

Platform Pricing, Information Asymmetry, and Antitrust Risk

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I. Introduction

Multi-sided platforms have become a defining feature of modern commerce. Millions of businesses, large and small, participate in them every day. Amazon accounts for 35.7% of the \$1.2 trillion U.S. e-commerce sales, and its third-party sellers generated approximately \$575 billion in gross merchandise volume in 2025. Shopify powers 14% of U.S. e-commerce market and processed \$378 billion in gross merchandise volume in 2025.^[1] In short-term lodging, Airbnb commands approximately 44% of the global short-term rental market with revenue of \$183 billion in 2024.^[2] A growing range of other sectors, such as online travel and ride-sharing, also use multi-sided platforms to connect sellers and buyers.

To help their sellers thrive, platforms have increasingly deployed sophisticated pricing recommendation tools. These can be economically efficient, reducing the information burden on individual sellers who lack the resources to price optimally on their own. But platforms hold a structurally unique position that can create antitrust risk. By intermediating transactions between sellers and buyers, a platform accumulates private information that would otherwise remain siloed. Each seller knows its own costs and transaction history, each buyer knows her own preferences and willingness to pay, but the platform knows all of it, in aggregate and in real time. Such informational privilege is both the source of platform efficiency and the root of antitrust concern.

A companion paper, “Pricing Algorithms and Antitrust Risk: Lessons from RealPage,” examines the first and most direct theory of harm: a pricing intermediary that aggregates nonpublic competitor information to generate recommendations, as illustrated by the DOJ’s enforcement action against RealPage, Inc. This paper takes that case as a starting point and examines two additional theories of harm that arise specifically in multi-sided platform contexts, where the platform’s informational position is more complex and the potential theory of harm extends beyond horizontal seller coordination.

II. RealPage as Baseline: Information Aggregation Across Competing Sellers (Theory 1)

The RealPage case established that when a pricing intermediary pools real-time, nonpublic data from competing sellers and feeds that pooled data back into pricing recommendations, the arrangement can constitute unlawful coordination under Section 1 of the Sherman Act, even without any direct communication among the competing sellers themselves. The DOJ’s proposed November 2025 consent decree would prohibit RealPage from using nonpublic competitor data in its recommendations and require that any nonpublic data used for model training be at least 12 months old. For a full account of the case and its legal foundations, see the companion paper.^[3]

This theory of harm concerns the seller side of the market: competing sellers sharing data through a common intermediary, whose recommendations suppress independent price competition among them. Multi-sided platforms create two additional theories of harm that go beyond this baseline. Both flow from the platform's privileged access to information on multiple sides of the market simultaneously.

III. Theory 2: Exploitation of Buyer-Side Information for Price Discrimination

A multi-sided platform does not merely aggregate seller data. It also accumulates rich behavioral data about buyers, including search histories, browsing patterns, purchase timing, and price sensitivity signals. Individual sellers on these platforms have no independent access to this buyer-side intelligence.

When a platform's pricing recommendations to sellers are informed by this buyer-side data, the seller is effectively leveraging the platform's surveillance of its own customers to extract more value from each transaction. The platform can guide sellers to discriminate across identifiable buyer segments in ways that individual sellers could not achieve on their own. Buyers, meanwhile, are unaware that their behavioral data is shaping the prices they are offered.

This theory is distinct from Theory 1. The harm does not require horizontal coordination among competing sellers. It flows from the platform's exploitation of buyer-side information that it collects and controls: the platform knows what each buyer is willing to pay, and it uses that knowledge to help sellers extract more consumer surplus. The sellers benefit individually, the platform earns more fees from sellers, and buyers pay more than they would in a market where sellers lacked this intelligence.

This theory fits awkwardly within U.S. antitrust doctrine. Sherman Act Section 1 requires an agreement among competitors; Section 2 addresses monopolization and exclusionary conduct. Neither provision is naturally suited to the exploitation of buyer-side information, which involves no horizontal coordination and may not rise to the level of exclusionary conduct required for a monopolization claim.

EU competition law, however, offers a more direct hook. Article 102 TFEU prohibits abuse of dominance, including exploitative practices such as unfair pricing. Critically, intent is irrelevant: a regulator only needs to show that conduct is capable of producing anticompetitive effects. A dominant platform systematically guiding sellers to extract maximum consumer surplus from identifiable buyer segments is a plausible candidate for exploitative abuse, particularly where the platform controls the data infrastructure that makes such discrimination possible and buyers have no meaningful way to opt out.^[4]

IV. Theory 3: Pricing Recommendations as Coordination Mechanisms

The third theory of harm does not require any explicit use of competitors' data in a pricing recommendation. It arises when the recommendation itself, issued by a common platform to many competing sellers, functions as the coordination mechanism that replaces independent price competition.

