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### **Data Acquisition as Monopolization in Digital Platform Markets**

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Matene Alikhani  
Brandon Nye  
Bruno Renzetti

Businesses have long gathered data on consumer preferences. This data helps businesses better understand their customers' behavior so that they can optimize business decisions, such as expanding into new markets and developing new products. Traditionally, companies use consumer surveys to gather information, but surveys are time consuming, and the information provided can soon become stale. A company would have to continuously conduct surveys to have the most accurate, up-to-date information on customer satisfaction, while continuous data on how consumers actually behave and spend money is both always up to date and more credible.<sup>1</sup>

The digital age has offered new forms of data gathering. Grocery stores, for example, went through a revolution with the introduction of bar codes, which offer the possibility of tracking purchases with a customer's loyalty program identification number.<sup>2</sup> This system enables stores to collect updated data on specific customers' behavior every time they shop at the store. Additionally, websites collect and store cookies, information on users that the website can analyze to improve its functionality or offerings.

Digital *platforms* have taken data collection to a new level. Dominant platforms continuously gather data every time a consumer uses the platform. Machine learning programs then use this data to instantaneously improve the platforms' algorithms to offer an improved user experience. The accumulation of data thus significantly affects the quality of digital platform services and their ability to compete with both online and offline businesses.<sup>3</sup>

Data collection by digital platforms is not only different in scale but also different in kind than traditional data collection. All firms experience a feedback loop where more data leads to better service, which leads to more customers and therefore more data. Digital platforms, however, also experience network effects, which means that the larger a platform is, the more likely that an increase in customers leads to an *additional* increase in customers. Data collection rapidly accelerates with a platform's size; the marginal cost of data collection decreases at scale. Because dominant platforms internalize network effects and lock in users from switching to competitors, dominant platforms can accumulate huge data advantages that their rivals cannot replicate without significant cost. Thus, competitors cannot offer products to compete with the now dominant platform and competition is lessened.

“Data acquisitions” – acquisitions of a company with user data valuable to the acquirer – by dominant digital platforms therefore pose significantly greater antitrust concerns than data acquisitions by firms in traditional supply chains. We propose a new taxonomy for understanding data acquisition cases involving digital platforms. We differentiate between the data acquired in traditional sectors and the data acquired by digital platforms where data has diminishing marginal cost. The former we term “pipe data” and the latter we term “network data.” To demonstrate the differences between each kind of data, this paper considers two

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<sup>1</sup> Anja Lambrecht & Catherine E. Tucker, *Can Big Data Protect a Firm From Competition?*, CPI ANTITRUST CHRONICLE, Jan. 2017.

<sup>2</sup> Matene Alikhani & Bruno Renzetti, *Smile, You're on Camera: Data Collection in Food Retailing Markets*, YALE L. & POL'Y REV. INTER ALIA (2023).

<sup>3</sup> STIGLER COMMITTEE ON DIGITAL PLATFORMS, *Final Report*, 27 (2019); Scott Morton & Dinielli, *Roadmap for a Monopolization Case Against Google Regarding the Search Market* (2020).

representative cases. First, we look at *FTC v. CCC* as a “pipe” case<sup>4</sup>; second, we look at *United States v. Bazaarvoice, Inc.* as a “network” case.<sup>5</sup> We also look at the Google/Waze merger and show how the alleged efficiencies arising from concentration of data can be rebutted.

The second part of this paper analyzes how antitrust enforcement can incorporate this taxonomy into its efforts to block anticompetitive data acquisitions. While data acquisitions are not in every case technically “vertical” or “horizontal” mergers, they entrench dominance and threaten competition at the expense of consumers and thus fall within the purview of Section 7 enforcement.<sup>6</sup>

## I. “Pipe” and “Network” Data

### A. *Economic Theory*

Companies can pay to acquire data in multiple ways. They can commission a consumer survey, they can buy data already collected from a third-party, they can invest in a bar-code scanner, or they can develop an algorithm that collects data from their website users. When a company obtains data in one of these ways, the company incurs a cost. It will continue as long as the cost of obtaining the data provides a benefit that results in a reasonable return. This cost, for each additional unit of data, is termed the marginal cost, while the benefit is termed marginal gain, or revenue. The marginal return of investing in another piece of data equals the marginal revenue generated from that piece of data (through better business performance) divided by the marginal cost of that piece of data.

