# Antitrust intelligence: six tips for talking to AI developers about antitrust

**Timothy Snyder**
*Associate,*
*Latham & Watkins, LLP*
*Washington DC*

**Kelly Fayne**
*Senior Associate,*
*Latham & Watkins, LLP*
*San Francisco*

**Karen Silverman**
*Partner*
*Latham & Watkins, LLP*
*San Francisco*

From collusion to price discrimination, antitrust regulators around the world are starting to focus on whether, when, and how artificial intelligence (AI) could enable a next generation of bad antitrust actors. While established precedent and concrete regulatory guidance remain in short supply, interest among lawmakers and regulators is intensifying. In February of this year, Margrethe Vestager, European Commissioner for Competition, said "we need rules to make sure artificial intelligence supports, instead of [harms], our fundamental values."[1] The Federal Trade Commission (FTC) devoted an entire day to *Competition and Consumer Protection Implications of Algorithms, Artificial Intelligence, and Predictive Analytics* in its recent hearings on competition and consumer protection in the 21st century.[2] At these hearings, Professor Maurice Stucke cited recent experimental evidence showing that "algorithms that . . . collude when playing with a human" can "reach a collusive outcome earlier than [a] human and human experiment."[3] Another speaker, Professor Joseph Harrington, warned: "Should at some future time algorithmic collusion occur and should it become ubiquitous, existing jurisprudence would offer no legal recourse of stopping it. Consumers are currently unprotected from algorithmic collusion."[4]

Nevertheless, AI – and for brevity we include in this term "machine learning" and "deep learning" technologies – holds great promise for companies and consumers. AI can help firms get the right products to the right customers faster and at lower cost. It can help organize logistics systems to cut out unnecessary expense. It can even save lives by improving disease diagnoses and predicting equipment failures. Despite all the good AI promises for companies and consumers, however, anxiety among many regulators and lawmakers remains high. While the world's competition regulators are figuring out how to fit AI-driven decisions and business practices into the existing antitrust framework (and whether new enforcement tools are needed), the task for antitrust advisors will be to prepare their clients and companies to navigate evolving regulatory environments.

Preparing begins with reframing the traditional approach to antitrust compliance.[5] In a world

1 Comm'r Margrethe Vestager, Eur. Comm'n, *An innovative digital future* (Feb. 8, 2019), https://ec.europa.eu/commission/commissioners/2014-2019/vestager/announcements/innovative-digital-future_en.

2 Press Release, Fed. Trade Comm'n, FTC Hearings on Competition and Consumer Protection in the 21st Century Continue with Examination of Algorithms, Artificial Intelligence, and Predictive Analytics 19-24 (Nov. 9, 2018), https://www.ftc.gov/news-events/press-releases/2018/11/ftc-hearings-competition-consumer-protection-21st-century-0.

3 FED. TRADE COMM'N, REMARKS BEFORE THE FTC HEARINGS ON COMPETITION AND CONSUMER PROTECTION IN THE 21ST CENTURY 60 (Nov. 14, 2018), https://www.ftc.gov/system/files/documents/public_events/1418693/ftc_hearings_session_7_transcript_day_2_11-14-18.pdf (remarks by Maurice Stucke); *but see id.* at 39-52 (remarks by Rosa Abrantes-Metz) (arguing that pricing algorithms may lead to more competitive rather than less competitive outcomes under certain circumstances).

4 *See id.* at 59 (remarks by Joseph Harrington).

5 Regulators may consider both the existence and design of

where employees (i.e., humans) *alone* made the decisions about pricing, promotions, competition, output, and capacity it makes sense that compliance programs focus on sensitizing the marketing and sales teams to the antitrust laws. But when those same decisions are delegated to or aided by complex and self-evolving algorithms, the approach should broaden. These technologies learn (quickly) and require regular monitoring for compliance with their initial purposes. So, the audience for antitrust compliance discussions has to expand to include AI developers and the dialog must be tailored to this new audience. In this article, we offer a few recommendations on how to have meaningful conversations with AI's developers, implementers, and users about spotting and avoiding antitrust pitfalls.

