Big Data in a Competition Environment

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I. INTRODUCTION

The U.S. Federal Trade Commission (“FTC”) is one agency with two missions: promoting competition and protecting consumers. Of course, competition and consumer protection laws have at their core the same fundamental goal: to promote consumer welfare through fair and vigorous competition unaltered by false, deceptive, or unfair tactics. In some circumstances, a particular set of facts may raise both competition and consumer protection issues. One area in which the two missions seem most likely to converge is in the world of big data.

To be clear, these would be distinct concerns. Despite calls to use the merger review process to improve privacy protections for consumers, the FTC continues to examine competition and consumer protection issues separately, examining the facts to determine if there is a potential violation of any law the FTC enforces. On the competition side, the inquiry remains focused on whether a merger is likely to create or enhance market power or facilitate its exercise, which can harm consumers by reducing competition along price and non-price dimensions such as quality or service.² We examine the extent to which the merging parties compete, who else competes, and whether others are likely to enter into the market. Since the decisions firms make about consumer privacy can lead to a form of non-price competition, the FTC has explicitly recognized that privacy can be a non-price dimension of competition.³

Although the FTC has yet to challenge a merger on the basis of a reduction in non-price competition over privacy protections, in some transactions involving data markets the FTC’s challenges clearly lay the foundation for that potential case.

II. COMPETING WITH BIG DATA

The growing importance of data to modern business has long been apparent in the FTC’s competition enforcement work. As early as 1996, when the FTC sought to undo a merger-to-monopoly in the field of salvage information management systems used by scrapyards and auto

¹ Deborah Feinstein is the Director of the FTC’s Bureau of Competition. The views expressed herein are the author’s and not necessarily those of the Commission or any Commissioner.

² U.S. Dep’t of Justice & Fed. Trade Comm’n, Horizontal Merger Guidelines 2 (2010): Enhanced market power can also be manifested in non-price terms and conditions that adversely affect customers, including reduced product quality, reduced product variety, reduced service, or diminished innovation. Such non-price effects may coexist with price effects, or can arise in their absence. When the Agencies investigate whether a merger may lead to a substantial lessening of non-price competition, they employ an approach analogous to that used to evaluate price competition.

³ Statement of the Commission, Google/DoubleClick, FTC File No. 071-0170 (Dec. 20, 2007).
repair shops, we have examined the ways that firms compete using data as a product, an input, or a tool for making competitively significant decisions.

By way of illustration, consider the FTC’s recent challenge to the merger of two firms providing rooftop aerial measurement services used by insurance companies to estimate repair costs for property damage claims. Prior to the development of these products, insurance adjusters or contractors would climb damaged roofs to obtain measurements—with obvious safety concerns and accuracy challenges. Based on our investigation of the likely competitive effects of the proposed merger, we heard that insurance companies prefer up-to-date, high-quality aerial images to calculate measurements of damaged buildings and to allow adjusters to identify attributes of the insured properties. The insurance companies also prefer that the measurement products integrate seamlessly with estimation software.

EagleView Technology Corporation was the self-proclaimed “industry standard,” controlling approximately a 90 percent share of the market and serving most of the top 25 insurance carriers. EagleView had the most extensive aerial image library, while Verisk had the leading claims estimation software and a smaller proprietary aerial image library. From that position, Verisk entered the market to compete directly with EagleView and, within two years, Verisk had succeeded in winning significant customers away. Based on concerns about the elimination of that direct and growing competition through the proposed merger, the FTC filed an administrative complaint and authorized staff to seek a preliminary injunction to prevent the merger. The parties abandoned their plans after the complaint was filed.

Mergers involving competing data providers can present unique, but not different, issues for competition analysis. For instance, market definition must account both for the dynamic nature of data, which must be updated and verified to retain its value, as well as the way that firms use data to compete. In some markets, data is the product—for instance, in the case of a database. In other markets, data is a key input, and firms compete to provide customized verification, analytics, or reporting to sophisticated customers. Using standard market definition analysis, the FTC has challenged mergers involving integrated drug information databases, electronic public record services for law enforcement customers, title plants, and electronic systems used to estimate car repair costs.

Similarly, entry conditions may be affected when incumbents have significant advantages over newcomers. For instance, the data involved may be publicly available, but existing firms used by insurance companies to estimate repair costs for property damage claims. Prior to the development of these products, insurance adjusters or contractors would climb damaged roofs to obtain measurements—with obvious safety concerns and accuracy challenges. Based on our investigation of the likely competitive effects of the proposed merger, we heard that insurance companies prefer up-to-date, high-quality aerial images to calculate measurements of damaged buildings and to allow adjusters to identify attributes of the insured properties. The insurance companies also prefer that the measurement products integrate seamlessly with estimation software.