When a firm surveys consumers, purchases market research, tracks bar codes, or elicits customer feedback, it is gathering traditional “pipe” data. Typically, the cost of this type of data collection is constant or increasing. A firm must hire more surveyors or contract for more market research at a set cost. In other words, *the marginal cost of “pipe” data collection is fixed or increasing*. As discussed, data drives better business decisions and thus more revenue, but as the amount of data collected increases, the utility of incremental amounts of data decreases.<sup>7</sup> Surveying the millionth customer is not as valuable as surveying the tenth. Thus, *there is a diminishing marginal benefit to “pipe” data*. Using the form of marginal return described above, it can be shown that the fixed or rising marginal cost and diminishing marginal revenue of “pipe” data leads to diminishing marginal returns on investment in data.

The basic form of this effect is also present in “network” data. “Network” data is distinguishable from “pipe” data because “network” data is collected by platforms that internalize network effects. Digital platforms often use web cookies and third-party tracking software to

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<sup>4</sup> *FTC v. CCC Holdings, Inc.*, 605 F. Supp. 2d 26 (2009).

<sup>5</sup> *United States v. Bazaarvoice, Inc.*, Case No. 13-cv-00133-WHO (N.D. Cal. 2014).

<sup>6</sup> Herbert Hovenkamp, *Antitrust and Platform Monopoly*, 130 YALE LAW JOURNAL 1952 (2021).

<sup>7</sup> Hal Varian, *INTERMEDIATE MICROECONOMICS; A MODERN APPROACH* (8TH EDITION) 309 (2009). (“Thus we would typically expect that the marginal product of a factor will diminish as we get more and more of that factor. This is called the law of diminishing marginal product.”)

gather data on users as they engage with the platform, whether it be using location services, showing interest in an item, or communicating with others.<sup>8</sup> Because of the network effects inherent in digital platforms, “network” data shows less decreasing marginal benefit and can even exhibit increasing marginal benefit. As with “pipe” data, “network” data drives a positive feedback loop where more data leads to better performance, which leads to more users, which leads to more data. However, because of the network effects inherent in digital platforms,<sup>9</sup> the increased user engagement drives *additional* user engagement, accelerating the positive feedback loop. Pipe settings do not have this additional force. Network effects increase with scale, so if a platform has one million users, a dollar spent on data collection to improve the platform will bring more new users (and thus more new data) than if the platform has one thousand users. *Thus, the marginal cost of acquiring new data decreases* as the firm grows and continues to invest in data. In contrast to “pipe” data, the decreasing marginal cost and increasing marginal gain lead “network” data to experience increasing returns to scale on investment in data.

“Network” data’s increasing marginal returns are protected by the lock-in effect of digital platforms.<sup>10</sup> Network effects, default biases, and “free” pricing all lock consumers into using the dominant digital platforms, which prevents consumers from breaking the positive feedback loop of data collection. Network effects make it costly for users to switch to a smaller digital platform because, assuming the platforms are not interoperable, switching sacrifices the benefits of the dominant platform’s large user base.<sup>11</sup> Default biases lead users to return to the platform set as the default on their browser or system.<sup>12</sup> Additionally, many platforms are monetarily free to users. For example, Google and Facebook do not charge users a fee but rather tax users’ attention with advertisements.<sup>13</sup> “Free” is a lower bound because paying users to use a platform and to provide data (negative pricing) causes adverse selection and opportunistic behavior.<sup>14</sup> Thus, “free” digital platforms cannot be undercut on price, so users will substitute away only for superior quality, on which basis – without data – it is costly for non-dominant firms to compete.<sup>15</sup>

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<sup>8</sup> Viktoria H.S.E. Robertson, *Excessive data collection: Privacy considerations and abuse of dominance in the era of big data*, 57 COMMON MARKET LAW REVIEW 161 (2020); Inge Graef, *Market Definition and Market Power in Data: The Case of Online Platforms*, 38 WORLD COMPETITION 473 (2015).

<sup>9</sup> Michael L. Katz & Carl Shapiro, *Systems Competition and Network Effects*, 8 93 (1994).

<sup>10</sup> Joseph Farrell & Paul Klemperer, *Coordination and Lock-In: Competition with Switching Costs and Network Effects*, 3 in HANDBOOK OF INDUSTRIAL ORGANIZATION 1970, 1970 (2007) (“Switching costs and network effects bind customers to vendors if products are incompatible, locking customers or even markets in to early choices. Lock-in hinders customers from changing suppliers in response to (predictable or unpredictable) changes in efficiency, and gives vendors lucrative ex post market power.”).

<sup>11</sup> See Farrell and Klemperer, *supra* note 11.

<sup>12</sup> Federico Etro & Cristina Caffarra, *On the economics of the Android case*, 13 EUROPEAN COMPETITION JOURNAL 282 (2017). See e.g., Judgment of the General Court (Sixth Chamber, Extended Composition) of 14 September 2022, *Google LLC and Alphabet, Inc. v European Commission*; *US v. Microsoft*.

