MOVE LAST AND TAKE THINGS:
FACEBOOK AND PREDATORY COPYING

Josh Obear*

Facebook's now decade-long dominance of the social media landscape stands in stark contrast with the industry's early history of dynamism and disruption. The company played a key role in growing the social media industry from the small, niche communities of the early 2000s into the omnipresent societal force it is today. Capitalizing on this growth, Facebook pioneered a business model that now transforms the attention of billions of users into billions of dollars of advertising revenue. But for all of Facebook's success, perhaps its greatest triumph has been in defending its golden goose from a swarm of competitors eager to claim a share of the profits. Countless challenges from Snapchat, Twitter, Google, and dozens of social network startups have all failed to break Facebook's hold of the market.

This Note argues that Facebook has exploited its market dominance to exclude competitors in the social media market. Despite complaints from competitors and business commentators, Facebook has so far avoided serious antitrust inquiry. By examining Facebook's history, its business model, and the structural incentives of the social media market, one can see how Facebook leverages its position toward anticompetitive ends. In particular, this Note explores how Facebook copies the popular apps and features developed by its rivals in order to prevent those rivals from establishing a foothold in the social media market. This copycat strategy causes significant non-monetary consumer harms, such as product degradation and stifled innovation, currently neglected by antitrust doctrine. Facebook's copying campaign highlights the need for courts to consider new

frameworks and theories that help identify new forms of anticompetitive conduct.

I.   INTRODUCTION

Over the past decade, the social media landscape has experienced rapid growth, innovation, and disruption. When Facebook first launched in 2004, the online social media market was still in its infancy: Myspace, considered the dominant social media website of the time, was struggling to figure out how to effectively monetize its product, and "social

network ads as big business was considered a fantasy."[1] A mere six years later, Facebook had usurped Myspace, revolutionized the social media advertising model, and transformed itself into a billion-dollar enterprise.[2] In 2017, Facebook reached two major milestones: two billion monthly visitors[3] and a stock valuation of more than $500 billion.[4] Facebook's early motto, once plastered on the office walls of its Menlo Park headquarters at One Hacker Way, encapsulates its revolution: "Move Fast and Break Things."[5]

---

[1] Kevin Kelleher, *How Facebook Learned from Myspace's Mistakes*, FORTUNE (Nov. 19, 2010), http://fortune.com/2010/11/19/how-facebook-learned-from-myspaces-mistakes/ [https://perma.cc/2FX4-CF8W]. Despite News Corp's 2005 purchase of Myspace for $580 million, Wall Street commentator and Business Insider co-founder Henry Blodget remarked in 2009 that "Myspace might actually be worth next to nothing." Emma Barnett, *MySpace by Numbers: How It Compares to Its Rivals*, TELEGRAPH (Jan. 6, 2011), http://www.telegraph.co.uk/technology/myspace/8243403/MySpace-by-numbers-how-it-compares-to-its-rivals.html [https://perma.cc/MNM5-8WGR]. *See infra* Part III for a discussion of the early history of the social media business model.

[2] *See* Kelleher, *supra* note 1.

[3] Kathleen Chaykowski, *Mark Zuckerberg: 2 Billion Users Means Facebook's 'Responsibility is Expanding,'* FORBES (June 27, 2017), https://www.forbes.com/sites/kathleenchaykowski/2017/06/27/facebook-officially-hits-2-billion-users/#5c6e5c137080 [https://perma.cc/7GPG-BHWD].

[4] John Shinal, *Facebook Passes Amazon in Market Cap and Now Sits on the Brink of an Exclusive Club*, CNBC (July 28, 2017), https://www.cnbc.com/2017/07/28/facebook-touches-500-billion-passes-amazon.html [https://perma.cc/ZVS8-FYGU]. This milestone made Facebook the fourth most valuable U.S. technology firm at that time, *id.*, in an era when the technology industry claimed the top five market capitalizations and seven of the twenty most profitable companies in the world. Alexis C. Madrigal, *Silicon Valley's Big Three vs. Detroit's Golden-Age Big Three*, ATLANTIC (May 24, 2017), https://www.theatlantic.com/technology/archive/2017/05/silicon-valley-big-three/527838/ [https://perma.cc/24QN-VF85].