## 1. Get there early

Developers and engineers will tell you, it is much easier to design something new and "by design" than to fix it down the road. In fact, the Consortium for IT Software Quality estimates the cost of poor quality software in the US in 2018 was $2.84 trillion, with 21.42% coming from issues with legacy systems and 16.87% from resolving defects.[6] It's easy to see how the costs might add up for a poorly planned AI project. Consider, for example, a new AI-based pricing tool that will be integrated into a company's sales platform. Waiting until after launch to ask probing questions about how it interacts with competitor pricing data could prove costly. Making changes at this stage may disrupt the platform's core functionality. Or, it may mean leaving a problematic system in place until a replacement can be designed, tested, and implemented. If a new AI technology could affect customers, pricing, competitors, user access to competitive alternatives, or other key antitrust areas, involvement of counsel at an early development phase would be more efficient and less disruptive.

## 2. Rethink your audience

In a pre-AI world, antitrust compliance focused on the front lines of competition (sales and marketing teams, procurement teams, executives determining competitive strategy, etc.). In other words, the object has been to talk to and teach the people who make the decisions that have the potential to create antitrust exposure. As AI becomes more integrated into sales, procurement, and competitive decision making, however, the people who are making the critical decisions may be the AI engineers and product developers that designed the AI product in the first place. In this context, effective antitrust compliance requires getting as close to the AI as possible, and that is by talking to people who know the most about the technology. This could, and likely should, mean going deep into IT departments and data science divisions to find the people who truly speak the language of a company's AI.

Take, as a hypothetical, a vertically integrated manufacturer that both produces an input to a finished product and also competes with its downstream customers at the retail level. This manufacturer begins developing an AI program to optimize the prioritization by which competing downstream retailers' orders are fulfilled to maximize net revenue. Antitrust counsel would certainly want to understand whether the retailers have access to competing suppliers, whether any competing retailers are at risk of significant delay, and whether the resale prices of those competing retailers could factor into the optimization results. While the first question may sensibly go to sales and/or procurement departments, answers to the other questions require input from the program's developers.

---

compliance regimes when evaluating whether antitrust violations have occurred. For example, the U.S. Department of Justice (DOJ) recently indicated that it may give credit to the existence of a corporate compliance regime, even if it is ultimately unsuccessful in preventing an antitrust violation. Assistant Attorney General Makan Delrahim said in his recent remarks on the subject that "the time has now come to improve the Antitrust Division's approach and recognize the efforts of companies that invest significantly in robust compliance programs." Makan Delrahim, Assistant Att'y Gen., U.S. Dep't of Just., Remarks at the New York University School of Law Program on Corporate Compliance and Enforcement: Wind of Change: A New Model for Incentivizing Antitrust Compliance Programs (Jul. 11, 2019), https://www.justice.gov/opa/speech/assistant-attorney-general-makan-delrahim-delivers-remarks-new-york-university-school-l-0. DOJ guidance advises that the DOJ will consider three questions when evaluating a compliance program: (1) is the program well designed; (2) is the program applied earnestly and in good faith; (3) does the program work? *See* U.S. DEP'T OF JUSTICE, JUSTICE MANUAL, § 9-28.800 (Jul. 2019).

6 Herb Krasner, *The Cost of Poor Quality Software in the US: A 2018 Report* 5 (Consortium for IT Software Quality, Sept. 26, 2018), https://www.it-cisq.org/the-cost-of-poor-quality-software-in-the-us-a-2018-report/The-Cost-of-Poor-Quality-Software-in-the-US-2018-Report.pdf.

Effective antitrust compliance requires getting as close to the AI as possible.