<sup>13</sup> See FIONA M. SCOTT MORTON & DAVID C. DINIELLI, *Roadmap for a Monopolization Case Against Google Regarding the Search Market*, (2020).

<sup>14</sup> Joshua S. Gans, *The Specialness of Zero*, NBER (WORKING PAPER 26485) (2019).

<sup>15</sup> Samson Y. Esayas, *Competition in (data) privacy: ‘zero’-price markets, market power, and the role of competition law*, 8 INTERNATIONAL DATA PRIVACY LAW, 182 (2018) (“Despite initial skepticism, there is a growing consensus that the level of privacy protection and deployment of PETs [*Privacy Enhancing Technologies*] could be subject to competition

These two elements of digital platforms—increasing returns to scale from “network” data and consumer lock-in—threaten digital platform competition. When a search engine, an e-commerce company, or a social media site captures market share early, competitors are unable to catch up. The market effectively “tips” in the dominant platform’s favor.<sup>16</sup> In other words, “[a]s one platform gains a slight advantage, that advantage reinforces itself and leads to dominance”.<sup>17</sup> The platform already has a larger customer base, through which it continually acquires new data to improve its platform. Because this customer base is locked in, competitors cannot easily entice users to switch, so entrants cannot replicate the dominant platform’s amassed data and associated quality. This is the market reality entrants face, and the reason they struggle to offer a competitive product.

This threat to competition occurs through two channels when dominant platforms acquire troves of valuable data. Not only is the dominant platform widening the data gap, but it is foreclosing competitors from accessing the acquired company’s data—data that might help level the playing field. The harm is therefore two-fold: a dominant player concentrates a larger amount of monopoly-sustaining data and rivals are foreclosed from the data that would help them effectively compete with the dominant player. Further, smaller platforms are at a disadvantage in trying to out-bid the dominant platform for these assets because the dominant platform’s higher profits create sizable barriers to entry.<sup>18</sup>

Data acquisition by a dominant firm thus significantly raises the costs required to compete, creating sizable barriers to entry and growth. In this way, data acquisition epitomizes the essence of the “raising rivals’ costs” foreclosure framework.<sup>19</sup> However, the traditional “raising rivals’ cost” framework has not adequately incorporated these types of digital platform mergers. One reason is that the dominant platform may not be acquiring a supplier in a traditional vertical chain of production. Many firms might have data valuable to a digital platform without participating in that platform’s supply chain. Whole Foods, for example, was not supplying Amazon or any other internet retailer with consumer data when Amazon acquired Whole Foods in 2017, but the data Amazon was able to acquire was useful for Amazon’s business model as well as for Amazon’s potential competitors.<sup>20</sup> The dominant platform may not be cutting off competitors from an input or from a distribution channel of which they were previously availing themselves. Yet the acquisition is no less harmful to competition; the

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as a parameter of quality, choice, or innovation, particularly when services are provided for 'free' and in exchange for personal data.”).

<sup>16</sup> STIGLER COMMITTEE ON DIGITAL PLATFORMS, *supra* note 3.

<sup>17</sup> MICHAEL KADES & FIONA M. SCOTT MORTON, *Interoperability as a competition remedy for digital networks*, 8 (2020).

<sup>18</sup> MICHAEL R. BAYE & JEFFREY PRINCE, *The Economics of Digital Platforms: A Guide for Regulators*, (2020) (“If a single firm controls data that is necessary for entering another market (e.g., map applications, or targeted ads), such data may serve as a natural barrier to entry. More broadly, data may also be a barrier to entry when significant sunk costs can be incurred to acquire data necessary to viably compete.”).

<sup>19</sup> Steven C. Salop & David T. Scheffman, *Raising Rivals’ Costs*, 73 PAPERS AND PROCEEDINGS OF THE NINETY-FIFTH ANNUAL MEETING OF THE AMERICAN ECONOMIC ASSOCIATION 267 (1983).

<sup>20</sup> Greg Petro, *Amazon’s Acquisition Of Whole Foods Is About Two Things: Data And Product*, FORBES, Aug. 2017, available at <https://www.forbes.com/sites/gregpetro/2017/08/02/amazons-acquisition-of-whole-foods-is-about-two-things-data-and-product/?sh=2e37c26fa808>.; See also Part IV on the Google-Waze merger.

effectively insurmountable barriers to entry bolstered by the acquisition severely restrict consumer choice in digital markets.