The economic theory of tacit collusion identifies a focal point as a central mechanism through which competitors can achieve supracompetitive outcomes without direct communication. A pricing recommendation issued by a shared platform, accepted by a significant share of competing sellers, functions as precisely such a focal point. Each seller knows it is receiving the same platform's guidance as its rivals. Adoption of the recommendation signals alignment. When the platform additionally discloses how many competing sellers have adopted its recommendation, it supplies the common knowledge that converts conscious parallelism into a legally cognizable coordination problem.

This theory extends beyond data input aggregation across competitors (i.e., Theory 1). A platform could generate recommendations using only publicly available data and each seller's own information, fully complying with the RealPage consent decree's data restrictions, and still produce coordination if its recommendations are sufficiently uniform across competing sellers and if adoption is sufficiently widespread. The harm lies in the coordination mechanism the recommendation system creates, not in the nonpublic data it consumes.

U.S. law doesn't support this theory well. Section 1 requires an agreement. As such, parallel adoption of a common platform's recommendations alone may not satisfy that requirement. The conscious parallelism doctrine allows courts to infer an agreement from parallel conduct when accompanied by "plus factors," and a platform's disclosure of adoption rates is a strong candidate. But the evidentiary bar is high, and the doctrine has not been tested in the context of algorithmic recommendation systems at scale.

In contrast, EU law provides a more practical framework. The landmark Eturas decision (Case C-74/14, ECJ 2016) involved multiple travel agencies using a shared booking platform whose operator introduced a technical restriction on discount offers and notified participating agencies.^[5] The European Court of Justice (ECJ) held that this could constitute a concerted practice under Article 101(1) of the Treaty on the Functioning of the European Union (TFEU) if agencies were aware of the notification, even without any direct communication among them. ECJ stated that infringement to Article 101(1) of TFEU "*may be proven not only by direct evidence, but also through indicia, provided that they are objective and consistent*" (par. 37).^[6] The principle is significant: passive participation in a shared system, with awareness of its coordination-enabling features, can satisfy the concerted practice requirement. Applied to platform pricing recommendations, a platform's disclosure of adoption rates to participating sellers could, under Eturas, support a finding of concerted practice without any bilateral communication among the sellers themselves.

VI. Practical Implications

For platforms deploying pricing recommendation systems, the three theories above translate into a set of practical implications for both compliance review and risk assessment. The inquiry cannot stop at data inputs alone. It must address the full architecture of the recommendation system, its reach across the market, and the mechanisms by which its outputs are communicated and adopted.

- **Evaluate both sides of the market.** Platforms that use buyer-side behavioral data to inform seller-facing pricing recommendations may have risk arisen from Theory 2, particularly under EU law. The information asymmetry the platform controls is itself the source of risk.

- **Assess recommendation uniformity and market coverage.** Even a recommendation system that uses only public data and each seller's own information creates Theory 3 exposure if its recommendations are sufficiently uniform and its adoption among competing sellers is sufficiently widespread, particularly under EU law.
- **Treat adoption-rate disclosures as a distinct risk factor.** Communicating to participating sellers how many competitors have accepted a recommendation elevates legal risk under the EU law, independently of the algorithm's data inputs.
- **The EU and US law gap is material.** Conduct that does not rise to a Sherman Act violation may still constitute a concerted practice under Article 101 or an exploitative abuse under Article 102. Cross-jurisdictional assessment is essential for platforms with significant EU operations.

Cross-jurisdictional coordination on compliance is therefore no longer optional for platforms operating on scale. A recommendation system that passes muster under U.S. law may still expose the platform to substantial risk under Article 101, Article 102, or gatekeeper obligations in the EU. Building compliance programs that address all three jurisdictions simultaneously — and that account for both data inputs and the structural features of how recommendations are generated, communicated, and adopted — is the most prudent path forward.

VII. Conclusion

The RealPage case established that algorithm-assisted coordination through a common pricing intermediary is an active antitrust enforcement priority. The two additional theories examined in this paper extend that concern to the full informational structure of multi-sided platforms. A platform that simultaneously accumulates seller data, holds privileged buyer intelligence, and issues pricing recommendations to a significant share of a market is doing more than any one theory captures.

As platform pricing tools become more sophisticated and more widely adopted across sectors, both U.S. and EU regulators will develop more targeted methods of detection and proof. The analytical frameworks are still maturing, but the direction has become clear: platforms cannot assume that limiting nonpublic data aggregation alone insulates their pricing recommendation systems from antitrust scrutiny. The coordination risk is structural. Managing it requires attention to system design — including how broadly recommendations are issued across competing sellers, how uniform the outputs are, and whether adoption rates or other coordination-enabling signals are disclosed to participating sellers — not only to what data the system consumes.

Sources

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