## 3. Inspire antitrust awareness

With the exception of the occasional discovery request or synergies analysis, CTOs and their reports have largely been spared from having to focus on antitrust. Motivating any new group to spot antitrust issues begins with inspiring attention. As AI becomes more and more a part of competition, AI's developers, implementers, and users will need to understand that even technical decisions may receive legal scrutiny and that antitrust violations can result in serious criminal penalties, costly litigation, injunctions, and prolonged investigations.

The need for attention to antitrust is not merely theoretical. Antitrust scrutiny of digital markets, including AI, is on the rise around the globe and is unlikely to subside. For instance, the European Commission (EC) has committed resources to study AI's competitive effects.[7] In April 2019, a group of EC sponsored experts published guidelines for trustworthy AI development, which included "human agency and oversight," "transparency," and "accountability."[8]

US enforcers are also looking closely at digital markets and AI. For instance, FTC Commissioner Rohit Chopra explained during the Agency's hearings on "Algorithms, Artificial Intelligence, and Predictive Analysis" that the "FTC derives expertise and learnings from enforcement, but [it] must also engage in an analytically rigorous examination of data surveillance and monetization techniques, as well as an analytically rigorous assessment of the regulations and restraints imposed by today's digital marketplaces on their participants."[9] The Department of Justice has similarly voiced its focus on digital markets, including algorithms and AI.[10] Assistant Attorney General Makan Delrahim recently dedicated a speech to antitrust enforcement in digital markets, recognizing that "[w]hile antitrust is not a panacea for every policy challenge presented by the digital market, the Antitrust Division will not shrink from the critical work of investigating and challenging anticompetitive conduct and transactions where justified."[11]

Antitrust regulators and civil plaintiffs are not just looking closely at AI and the use of algorithms, they are taking action. In 2015, the DOJ charged David Topkins and his co-conspirators with adopting specific pricing algorithms to coordinate prices on wall posters sold through Amazon's marketplace.[12] The conspirators wrote computer code to algorithmically coordinate price changes,[13] illustrating AI's usefulness as a tool to enforce unlawful agreements. In 2016, a private litigant sued Uber, alleging the ride-sharing application reflects an "illegal business [plan] to fix prices among competitors and take a cut of the profits."[14] Essentially, plaintiffs alleged that Uber's pricing and payment application functioned as a hub-and-spoke price fixing scheme. Though the court ultimately compelled arbitration,[15] the case illustrates the litigation risks associated with price setting algorithms.[16]

7 *See supra* note 2.

8 Independent High-Level Expert Group on Artificial Intelligence, Ethics Guidelines for Trustworthy AI, at 14 (Apr. 8, 2019), https://ec.europa.eu/futurium/en/ai-alliance-consultation/guidelines#Top.

9 Comm'r Rohit Chopra, Fed. Trade Comm'n, Prepared Remarks at the George Mason University Antonin Scalia Law School: FTC Hearings on Competition and Consumer Protection 4 (Oct. 15, 2018), https://www.ftc.gov/system/files/documents/public_statements/1415765/chopra_-_prepared_remarks_ftc_hearings_session_3_10-15-18.pdf.

10 *The Division Tackles Digital Markets*, Dep't of Just., https://www.justice.gov/atr/division-operations/division-update-spring-2019/division-tackles-digital-markets (updated Mar. 27, 2019).

11 Makan Delrahim, Assistant Att'y Gen., Remarks at the Antitrust New Frontiers Conference, The Digital Economy and Economic Concentration: "…And Justice for All": Antitrust Enforcement and Digital Gatekeepers 11 (June 11, 2019), https://www.justice.gov/opa/speech/file/1171341/download.

12 Press Release, Dep't of Just., Former E-Commerce Executive Charged with Price Fixing in the Antitrust Division's First Online Marketplace Prosecution (Apr. 6, 2015), https://www.justice.gov/opa/pr/former-e-commerce-executive-charged-price-fixing-antitrust-divisions-first-online-marketplace.