*B. “Pipe” Data and FTC v. CCC*

*FTC v. CCC Holdings, Inc.* provides an example of a merger that involves the acquisition of “pipe” data.<sup>21</sup> In 2008, the FTC filed to enjoin the merger between CCC Information Services Inc. (“CCC”) and Mitchell International, Inc. (“Mitchell”), two leading players in the market for “Estimatics.” Estimatics is a database system used by auto insurers to estimate the cost of repairs. One of the main components of the tool is the database from which parts and labor costs are pulled. CCC, Mitchell, and their competitor Audatex, together controlled 99% of the Estimatics market at the time. The FTC brought a case under Section 7 of the Clayton Act alleging that this three-to-two merger would substantially lessen competition. The combined post-merger entity would have a combined market share of 70% in the Estimatics market, and the merger would lead to an HHI increase of 2,035 points.

The court found that data was the most significant barrier to entry in the Estimatics market. A comprehensive database is necessary to assess costs accurately.<sup>22</sup> Estimatics companies acquire data from auto repair shops across the country.<sup>23</sup> For a database to be competitive, it would need to cover around 95% of automobiles in the United States, including historical data on major makers and models.<sup>24</sup>

In this case the dataset constituted a barrier to entry for new entrants into auto insurance because any new entrant would have to pay the full cost of gathering the requisite data and build its own database through repair shop surveys.<sup>25</sup> There could be cases where these costs were substantially lower and did not constitute a barrier to entry. Either way, however, this data would fall within our category of “pipe” data because it does not create network effects. It was not found that auto insurers obtain a greater benefit from using an Estimatics product when other insurers use the same product.

In this case the court deemed the cost of data accumulation too high for new entrants to reasonably incur, and therefore entered judgment for the FTC. “The difficulty and cost of developing and maintaining an entirely new parts and labor database that is accepted by the market would be significant barriers to new entrants.”<sup>26</sup> “It would take a number of years, untold thousands of man-hours, and millions of dollars of investment to create and maintain competitive parts and labor damage.”<sup>27</sup> Thus, a company could only compete if it were able to bear the significant burden of acquiring the requisite data.

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<sup>21</sup> *FTC v. CCC Holdings, Inc.*, *supra* note 4.

<sup>22</sup> *Id.* at 51-52.

<sup>23</sup> *Id.*

<sup>24</sup> *Id.*

<sup>25</sup> *Id.*

<sup>26</sup> *Id.* at 50.

<sup>27</sup> *Id.* at 51.

### C. “Network” Data and Bazaarvoice

Data played a different and crucial role in the *Bazaarvoice* case.<sup>28</sup> In 2012, Bazaarvoice acquired PowerReviews, its main competitor in the market for product “ratings and reviews” platforms (“PRR platforms”). Like in CCC, this market is built on data: these platforms’ value-add is generating product review data for manufacturers and retailers. Unlike in CCC, however, the firms in this market are platforms because they experience significant network effects through “syndication” networks. Syndication networks “allow manufacturers to share, or ‘syndicate,’ ratings and reviews with their retail partners. Through the syndication network, retailers can display user-generated content that was originally collected by a product’s manufacturer.”<sup>29</sup> Syndication networks put PRR platforms at the center of a two-sided market: “As more manufacturers sign up for Bazaarvoice’s [PRR platform], the Bazaarvoice network becomes more valuable to retailers because it allows them to gain access to a greater volume of [ratings and reviews].”<sup>30</sup> The court found this network effect to be a “significant competitive advantage for Bazaarvoice.”<sup>31</sup>

Bazaarvoice was thus gathering “network” data. The more ratings and reviews it gathered for manufacturers, the more retailers would join the network, and the more data it would gather.<sup>32</sup> The network effects from more retailers and manufacturers joining the syndication network causes this feedback loop to generate increasing returns on investment in data. The court ultimately blocked this merger because Bazaarvoice and PowerReviews were leading head-to-head competitors in a concentrated market. We use this case to illustrate a different point. If the transaction had somehow involved only the data of these competitors, that network data would create the potential to entrench Bazaarvoice’s position in the market and prevent entry (even if the merger were not removing a competitor from the market.)

## II. Making a U-Turn on Efficiencies: The Google/Waze Merger

In 2012, Google, the dominant firm in general search services, acquired Waze, a crowdsourced location mapping service.<sup>33</sup> The merger drew criticism as potentially reducing

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<sup>28</sup> *United States v. Bazaarvoice, Inc.*, No. 13-CV-00133-WHO, (N.D. Cal. Jan. 8, 2014).

<sup>29</sup> *Id.* at 6.

<sup>30</sup> *Id.* at 12.