[5] Nick Statt, *Zuckerberg: 'Move Fast and Break Things' Isn't How Facebook Operates Anymore*, CNET (Apr. 30, 2014), https://www.cnet.com/news/zuckerberg-move-fast-and-break-things-isnt-how-we-operate-anymore/ (on file with the *Columbia Business Law Review*). In 2012, Mark Zuckerberg invoked the "Move Fast and Break Things" motto in a letter to investors as part of Facebook's SEC filings prior to its initial

Investors celebrated Facebook's meteoric rise, but many other commentators have begun to question the resultant concentration of power. Facebook faced heavy criticism for its "role in spreading fake news and divisiveness" during the 2016 U.S. presidential election,[6] and even before then, many commentators had expressed concern about Facebook's control over social discourse and its capacity for censorship.[7] Facebook founder Mark Zuckerberg has himself acknowledged that "many people now believe technology only centralizes power rather than decentralizes it."[8]

Concerns about Facebook's growing influence are not limited to the political sphere. In late 2017, Facebook admitted that social media use was linked with reductions in self-reported mental health and increases in teen depression.[9]

---

public offering. *See* Facebook, Registration Statement (Form S-1) 67 (Feb. 1, 2012). Facebook has since distanced itself from the motto, a move that some considered to be a sign of the "maturation" of the company. *See* Statt *supra*. As this Note argues in Part IV, this shift in Facebook's business philosophy was less a show of maturity than it was an adaptation to Facebook's newfound position as an entrenched monopolist.

[6] Deepa Seetharaman, *Mark Zuckerberg Resolves to 'Fix' Facebook in 2018*, WALL ST. J. (Jan. 4, 2018, 5:24 PM), https://www.wsj.com/articles/mark-zuckerberg-resolves-to-fix-facebook-in-2018-1515104645 (on file with the *Columbia Business Law Review*).

[7] *See generally* Benjamin F. Jackson, *Censorship and Freedom of Expression in the Age of Facebook*, 44 N.M. L. REV. 121 (2014) (discussing the incentives and implications of censorship on social media platforms and advocating for First Amendment protections); Trevor Puetz, Note, *Facebook: The New Town Square*, 44 SW. L. REV. 385 (2014) (arguing that Facebook should be treated as a public forum for First Amendment purposes, with Facebook's censorship capacity limited by the quasi-municipality doctrine).

[8] Mark Zuckerberg, FACEBOOK (Jan. 4, 2018), https://www.facebook.com/zuck/posts/10104380170714571 [https://perma.cc/3L94-MXCL].

[9] Brett Molina, *Facebook Admits Spending Too Much Time on Facebook Might Be Bad for You*, USA TODAY (Dec. 18, 2017, 6:31 PM), https://www.usatoday.com/story/tech/talkingtech/2017/12/18/facebook-admits-spending-too-much-time-facebook-might-bad-you/960418001/ [https://perma.cc/3M46-KSAT]; David Ginsburg & Moira Burke, *Hard Questions: Is Spending Time on Social Media Bad for Us?*, FACEBOOK (Dec. 15, 2017), https://newsroom.fb.com/news/2017/12/hard-questions-is-

Given that Facebook's business model centers on maximizing the amount of time users view content—and, by extension, view advertisements[10]—Facebook has a clear conflict of interest with efforts to curb the negative effects of excessive screen time. While Facebook has taken steps to redesign its user experience away from passivity,[11] the structure and incentives of the news feed (currently the main driver of native advertising on Facebook's primary platform)[12] reward Facebook's current model.[13] Furthermore, given studies linking teen depression to smartphone use,[14] Facebook's

spending-time-on-social-media-bad-for-us/ [https://perma.cc/R6JC-W6CQ]; *see also* Holly B. Shakya & Nicholas A. Christakis, *Association of Facebook Use with Compromised Well-Being: A Longitudinal Study*, 185 AM. J. EPIDEMIOLOGY 203, 208 (2017) (finding that "the use of Facebook was negatively associated with overall well-being.").