13 The DOJ and David Topkins reached a plea agreement. Plea Agreement, *U.S. v. David Topkins*, No. CR 15-00201-WHO (N.D. Cal. Apr. 30, 2015), ECF No. 7, https://www.justice.gov/atr/case-document/file/628891/download.

14 First Amended Complaint at 1, *Meyer v. Kalanick*, No. 1:15-cv-09796-JSR (S.D.N.Y. Jan. 29, 2016), ECF No. 26.

15 *Meyer v. Kalanick*, 291 F. Supp. 3d 526, 537 (S.D.N.Y. 2018) (re-affirming its order to compel arbitration).

16 In 2018, India's competition authority dismissed similar allegations

## 4. Equip for issue spotting

Once sufficiently motivated, we think it is safe to assume that most AI developers, implementers, and users will be relatively new to antitrust. Training or compliance programs, therefore, may need to start at square one to a greater degree than they do today. This is particularly important because not all AI needs antitrust attention. While it would be wonderful if every new AI development could undergo rigorous review by antitrust counsel, preparing for triage seems more realistic.

Perhaps the easiest shortcut to triage antitrust risk is to ask one simple question: will any group of people feel disadvantaged by the product? If customers, competitors, suppliers, employees, or others have reason to complain about an instance of AI disadvantaging them in some way (assuming they knew everything about how it works), antitrust counsel should be brought in to understand who would be upset and why.

By providing AI developers, implementers, and users with guidance on the functionalities that could raise antitrust issues, counsel can help their companies and clients identify the times when a phone call is more likely to be worthwhile. For instance, certain antitrust-sensitive AI areas are more likely to require attention, such as pricing practices, customer targeting and interactions, treatment of competitors, supply agreements and procurement processes, customer engagement, and hiring.

AI developers can also be reminded to flag the need for antitrust review whenever there is some chance that the use of a similar tool by competitors could affect how the AI functions, or the outcomes it produces. Take, as a hypothetical, AI developed by internet retailer X to set the price displayed to customers. If retailer X's AI also scrapes competitor Y's site for prices, then the use of similar AI by competitor Y could mean that the two AI systems would develop interactive pricing. The susceptibility of both companies' AI to the use of AI by their competitor is a reason for close antitrust review.

It can also be helpful to remind those who are developing and deploying AI that antitrust risk increases in the presence of market power. For instance, AI that generates discounts, some of which could result in below-cost pricing, could experience increased antitrust scrutiny if the discounts (single product or bundled) involve products where the seller has a high market share.[17] While an AI development team need not be educated to the economics of market definition, outside counsel can help by identifying certain products or services where extra attention to antitrust is worthwhile. However, focusing only on the areas where a company has high market shares does not address the need to detect and avoid illegal coordination with competitors, violation of state unfair competition laws, and prohibitions on price discrimination.[18]

## 5. Talk the tech

Teaching AI developers, implementers, and users to speak antitrust is only half of the battle. Counsel should be prepared to make an equal investment in learning the technology. A deep and thorough facility with the technology may also precipitate a positive shift in how organizations view the role of the legal department in product development. The more counsel is seen as a partner rather than a rubber stamp or roadblock, the more they are likely to contribute to smart AI development and deployment.

Of course, higher degrees in engineering and data science need not be prerequisites to effective antitrust counsel. A few key features and functions are the most important for counsel to understand.

- **What is it for?** What is the goal of the technology and why is it being developed? What will it do when it is operating well? Will there be any impact on prices, discounts, the availability of products, and to whom they are sold? Will it affect how the company interacts with its customers or competitors? How will we know if it is working? How will it know when to stop?

against Uber and Ola, another ride-hailing company. *In re: Samir Agrawal*, (2018), Case No. 37 (Competition Comm'n of India), https://www.cci.gov.in/sites/default/files/37of2018.pdf.