<sup>31</sup> *Id.*

<sup>32</sup> See DOJ Complaint in *Bazaarvoice*:

*“As more manufacturers begin to purchase Bazaarvoice’s PRR platform, the Bazaarvoice network becomes more valuable to retailers because it will allow them to gain access to a greater volume of ratings and reviews. Similarly, as more retailers purchase Bazaarvoice’s PRR platform, the Bazaarvoice network becomes more valuable for manufacturers because it will allow them to syndicate content to a greater number of retail outlets. The feedback between manufacturers and retailers creates a network effect that is a significant and durable competitive advantage for Bazaarvoice.”*

<sup>33</sup> The merger was cleared by the then-existing Office of Fair Trading of the United Kingdom in 2013. The FTC did not seek to enjoin the merger, even though the authority conducted a preliminary inquiry of the case. See Alexei Oreskovic, *FTC conducting preliminary inquiry of Google’s Waze acquisition*, REUTERS, Jun. 2013.

horizontal competition in location services by killing a nascent competitor to Google Maps or by keeping it out of the hands of other platforms.<sup>34</sup>

However, there was another component to the merger that warranted antitrust regulators' attention: data acquisition. Some argued that the high price tag (\$1 billion) for a company whose assets and sales fell below the \$70.9 million Hart-Scott-Rodino threshold was a result of the user data Waze had accumulated – a true data-driven merger.<sup>35</sup> Waze had data on users' routes and location patterns,<sup>36</sup> data that is key to knowing consumers' preferences.<sup>37</sup> Such data are critical for selling effective local advertising, at the time an exciting new market that was just opening up.<sup>38</sup> Company documents and ex post analysis show that Waze was purchased for its data rather than for its technology or capabilities. Waze's data were harvested for use in Google Maps and advertising, and the once exciting and high growth company languished as other services were promoted in its stead.

The DOJ and the states are currently pursuing Section 2 cases against Google for its anticompetitive course of conduct in the general search market. Part of the states' case is premised on Google actively and unfairly denying competitors access to user search data, which the complaint alleges is the “central foundation of Google's business and its resulting monopolies.”<sup>39</sup> The states allege that Google is using its search engine monopoly to deny specialized vertical search providers customers, with whose data they can improve their search engine algorithms and compete with Google.<sup>40</sup> Additionally, the states allege that Google is conditioning advertising relationships on sharing the specialized vertical providers' proprietary customer data. The DOJ also has a display advertising case against Google. Once again, knowing where the user physically is allows for more effective local display ads. Competitors seeking to compete in that market would gain from being able to buy location data from a neutral third party.

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<sup>34</sup> The organization Consumer Watchdog offered a letter to the Antitrust Division of the DOJ expressing its concerns over the acquisition. Consumer Watchdog, *Oppose Google's acquisition of Waze*, (2013), available at <https://consumerwatchdog.org/resources/ltrftc061213.pdf> (“Now with the proposed Waze acquisition the Internet giant would remove the most viable competitor to Google Maps in the mobile space. Moreover, it will allow Google access to even more data about online activity in a way that will increase its dominant position on the Internet.”). See also Chantal Tode, *The Waze Craze: Why Google outbid Facebook, Apple to acquire the mapping service*, MARKETING DIVE, 2013; Paresh Dave, *Waze's ex-CEO says app could have “grown faster” without Google*, REUTERS, Feb. 2021; Sam Gustin, *Crosstown Traffic: Why Google's \$1B Waze Deal Faces U.S. Antitrust Scrutiny*, TIME, June 2013.

<sup>35</sup> Eric Markowitz, *The Real Reason Google Wants Waze: Your Data*, INC., Jun. 2013.

<sup>36</sup> *Id.*

<sup>37</sup> Google executives themselves acknowledge the importance of location data to their various product lines and services. See Amir Efrati, *Google Calls Location Data “Valuable,”* THE WALL STREET JOURNAL, May 1, 2011.

<sup>38</sup> Maurice E. Stucke, Allan P. Grunes. BIG DATA AND COMPETITION POLICY 2016, 93. (“The stakes are large, as geo-location and mapping data are key for advertisers. Using users' geo-location data, Google and Waze can track where people are and influence where they will go by providing them information on nearby advertisers (such as promoting a nearby Taco Bell). The first step is to target users by their location. The next step is to combine all the data on the user (tastes, search history, etc) to target him with behavioural ads.”)

<sup>39</sup> See the Complaint in *Colorado v. Google*, Case No. 1:20-cv-03715-APM, D.D.C.

