

# Artificial Intelligence, Machine Learning and Robotics

## Artificial Intelligence and the Use of Pricing Algorithms

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Companies around the world are using algorithms to set their prices to gain a competitive edge. When done unilaterally, this doesn't run afoul of the antitrust law, but when done collectively, it can lead to civil and criminal penalties. Companies using pricing algorithms should consider the following tips to avoid even the appearance of pricing collusion with competitors.

### 1 KNOW THE LAW

Companies should know two federal laws that may be implicated when using pricing algorithms. Section 1 of the Sherman Act, 15 U.S.C. § 1, prohibits agreements that unreasonably restrain trade, including agreements between companies to set prices or use algorithms. Section 5 of the FTC Act, 15 U.S.C. § 45, prohibits "unfair" practices affecting commerce and does not require an agreement between companies. Violations of either of these laws may result in civil penalties, and the Sherman Act permits criminal prosecution of per se violations of the law.

### 2 DON'T AGREE OR COMMUNICATE WITH COMPETITORS ABOUT PRICING OR ALGORITHM CHOICES

Any agreement between two or more competitors to fix prices, even when an algorithm is the method by which the competitors implement the agreement, is a per se violation of the law. Whether the algorithm that effectuates the agreement is developed by a single competitor, used by both competitors, or provided by a third-party algorithmic supplier, any agreement to fix prices is illegal.

### 3 USE OF ALGORITHMS, WITHOUT AGREEMENT, IS NOT ILLEGAL

It is not illegal when competitors independently decide to use the same algorithm or when their use of separate algorithms results in similar prices among competitors.

### 4 BEWARE OF CLASS ACTION LAWSUITS

Companies should not be surprised by potential litigation when competitors' prices react to market conditions in a similar manner. Without agreement, any "conscious parallelism" between competitors with respect to pricing does not violate federal antitrust laws, but perceived similarity or parallelism could lead to an inference of improper coordination that may increase the risk of litigation.

### 5 SCOPE OF REGULATORY CHANGES ARE UNCERTAIN

Short-term regulatory changes are unlikely, but in the long term it is possible that federal agencies will be more aggressive in blocking mergers in concentrated industries that rely heavily on algorithms. It is unclear how existing antitrust laws will be used to regulate companies whose prices are ultimately established solely by machine learning, and thus without human involvement.