As AI Pricing Tools Evolve, So Does Antitrust Risk

By **Bradley Justus, Denise Plunkett and Lindsey Strang** (September 28, 2023)

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Once a futuristic prospect, artificial intelligence is now mainstream. ChatGPT, an AI chatbot that allows users to instantly generate prose on nearly any topic, is quickly becoming a household name. Stakeholders and regulators across industries are scrambling to respond to the proliferation of AI.

While university administrators hatch plans to prevent students from getting by with AI-generated essays, antitrust regulators are focused on AI's potential impact on competition. Against this backdrop, companies developing or using either AI or algorithmic pricing tools should keep alert to potential antitrust risks.

Increased Regulatory Scrutiny

In a May New York Times interview, Lina Khan, chair of the Federal Trade Commission, discussed her view that regulation of AI is necessary to prevent large tech companies from further entrenching their purported dominance.[1] Khan and others posit that without oversight by antitrust agencies, incumbents may leverage data, cloud services and computing power to lock out innovative newcomers attempting to compete in the AI space.[2]

The feared result is that only a few large companies will hold keys to this pivotal new kingdom.

Antitrust regulators also have expressed concerns that companies may deploy AI-powered algorithms to coordinate prices with competitors. In 2022, Richard Powers, the U.S. Department of Justice Antitrust Division's deputy assistant attorney general for criminal enforcement, observed that "it is increasingly possible that competing companies will use algorithms that communicate and coordinate with each other without any human-to-human communication."[3]

Antitrust Division Principal Deputy Assistant Attorney General Doha Mekki subsequently raised the potential for even historical, aggregated data to pose a threat to competition through the use of AI.[4] Enforcers say they expect companies to take proactive steps to ensure their use of AI-powered algorithms does not harm competition. Antitrust Division chief Jonathan Kanter delivered a directive for companies to "start training your AI just like you train your employees."[5]

The use of pricing algorithms has given rise to enforcement and civil actions. On the far end of the spectrum are clear-cut attempts at price-fixing through the use of algorithms in place of intercompany communications through employees. This is nothing new and is essentially the scheme alleged in the criminal investigation into sellers of posters on Amazon that resulted in a guilty plea by executive Daniel William Aston and his company, Trod Ltd., in 2016.[6]

The lesson learned is unremarkable: You cannot agree to coordinate prices with competitors by using algorithms instead of employee communications.

Recent Algorithmic Pricing Developments

Pricing tools have become more sophisticated since the poster price-fixing case, unlocking potentially significant procompetitive benefits and introducing more complexity to the potential antitrust risks.

For example, AI-powered pricing algorithms can expand output by suggesting lower prices when supply outstrips demand, facilitating the matching of buyers and sellers, and providing greater transparency in markets with asymmetric availability of pricing information.

At the same time, private lawsuits challenging competing companies' use of common pricing software are multiplying. In October 2022, news broke that RealPage Inc., a software company, was publicly stating that its revenue management software was responsible for driving as much as a 14.5% increase in apartment rental prices.[7]

RealPage and the property management companies that used RealPage's software are now defending against class action claims in the In re: RealPage Inc. Rental Software Antitrust Litigation in the U.S. District Court for the Middle District of Tennessee that they conspired to use the software to inflate the rents charged to tenants.[8]

The plaintiffs have alleged that the challenged software deploys algorithms to analyze large volumes of data to generate price recommendations and provide landlords an anonymous view of what their nearby competitors are charging.[9]

In its defense, RealPage has explained that its software does not always push prices up; it can also detect demand drops and suggest lower rents.[10]

Several Las Vegas hotels are facing a similar class action in the U.S. District Court for the District of Nevada. The Jan 25 Gibson v. MGM International complaint alleges the use of AI pricing algorithms developed by the Rainmaker Group to generate room rate recommendations using data collected from competing hotels.[11]

The Rainmaker Group allegedly touted that its room rate recommendations were accepted by the defendant hotels 90% of the time.[12] The plaintiffs have alleged that defendants' revenues have increased by up to 15% from using the challenged software.[13]

Most recently, 18 property management companies were sued in the U.S. District Court for the Western District of Washington for allegedly using pricing software developed by Yardi Systems to drive up the rents at multifamily rental properties across the country.[14]

As in the other recent cases, the plaintiff, McKenna Duffy, alleges that Yardi Systems touted its ability to help the property management companies inflate prices, including by eliminating "traditional sales devices such as concessions and specials," according to the Sept. 8 Duffy v. Yardi Systems complaint.[15]

One interesting aspect of these cases is that the plaintiffs do not appear to rest their cases on the contention that the competitors actually agreed to use common algorithms to drive up industry prices, as the Amazon poster sellers allegedly had done. Instead, the plaintiffs seem poised to argue that the common use of algorithmic pricing software by competing companies is itself evidence of tacit collusion.