<sup>40</sup> *Id.*



The acquisition of Waze therefore fits into at least two anticompetitive data acquisition frameworks in current litigation. This framework supports the DOJ and states' cases that Google is unfairly maintaining its monopoly by accumulating data and denying competitors this data.

The argument for efficiencies arising from the merger can be divided in three different groups. First, the data enabled Google to deliver a better experience for its users and that is shown in its high market share. Second, a larger amount of data would also drive greater innovation. Third, data would provide Google with greater economies of scale and therefore promote efficiency. However, all the three proposed merger-specific efficiencies mentioned can be rebutted.

First, the fact that a firm is the incumbent and dominant player in a given market does not necessarily mean that the product or service is better – this is the whole reason behind antitrust enforcement of exclusionary conduct. In the Google case, for instance, it mandated that Google search be the default navigation app for Android phones. Therefore, users had the tendency to use the default app not because it was the best one available, but because it did not demand any action from the consumer to use it—it was already installed in the device. There is no evidence that the service improvements due to the acquisition resulted in services that were better than the alternative of separate firms competing for share.

Second, it is more likely that the concentration of data – and market share – stifles innovation instead of promoting it. By acquiring Waze, Google enabled its monopoly position in the mobile mapping market. The expected behavior from monopolists is to sit on its dominant position. Considering that the monopolist does not need to expand its consumer base, it does not have incentives to offer innovative products. In fact, Google let Waze lag behind after the merger and only now is consolidating the working teams.<sup>41</sup> Moreover, in digital markets, such as mobile mapping, the traditional economic concepts of price competition and stationary technology are ill-equipped to deal with innovation competition. New measures are necessary to address technological evolution.<sup>42</sup>

Third, it is clear that data collection exhibits economies of scale. However, given the reduced incentives of a monopolist to innovate and grow, these efficiencies may not be realized and benefit consumers. For example, in 2021, former Waze CEO Noam Bardin stated that the company likely would have grown faster and more efficiently if it had not been acquired.<sup>43</sup> Further, Waze's ability to grow was hamstrung by Google's willingness to constrain the subsidiary and take its ideas to use in Google Maps.<sup>44</sup> Interestingly, the Waze and Google Maps teams did not see any integration in the roughly ten years since the acquisition. Only in late

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<sup>41</sup> Miles Kruppa, *Google Combines Maps and Waze Teams Amid Pressure to Cut Costs*, THE WALL STREET JOURNAL, Dec. 7, 2022.

<sup>42</sup> Daniel F. Spulber, *Antitrust and Innovation Competition*, 11 JOURNAL OF ANTITRUST ENFORCEMENT 5, 28 (2023). (“Antitrust policy seeks to promote consumer welfare and economic efficiency. Technological change significantly impacts both consumer welfare and economic efficiency. The increasing importance of innovation competition suggests applying measures of market performance that reflect technological change.”)

<sup>43</sup> Dave, *supra* note 37.

<sup>44</sup> *Id.*

2022 were the two teams combined, with the express purpose to “reduce overlapping mapmaking work across the Waze and Maps products.”<sup>45</sup> The lack of integration of two mapping services with clear overlap in functionality, owned by the same company, for close to a decade, shows that the Waze purchase was primarily about data. Once Waze’s data was used to build Google Maps, the company was a neutralized competitor allowed to slowly atrophy under a much larger parent.<sup>46</sup>

The Google/Waze merger decision needs a U-turn. The current case being sought by the DOJ and states against Google is the perfect occasion to rescue the lack of analysis of the merger in 2013. Now, ten years after the merger, the authority should benefit from an *ex post* analysis and better pinpoint the damage done by the acquisition of “network” data.

### III. Legal Response and Strategies Going Forward

Because data acquisitions by dominant digital platforms create such a risk of competitive harm, antitrust enforcement should aggressively challenge these mergers. The competitive harm is somewhat different than those we have seen before, so data acquisition cases will have to be argued in a new way.

In a traditional vertical merger, the dominant firm is acquiring a supplier who already deals with the dominant firm and its competitors or who is in some way a part of the supply chain. By contrast, digital platforms that acquire data are often acquiring a firm that does not appear to be either vertically or horizontally related. An app developer or some other tech firm with a repository of data may not be in the business of selling that data; it may not be ‘vertically aligned’ with its acquirer. As discussed above, Waze was not selling its location data to search engines before Google acquired it, and Whole Foods was not selling customer data before Amazon acquired it.<sup>47</sup>

The common foreclosure doctrines must therefore be modified to accommodate this market reality. Traditionally, courts determine anticompetitive foreclosure risk by looking at the amount of the market that is being foreclosed<sup>48</sup> or to the net foreclosure rate.<sup>49</sup> In doing this, courts explicitly look at foreclosure “from a segment of the market otherwise open to [competitors].”<sup>50</sup> If the acquired data was not previously available to a platform’s competitors,

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<sup>45</sup> Kruppa, *supra* note 45.