[10] *See, e.g.*, David Ingram & Rishika Sadam, *Facebook Shares Hit Record High as Mobile Ad Sales Soar*, REUTERS (July 26, 2017), https://www.reuters.com/article/us-facebook-results/facebook-shares-hit-record-high-as-mobile-ad-sales-soar-idUSKBN1AB2S8 [https://perma.cc/98DW-JVU3] ("[Facebook] also is accelerating its push into video, an effort aimed at taking advertising dollars from the television industry and increasing the time people spend on Facebook."). For an explanation of Facebook's advertising business model, see *infra* Part III.

[11] Mark Zuckerberg, CEO, Facebook, Inc., Remarks on Second Quarter 2018 Results Conference Call (July 25, 2018), https://investor.fb.com/investor-events/event-details/2018/Facebook-Q2-2018-Earnings/default.aspx [https://perma.cc/UZ83-A3HZ] ("We've launched multiple changes over the last half to news feed that encouraged more interaction and engagement between people and we plan to keep launching more like this.").

[12] *See* Ingram & Sadam, *supra* note 10 ("Clearly, the biggest driver of growth is, overall, Facebook news feed.").

[13] For an explanation of the news feed and its role in Facebook's business model, see discussion *infra* Part III.

[14] One such study, from 2017, found a strong correlation between smartphone adoption and teen mental health problems. *See* Jean M. Twenge, Thomas E. Joiner, Megan L. Rogers & Gabrielle N. Martin, *Increases in Depressive Symptoms, Suicide-Related Outcomes, and Suicide Rates Among U.S. Adolescents After 2010 and Links to Increased New Media Screen Time*, 6 CLINICAL PSYCHOL. SCI. 1, 11–12 (2017) ("Since 2010, adolescents [have] spent more time on social media and electronic devices, activities positively correlated with depressive symptoms and suicide-related outcomes. . . . Indicators of economic recession (high unemployment

reliance on its mobile platform for the vast majority of its advertising revenue[15] provides an example of how the company's public relations efforts may ultimately conflict with its bottom line. Perhaps no one can predict how Facebook will ultimately address these public concerns, but at least one thing is abundantly clear: across multiple fields, there are serious national conversations about the implications and consequences of Facebook's size and power.

Surprisingly, Facebook's dominance has thus far received little scrutiny from the traditional champion against concentrations of power: antitrust law. Antitrust authorities have largely turned a blind eye toward Facebook, even as journalists and business commentators have increasingly recognized the company's monopolistic potential and criticized its anticompetitive practices.[16] This blindness reflects

and negative Dow Jones Index change) were not positively correlated with depressive symptoms, suicide-related outcomes, or suicide deaths when matched by year (in contrast to smartphone adoption and social media use, which were positively correlated with mental health indicators when matched by year).").

[15] David Wehner, CFO, Facebook, Inc., Remarks on Second Quarter 2018 Results Conference Call (July 25, 2018), https://investor.fb.com/investor-events/event-details/2018/Facebook-Q2-2018-Earnings/default.aspx [https://perma.cc/T47G-H9J8] ("Mobile ad revenue . . . represent[ed] approximately 91% of ad revenue for the second quarter of 2018."). According to Needham and Co. analyst Laura Martin, Facebook's suite of mobile apps "are the de facto mobile advertising monopol[y]." Ingram & Sadam, *supra* note 10.