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4 Automatic Data Processing, Inc., Dkt. No. 9282 (FTC complaint issued Nov. 14, 1996). ADP settled the charges by agreeing to divest the former AutoInfo assets and to grant the divestiture buyer an unrestricted license to its proprietary cross-indexed numbering system for auto parts. Nearly twenty years later, the FTC required divestitures to restore competition in the same market after the merger of two of the three leading providers. Solera Holdings, Inc., No. C-4415 (FTC complaint issued Jul. 29, 2013).


7 Reed Elsevier NV, No. C-4257 (FTC complaint issued Sept. 15, 2008).


may have developed sophisticated analytic techniques or gained a reputation for reliability that makes it difficult for new entrants or fringe competitors to challenge established competitors.\(^\text{10}\) In other cases, the data is not publicly available, and incumbents have a significant head start collecting and verifying data so that it would be difficult, costly, and time-consuming for a new firm to match the offerings of existing firms.\(^\text{11}\) Sometimes, the databases serve as a platform for buyers and sellers to meet, such as is the case with real estate listing services,\(^\text{12}\) in markets where network effects can be difficult to overcome.

Finally, the depth and scope of incumbents’ data stores may have implications for innovation—or, more precisely, how new or existing firms can access and use data to develop new products. In *Nielsen Holdings/Arbitron*, the FTC alleged that the proposed merger would eliminate future competition to develop a national syndicated cross-platform audience measurement service.\(^\text{13}\) According to the FTC, the two companies were best-positioned to develop this new product because they were the only firms with large, representative panels capable of reporting TV programming viewership, including individual demographic data such as age and gender information. To ensure that the merger did not eliminate emerging competition for these future products, the FTC required Nielsen to divest and license assets, including a royalty-free license to Arbitron’s data for eight years, so that an FTC-approved buyer could successfully develop a service to compete with Nielsen’s future product.

### III. PRIVACY CONCERNS WITH CONSUMER DATA

With more and more data being collected about consumers—from their shopping habits to their sensitive health information—it was inevitable that the FTC would examine markets that include consumer data. In 2007, the FTC reviewed Google’s acquisition of DoubleClick, which combined Google’s user search data with DoubleClick’s browsing data. After an extensive investigation, the FTC determined that Google and DoubleClick did not directly compete in any relevant market.

Moreover, the FTC examined a number of theories of potential harm due to leveraging, but found that the merger did not give Google an advantage that its rivals could not match. For instance, the staff determined that many of Google’s most significant competitors in the ad intermediation market—firms the likes of Microsoft, Yahoo!, and TimeWarner—had access to their own unique data stores and popular search engines sufficient to compete vigorously against Google.\(^\text{14}\)

As part of its merger review, privacy advocates urged the FTC to oppose the Google/DoubleClick transaction on the grounds that the combination of their respective data

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\(^{10}\) See, e.g., *CoreLogic, Inc.* No. C-4458 (FTC complaint issued Mar. 24, 2014) (national assessor and recorder bulk data collected from public records for real property transactions as well as local tax assessments available at local government offices).

\(^{11}\) See *Dun & Bradstreet*, Dkt. 9342 (FTC May 7, 2010) (administrative complaint settled with order requiring divestiture of updated database used to market educational materials for kindergarten through twelfth grade).

\(^{12}\) For instance, the FTC has challenged a merger between two competing commercial real estate databases, citing the potential for unilateral anticompetitive effects. *CoStar Group, Inc.*, No. C-4368 (FTC Apr. 30, 2012).

\(^{13}\) *Nielsen Holdings*, No. C-4439 (FTC complaint issued Sept. 30, 2013).

\(^{14}\) Statement of the Commission, Google/DoubleClick, FTC File No. 071-0170 (Dec. 20, 2007).
sets of consumer information could be exploited in ways that threatened consumer privacy. In closing its investigation, the FTC explicitly declined to rely on its antitrust authority to intervene for reasons other than antitrust concerns. Similar appeals were made in the FTC’s recent review of Facebook’s acquisition of WhatsApp. In the Bureau of Competition, we reviewed the transaction using our standard approach, while staff in the Bureau of Consumer Protection (“BCP”) considered the implications of the transaction on certain privacy issues, especially in light of Facebook’s obligations contained in a 2011 FTC order that resolved allegations that Facebook had deceived consumers by failing to keep its privacy promises.15

Both Bureaus worked through their concerns, with different results. BCP focused on how the proposed transaction would affect the promises that WhatsApp had made to consumers about the limited nature of the data it collects, maintains, and shares with third parties—promises that exceeded the protections promised to Facebook users at the time the deal was announced. Although the transaction went forward as proposed, BCP concluded that it was appropriate to alert the companies about the privacy concerns raised and to assure the public that the protections under Section 5 and the FTC’s Facebook Order would apply to WhatsApp data.16

Not every merger raises concerns about non-price competition, and only a few of those that do are likely to present concerns about a reduction in competition involving privacy protections. But even if a merger does not threaten to reduce competition in a meaningful way, the FTC will continue to use its consumer protection authority to ensure that companies live up to their obligations to protect the privacy of consumer data.

15 Facebook, Inc., No. C-4635 (FTC complaint issued Nov. 29, 2011).