<sup>46</sup> See Colleen Cunningham, Florian Ederer & Song Ma, *Killer Acquisitions*, 129 JOURNAL OF POLITICAL ECONOMY (2021).

<sup>47</sup> Petro, *supra* note 21.

<sup>48</sup> *Brown Shoe Co., Inc. v. United States*, 370 U.S. 294 (1962); *Tampa Elec. Co v. Nashville Coal Co.*, 365 U.S. 320 (1961); *U.S. v. Microsoft*, 253 F.3d 34 (D.C. Cir. 2001); *U.S. v. Dentsply Intern., Inc.*, 399 F.3d 181 (3d Cir. 2005).

<sup>49</sup> See Thomas G. Krattenmaker & Steven C. Salop, *Anticompetitive Exclusion: Raising Rivals’ Costs to Achieve Power over Price*, 96 YALE LAW JOURNAL 209 (1986).

<sup>50</sup> *Brown Shoe Co., Inc. v. United States*, 370 U.S. 294 (1962)

then there is no cognizable “foreclosure.” For similar reasons, it would be difficult to challenge the acquisition under a duty-to-deal framework if the data holder never dealt to begin with.<sup>51</sup>

Courts should look at data acquisition in the way that the Third Circuit analyzed *US v. Dentsply Intern, Inc.*<sup>52</sup> The traditional raising rivals’ cost framework assumes that the remaining supply of an input or downstream purchasers is limited, and therefore foreclosure forces competitors “to bid up the price of that supply, thereby increasing their costs.”<sup>53</sup> In *Dentsply*, however, the court held that while cutting off rival manufacturers from dealers did not foreclose them from the ultimate buyers, the “undeniable reality” of the market is that selling directly to buyers is “impracticable for a manufacturer.”<sup>54</sup> Similarly, even though a competitor platform is not foreclosed from the ultimate source of consumer data (the consumers themselves), replicating such data is often impracticable.<sup>55</sup>

As discussed above, the issue is that data acquisition sets rivals back on quality and network effects and therefore requires an unreasonably high investment by rivals to catch up. Data acquisition raises the total cost for rivals to compete effectively, not per unit input costs.

Like in *Dentsply*, antitrust enforcers could bring a Section 2 challenge in a case of data acquisition, arguing that data acquisition constitutes an attempt to monopolize a digital market. Because of the self-perpetuating cycle of consumer acquisition and data collection, digital markets tend toward monopoly, so acquisition of valuable data via merger by an already dominant firm could constitute an attempt to monopolize or maintain monopoly.<sup>56</sup> Across Section 2 cases, otherwise legal contracts and mergers become anticompetitive conduct when it has the “effect of foreclosing rivals from the market.”<sup>57</sup> Exclusivity contracts, overbuying, and vertical integration are proscribed when undertaken by a dominant firm looking to reduce competition.<sup>58</sup> Enforcement should respond similarly to the risk of harm to competition when a dominant digital platform acquires firms with *unique* and *valuable* consumer data.

Another possibility would be for antitrust enforcers to invoke the essential facilities doctrine.<sup>59</sup> While the Supreme Court refused to explicitly recognize or repudiate the doctrine,<sup>60</sup> and commentators have criticized the doctrine’s potential scope,<sup>61</sup> there is a case to be made that data in digital platform markets satisfies the doctrine’s four necessary elements.<sup>62</sup> The key to

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<sup>51</sup> *Verizon Commun., Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398 (2003).

<sup>52</sup> *U.S. v. Dentsply Intern., Inc.*, 399 F.3d 181 (3d Cir. 2005).

<sup>53</sup> Krattenmaker and Salop, *supra* note 53.

<sup>54</sup> *U.S. v. Dentsply Intern., Inc.*, 399 F.3d 181, 193 (3d Cir. 2005).

<sup>55</sup> See *FTC v. CCC Holdings, Inc.*, 605 F. Supp. 2d 26 (D.D.C. 2009).

<sup>56</sup> Sherman Act, Section 2.

<sup>57</sup> *U.S. v. Microsoft*, 253 F.3d 34 (D.C. Cir. 2001).

<sup>58</sup> See *U.S. v. Microsoft*, 253 F.3d 34 (D.C. Cir. 2001); *FTC v. American Tobacco Co.*, 264 U.S. 298 (1924); *Ford Motor Co. v. United States*, 405 U.S. 562 (1972).