[16] *See, e.g.*, Elizabeth Dwoskin, *Facebook's Willingness to Copy Rivals' Apps Seen As Hurting Innovation*, WASH. POST (Aug. 10, 2017), https://www.washingtonpost.com/business/economy/facebooks-willingness-to-copy-rivals-apps-seen-as-hurting-innovation/2017/08/10/ea7188ea-7df6-11e7-a669-b400c5c7e1cc_story.html [https://perma.cc/7JN4-XN4E] ("'The dominance of these companies is choking off the start-up world,' Roger McNamee, an early investor in Google and Facebook and founder of the investment firm Elevation Partners, said of the two companies. 'I helped create a monster, and I regret it.'"); Brian Feldman, *Is Facebook a Monopoly? Just Ask Snapchat*, NEW YORK MAG. (Apr. 14, 2017), http://nymag.com/selectall/2017/04/is-facebook-a-monopoly-just-ask-snapchat.html [https://perma.cc/Z6JP-HWUG] ("[W]hen it's considered as a business strategy, employing Facebook's sheer magnitude as leverage to box out competition, it sounds less like a dishonorable practice, and more like

antitrust's broader difficulty in adapting to the challenges and problems arising from the explosion of the internet. When the Department of Justice ("DOJ") brought the seminal *Microsoft* litigation in 1998,[17] few people outside the technology industry understood the internet's potential.[18] And yet, that case reflects one of last significant antitrust monopolization

an anti-competitive, monopolistic one."); Greg Ip, *The Antitrust Case Against Facebook, Google and Amazon*, WALL ST. J. (Jan. 16, 2018), https://www.wsj.com/articles/the-antitrust-case-against-facebook-google-amazon-and-apple-1516121561 (on file with the *Columbia Business Law Review*) (discussing Facebook's market power and comparing its anticompetitive conduct to that of past targets of antitrust litigation, including Standard Oil Co. and AT&T); Kelleher, *supra* note 1 ("At this moment in time, it's safe to say social networking *is* Facebook.").

[17] United States v. Microsoft Corp., 253 F.3d 34 (D.C. Cir. 2001) (en banc) (per curiam).

[18] In 1998, only forty-one percent of adults went online, and seventy-nine percent of non-internet users said they worried "not very much" or "not at all" "about missing out on something by not going online." Susannah Fox, *The Internet Circa 1998*, PEW RES. CTR. (June 21, 2007), http://www.pewinternet.org/2007/06/21/the-internet-circa-1998/ [https://perma.cc/2DWQ-CKAL]. In contrast, Bill Gates' 1995 "Internet Tidal Wave" memo—an important piece of evidence in the *Microsoft* litigation—assigned the internet the "highest level of importance," and declared that the internet "will set the course of [the] industry for a long time to come." Memorandum from Bill Gates to Executive Staff and Direct Reports (May 26, 1995), https://www.justice.gov/sites/default/files/atr/legacy/2006/03/03/20.pdf [https://perma.cc/UGW9-2QXB].

challenges[19] and remains a leading doctrinal case for assessing monopolization claims.[20]

There is a growing body of scholarship criticizing current antitrust doctrine's failure to "capture the architecture of market power in the twenty-first century marketplace," especially for tech companies and internet platform intermediaries.[21] At the heart of the debate is a tension

---

[19] *See, e.g.*, Carl Shapiro, *Microsoft: A Remedial Failure*, 75 ANTITRUST L.J. 739, 739 (2009) (describing the *Microsoft* case as "unquestionably the most visible antitrust case since the breakup of AT&T"). Even with the DOJ and Federal Trade Commission's recent focus on blocking mergers, tech companies have largely been given a pass. For example, the FTC approved the merger of Facebook and Instagram in 2012, despite widespread acknowledgement in the business community that Instagram was one of Facebook's greatest potential competitors. *See, e.g.*, Nicholas Carlson, *Instagram Was Facebook's Biggest Threat*, BUS. INSIDER (Apr. 9, 2012, 1:33 PM), http://www.businessinsider.com/instagram-was-facebooks-biggest-threat-2012-4 [https://perma.cc/2U4Y-CLQR]; *Facebook Buys Instagram for $1 Billion, Turns Budding Rival into Its Standalone Photo App*, TECHCRUNCH (Apr. 9, 2012) [hereinafter *Facebook Buys Instagram*], https://techcrunch.com/2012/04/09/facebook-to-acquire-instagram-for-1-billion/ [https://perma.cc/67U6-NDBM] (describing the deal as "squashing a threat to [Facebook's] dominance in photo sharing."). While the FTC did not disclose its reasons for approving the merger, the United Kingdom Office of Fair Trading (which also approved the merger) relied on the fact that Instagram did not have advertising or a revenue stream. *See* Josh Constine, *Why the OFT and FTC Let Facebook Buy Instagram: FB Camera Is Tiny, IG Makes No Money, and Google*, TECHCRUNCH (Aug. 22, 2012), https://techcrunch.com/2012/08/22/ftc-facebook-instagram [https://perma.cc/K6H6-KRA6]. That reasoning seems naïve in hindsight, given that Instagram now runs ads generating more than ten percent of Facebook's revenue and could be independently valued at $100 billion. *See* Emily McCormick, *Instagram Is Estimated to Be Worth More than $100 Billion*, BLOOMBERG (June 25, 2018, 2:17 PM), https://www.bloomberg.com/news/articles/2018-06-25/value-of-facebook-s-instagram-estimated-to-top-100-billion (on file with the *Columbia Business Law Review*).