17 Sherman Act, 15 U.S.C. § 2 (2000); *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 222, 224-25 (1993).

18 For example, the *Robinson-Patman Act*, which prohibits price discrimination under certain circumstances, could be a growing area for private antitrust complaints if AI results in different customers receiving different prices for the same commodities. Clayton Act, 15 U.S.C. § 13(a)-(f) (2012).

- **What are the inputs?** What data does the tool rely on? Where and how are those data stored? Are data scraped from third party websites? Is any data purchased? From whom does the data derive and who else has access to similar data?

- **What does it do?** How does the tool use the input data to achieve its purpose? Is it an algorithm? Is it self-learning? What are the key "decisions" the tool is called upon to make? If the tool has the ability to evolve through repeated interactions, how will its evolution be monitored (and what are its limits)?

- **Where did it come from?** Is this tool homegrown? Acquired from a third party? Do others (especially competitors) use something similar?

Using the same AI as a competitor could be problematic, or agreeing upon datasets, especially if the systems interact in a way that creates the inference of coordinated price increases or output reductions. A pre-AI enforcement action illustrates why. In 1994, the DOJ settled charges that six airlines colluded on setting airline fares by using a jointly owned computerized online booking system called the Airline Tariff Publishing Company (ATPCo.).[19] The purpose of the system was to share fare information with travel agents and the public, but some airlines allegedly used the system to signal fare changes and reach understandings to limit discounting. AI could raise similar scenarios, especially when competitors use the same or similar tools, and/or rely on the same or similar data.

If counsel act as partners they are more likely to contribute to smart AI development and deployment.

## 6. Expect evolution and keep in touch

Regulators, lawmakers, and academics are vigorously debating whether current antitrust doctrine can adequately police AI. For example, there is an ongoing debate about what should constitute an "agreement in restraint of trade" (i.e., collusion) under the Sherman Act. Under current laws, parties that agree to restrain trade by, for example, allocating markets, only violate the law if there is an actual agreement (i.e., if humans had a meeting of the minds). If competitors simply observe one another and react with an understanding that the other will react in parallel without ever reaching an agreement (e.g., A chooses not to sell in the west knowing B will refrain from selling in the east), there is no Sherman Act violation. Yet there is little economic difference to consumers between express collusion (illegal) and conscious parallelism (legal). The decision of the US agencies to permit tacit coordination today reflects a practical enforcement limitation that recognizes criminalizing tacit behavior risks over-enforcement resulting in too many Type I errors.[20] But does this balance hold when AI is responsible for competitive decision-making and there are no human minds to meet? If regulators and lawmakers are dissatisfied with this outcome, we can expect interest in reshaping antitrust to persist with the goal of handling the new challenges presented by AI.

As AI evolves and becomes more prevalent, legal and economic experts are likely to develop additional theories and empirical studies of the impact of AI on competition. As discussed above, regulators and lawmakers worldwide are already taking a close look at digital markets and AI. To keep up with the pace of innovation in AI (and in antitrust) it is critical for companies developing and deploying AI to maintain an ongoing dialogue with antitrust counsel to manage risk.

## Conclusion

Artificial intelligence, machine learning, and deep learning present tremendous prospects for businesses and consumers, but these tools also face regulatory uncertainty and skepticism, particularly given the close attention that

19 Press Release, U.S. Dep't of Just., Justice Department Settles Airlines Price Fixing Suit, May Save Consumer hundreds of Millions of Dollars (Mar. 17, 1994), https://www.justice.gov/archive/atr/public/press_releases/1994/211786.pdf.

20 *See generally* Frank H. Easterbrook, *Limits of Antitrust*, 63 Texas L. Rev. 1 (1984).

competition regulators around the globe are paying to digital markets. Antitrust risk management now depends on the help and attention of the developers, implementers, and users on the front lines of AI to prepare for, spot, and manage a new wave of antitrust challenges. Helping AI's experts develop antitrust intelligence starts with reframing and expanding the conversation about AI and antitrust. Through continued dialogue, AI's engineers and their lawyers will be better equipped to evolve with the challenges ahead.