<sup>59</sup> See Robert Pitofsky, Donna Patterson & Jonathan Hooks, *The essential facilities doctrine under U.S. antitrust law*, 70 ANTITRUST LAW JOURNAL 443 (2002).

<sup>60</sup> *Verizon Commun. Inc. v. L. Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 411 (2004).

<sup>61</sup> See Phillip Areeda, *Essential Facilities: An Epithet in Need of Limiting Principles*, 58 ANTITRUST L.J. 841 (1989).

<sup>62</sup> See *MCI Commun. Corp. v. Am. Tel. and Tel. Co.*, 708 F.2d 1081, 1132-33 (7th Cir. 1983).

employing this doctrine would be proving that data is essential, which many scholars argue is true for digital platforms with machine learning capabilities.<sup>63</sup> Re-collecting millions of Google searches or Facebook engagements through alternative means would be incredibly costly. Courts do not traditionally like imposing remedies that require them to interfere in the workings of an industry or engage in regulation. Happily, the problem of market power generated through data has a clear solution.

As discussed above, even though data is non-rivalrous, the lock-in effects of digital platforms prevent users from either wanting to, or being able to, bring their data to a rival. And digital platforms do not currently make their data public and thus exclude rivals from it. Another potential remedy in these monopolization challenges might be mandated interoperability or data sharing.<sup>64</sup> Mandated interoperability or data sharing avoids raising the cost for rivals to effectively compete and simultaneously allows the merging firms to internalize the pro-consumer efficiencies and synergies created by the merger.<sup>65</sup> Scholars have proposed that when a dominant digital platform acquires a nascent firm with key intellectual property, the platform license the acquired intellectual property to others on fair and reasonable terms.<sup>66</sup> This same principle can be applied to acquisitions of data. It is effectively costless to copy digital data and leaves the original asset unharmed, which makes data cases very different than those involving factories. Allowing competitors to license crucial consumer data on fair and reasonable terms will neutralize the ability of the dominant platform from denying competitors the information necessary for them to grow and catch up.

Antitrust enforcement could also play an essential role. For one, the new Merger Guidelines (which will include updates to both the horizontal and vertical merger guidelines) could explicitly define this type of merger as a related-market merger that draws enforcement scrutiny. Currently, the Merger Guidelines focus only on acquisitions affecting “rivals that trade with, or could trade with, the [ ] merging firm.”<sup>67</sup> As stated above, firms may not be in the business of selling or sharing their data before being acquired. One might argue that an acquiree firm “could” sell its data to the acquirer’s rivals, but this would likely lead courts to employ a likelihood or tendency test.<sup>68</sup> Rather, the new Merger Guidelines could define data acquisitions as harmful vertical mergers that raise rivals’ costs much like mergers that foreclose inputs, close

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<sup>63</sup> Stigler Report at 37; Scott Morton & Dinielli, *Roadmap for a Monopolization Case Against Google Regarding the Search Market* (2020).

<sup>64</sup> See Hovenkamp, *supra* note 6. The argument is that dominant platforms should be mandated to interoperate, and the smaller competing platforms would have the option to choose whether to require the interoperability. If Facebook were mandated to interoperate, it would not be able to refuse interoperability, but competing platforms would not be obligated to interoperate with Facebook. Yale Tobin Center for Economic Policy, *Equitable Interoperability: the “Super Tool” of Digital Platform Governance*, Policy Discussion Paper no. 4, July 13, 2021 (“Indeed, the fact that a platform like Twitter has grown and prospered without being able to interoperate with Facebook suggests that it might be better off without interoperating if given the choice”).

<sup>65</sup> Hovenkamp, *supra* note 6.

<sup>66</sup> *Id.* at 2043.

<sup>67</sup> U.S. Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines* (2010).

<sup>68</sup> The “potential competitor” theory of harm requires showing a “substantial likelihood” that an entrant or competitor would participate in the market. *US v. Marine Bancorporation*, 418 U.S. 602, 633 (1974). Some courts have required a high burden of proof for these elements. See *FTC v. Within*, Case no. 5:22-cv-04325-EJD (N.D.Cal., 2023)

distribution channels, or raise complement prices.<sup>69</sup> The Guidelines could provide an example of a dominant firm acquiring a company with valuable consumer data in a market in which data provides increasing returns to scale. Situations such as these comport with Section 7's proscription of mergers that "tend to limit competition."<sup>70</sup>

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<sup>69</sup> U.S. Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines* (2010).

<sup>70</sup> Clayton Act, Section 7.