[20] *See, e.g.*, Benjamin M. Miller, *Product Hopping: Monopolization or Innovation?*, 22 B.U. J. SCI. & TECH. L. 89, 104 (2016) (citing *Microsoft* as the analytical framework for monopolistic conduct).

[21] Lina M. Khan, Note, *Amazon's Antitrust Paradox*, 126 YALE L.J. 710, 716 (2017) (arguing that current antitrust doctrine fails to properly account for the underlying structure and market dynamics of modern economics). *See generally* MAURICE E. STUCKE & ALLEN P. GRUNES, BIG DATA AND

between proactive antitrust enforcement to protect competition and the possibility of condemning, for lack of understanding, conduct that is actually procompetitive and pro-consumer.[22] Because the tech industry, in particular, experiences rapid shifts in business models and market power, antitrust law may react too slowly (allowing a firm to

COMPETITION POLICY ch. 7 (2016) (arguing that antitrust merger review fails to take into account the competitive impacts of "big data" in tech industries); Pamela J. Harbour & Tara I. Koslov, *Section 2 in a Web 2.0 World: An Expanded Vision of Relevant Product Markets*, 76 ANTITRUST L.J. 769, 773 (2010) (arguing that the antitrust agencies should define "relevant product markets" for tech industries based on "current and future interrelationships and convergence among various technologies," accounting for "areas where new and meaningful competition is likely to emerge" due to technological developments); John M. Newman, *Antitrust in Zero-Price Markets: Foundations*, 164 U. PA. L. REV. 149 (2015) (criticizing antitrust's failure to address zero-price markets such as search engines and social media platforms); Timothy Wu, *Blind Spot: The Attention Economy and the Law*, ANTITRUST L.J. (forthcoming 2018) (arguing that antitrust agencies have struggled to give appropriate weight to attentional power in assessing the market power of advertising-based tech platform intermediaries). *But see* Geoffrey A. Manne & Joshua D. Wright, *Google and the Limits of Antitrust: The Case Against the Case Against Google*, 34 HARV. J.L. & PUB. POL'Y 171, 178 (2011) (arguing that aggressive enforcement of antitrust law against companies like Google could discount potential procompetitive justifications and create a "substantial risk for a false positive which would chill the innovation and competition that currently provides immense benefits to consumers."); Spencer W. Waller, *Antitrust and Social Networking*, 90 N.C. L. REV. 1771, 1800–05 (2012) (deeming the current antitrust world "appropriate" and concluding that Facebook and similar firms should not be subject to monopolization liability, but also recognizing the potential for "firms with market power in the technology space. . . [to] engage in a variety of tactics to prevent the second wave of creative destruction" central to a Schumpeterian model of competition).