The contours of this theory of liability are uncertain, and its likelihood of success remains to be seen as there are many open questions to consider:

- To what extent does liability rest on the competing companies each being aware of the others' use of the software?
- Is it a sufficient defense if a company frequently did not accept the algorithm's pricing recommendations?
- Is the use of the AI-powered pricing tools still actionable if there is a clear record of also recommending price decreases?
- What if the algorithmic pricing is visible to both buyers and sellers — e.g., as with used car websites, such as Carvana, that allow both buyers and sellers to compare posted prices to historical trends?

Practical Implications

Given the keen interest of regulators and private plaintiffs in the potential use of AI and algorithmic pricing tools to harm competition, companies need to be smart about how they navigate these choppy waters.

Companies developing AI-enabled technology should anticipate regulator concerns that AI may lead to consolidation in numerous technology markets.

While companies developing AI-enabled technology have no obligation to level the playing field by giving away the fruits of their labor, they should be alert to the FTC's increased emphasis on so-called open first, closed later practices where the ability for competitors to interoperate with an incumbent platform are limited over time.[16]

Large companies should also brace themselves for in-depth regulatory reviews of any transactions with rivals in the AI space. To win clearance, they should be prepared to demonstrate that other players have access to the information and know-how needed to compete with their AI technology.

Key Takeaways

Companies developing or using algorithmic pricing tools should ensure they are able to establish the procompetitive benefits of the tools and follow other practical guidelines to limit antitrust risk.

First, when using a pricing algorithm that relies on public market data, ensure that users can still make independent pricing decisions. If tools facilitate automatic generation of prices at a certain level across all competitors, the result could give rise to antitrust concerns.

To avoid this, it is important to ensure actual pricing decisions remain independent, and that the recommendation generated by the pricing algorithm is one factor among others considered in price-setting.

Second, if the pricing algorithm relies on nonpublic market data, it is important to have a clear and well-documented procompetitive justification. The antitrust risk is greater in

situations where companies employ algorithmic pricing tools that recommend pricing on the basis of nonpublic data —e.g., data collected individually from competing companies, as is alleged in the RealPage suit.

Here, again, it is important for companies to ensure they are continuing to make independent pricing decisions. Companies should also carefully establish the legitimate reason for the collection and use of nonpublic data. For example, information sharing could expand output by facilitating the matching of buyers and sellers in a particular geographic area.

Third, avoid suggestions that the pricing algorithms serve only to increase prices. A pricing algorithm that helps a company determine not just where it has opportunities to raise prices, but also where it may be priced too high to win sales is less likely to draw scrutiny.

Companies should be thoughtful about how they employ and describe such tools to avoid the suggestion that the pricing algorithms only push prices up. Algorithms that have the clear effect of driving up prices — particularly if those increases are considerable, rapid, or otherwise unwarranted — will likely attract scrutiny.

Finally, when feasible, avoid asymmetry in information access. In some industries, all parties to transactions have considerable, and equal, access to extensive pricing data.

For example, used car websites provide both buyers and sellers access to real-time comparisons of posted prices to sales of comparable vehicles. In contrast, when sellers have exclusive access to the relevant data used to determine pricing, there is a greater risk that buyers may allege increased prices or decreased competition.

The use and scrutiny of AI and algorithmic pricing tools is rapidly proliferating. Companies in this space or considering entering it should be mindful of the evolving legal landscape and proactive in minimizing the legal and regulatory risk associated with it.

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[7] Heather Vogel, Haru Coryne, and Ryan Little, Rent Going Up? One Company's Algorithm Could Be Why, ProPublica (Oct. 15, 2022), https://www.propublica.org/article/yieldstar-rent-increase-realpage-rent.

[8] See First Amended Class Action Complaint, Meredith, et al. v. RealPage, Inc., et al., No. 3:23-md-03071 (M.D. Tenn. Sept. 7, 2023), ECF No. 527; Second Amended Consolidated Class Action Complaint, Goldman, et al. v. RealPage, Inc., et al., No. 3:23-md-03071 (M.D. Tenn. Sept. 7, 2023), ECF No. 530.

[9] Second Amended Consolidated Class Action Complaint, Goldman, et al. v. RealPage, Inc., et al., No. 3:23-md-03071 (M.D. Tenn. Sept. 7, 2023), ECF No. 530. at 92.

[10] Heather Vogel, Haru Coryne, and Ryan Little, Rent Going Up? One Company's Algorithm Could Be Why, ProPublica (Oct. 15, 2022), https://www.propublica.org/article/yieldstar-rent-increase-realpage-rent.

[11] Class Action Complaint, Gibson, et al. v. MGM Resorts International, et al., No. 2:23-cv-00140-MMD-DJA (D. Nev. Jan. 25, 2023), ECF No. 1.

[12] Id. at 18.

[13] Id. at 8-9.

[14] See Class Action Complaint at 2, Duffy v. Yardi Systems, Inc., et al., No. 2:23-cv-01391 (W.D. Wash. Sept. 8, 2023), ECF No. 1.

[15] Id. at 2.

[16] Staff in the Bureau of Competition and Office of Technology, Generative AI Raises Competition Concerns (June 29, 2023), available at https://www.ftc.gov/policy/advocacy-research/tech-at-ftc/2023/06/generative-ai-raises-competition-concerns.