Services (AWS). Current automotive customers that use AWS in some form or another include BMW, Lyft, Uber, and Audi. AWS performs simple functions (such as chat bots, customer targeting, and

marketing) to more complex functions (such as data collection, deep learning and simulation, and even over-the-air vehicles management and location-based services).

Self-driving vehicles have yet to hit the road in a major way, but Amazon's entry into this technology could have an immense impact on the entire retail and shipping industry. In particular, self-driving technology has the potential to make long-haul shipping cheaper and faster because, unlike human drivers, machines do not command a salary or require down time.

Amazon is the country's largest online retailer, holding 37.5 percent of online retail market share last year. Thus, when it makes a move, everyone else pays attention. If Amazon adopts self-driving technology, it may push others to do the same. Employers in shipping and delivery industry should be aware of this foray into self-driving technology. Although it may not be evident at first blush, numerous employment issues are implicated. Companies looking to incorporate automation into their business models should give careful forethought to everything from collective bargaining concerns to workplace safety issues.

If you have questions or concerns regarding how the adoption of AV technology may impact your company, contact [Samantha Saltzman](#) or any member of our [Autonomous Vehicles Practice Group](#).