[22] This tension has been at the core of antitrust policy since the rise of the Chicago School in the 1980s. For a discussion of the Chicago School's assumptions and impact on contemporary antitrust enforcement, see Khan, *supra* note 21, at 717–22. *See also Microsoft*, 253 F.3d at 58 ("Whether any particular act of a monopolist is exclusionary, rather than merely a form of vigorous competition, can be difficult to discern: the means of illicit exclusion, like the means of legitimate competition, are myriad. The challenge for an antitrust court lies in stating a general rule for distinguishing between exclusionary acts, which reduce social welfare, and competitive acts, which increase it.").

entrench itself as a monopolist and eliminate competitors before the antitrust authorities can recognize the anticompetitive nature of its conduct), or too quickly (improperly presuming that conduct that might have been anticompetitive in traditional markets will have the same effects in tech markets).

Therefore, in addition to understanding the nature of market power and monopoly in the tech industry, it is important to understand what anticompetitive conduct looks like in the twenty-first century. So far, antitrust doctrine has largely failed to address this challenge. While "rigorous definition of market power" remains an important step before the identification of exclusionary and harmful behavior,[23] antitrust authorities need to embrace new conceptions and theories of anticompetitive harm. These can both guide their inquiry of market power and allow them to move quickly against monopolists when that power and harm are identified.[24]

Facebook's recent string of copycat conduct provides an ideal example of a kind of anticompetitive harm currently overlooked by antitrust law. Although copying has long been a mainstay in the tech industry,[25] Facebook's highly publicized copying of popular features of rival apps—both

---

[23] Waller, *supra* note 21, at 1803.

[24] The *Microsoft* court acknowledged the especial need for quick responses to anticompetitive behavior in the tech industry: "[J]ust over six years have passed since Microsoft engaged in the first conduct plaintiffs allege to be anticompetitive. As the record in this case indicates, six years seems like an eternity in the computer industry. By the time a court can assess liability, firms, products, and the marketplace are likely to have changed dramatically." 253 F.3d at 49.

[25] *See* Dwoskin, *supra* note 16 ("Many in Silicon Valley say copying is fair game, arguing it is intrinsic to competition and to the history of U.S. business."); Betsy Morris & Deepa Seetharaman, *The New Copycats: How Facebook Squashes Competition From Startups,* WALL ST. J. (Aug. 9, 2017, 1:47 PM), https://www.wsj.com/articles/the-new-copycats-how-facebook-squashes-competition-from-startups-1502293444 (on file with the *Columbia Business Law Review*) ("Facebook executives have said publicly it is common in tech for companies to build on technologies pioneered by others.").

established, highly-capitalized rivals such as Snapchat,[26] and, perhaps more importantly, fledgling startups—has shone a spotlight on a previously unrecognized array of anticompetitive harms.[27] In recent years, Facebook's copying has become so brazen and obvious that one journalist joked that the company's new motto should be "Move Last and Take Things."[28]

This Note will map out Facebook's copying campaign, tracing the sources of Facebook's growth and documenting the company's shift away from competitive market disruption towards anticompetitive market stagnation. In particular, the Note will analyze how specific aspects of the social media market enabled Facebook to build a legitimate empire through procompetitive copying, and describe how Facebook then corrupted those same strategies toward anticompetitive, exclusionary ends. In order to provide a coherent framework that identifies anticompetitive copying while avoiding condemnation of procompetitive behavior, this Note will propose a new exclusionary theory: predatory copying.

Part II of this Note provides an overview of monopolization doctrine and existing exclusionary theories under section 2 of

---

[26] *See* Kathleen Chaykowski, *Facebook's Rich History of Copying Snapchat*, FORBES (Aug. 3, 2016, 11:32 AM), https://www.forbes.com/sites/kathleenchaykowski/2016/08/03/snapchat-copycat-facebooks-rich-history-of-copying-its-best-features/#6ac1d0f73b79 [https://perma.cc/UX9C-J66P] (documenting Facebook's series of Snapchat-cloning attempts).

[27] *See* Dwoskin, *supra* note 16 ("When venture capitalists hear pitches from entrepreneurs, they say that one of the first questions they ask is how easy would it be for Facebook to copy the idea."); *id.* (describing Facebook's "new reputation as a threat to start-ups" as a result of its copying); Morris & Seetharaman, *supra* note 25 ("Silicon Valley is dominated by a few titans, a development that's fundamentally altering the nature of America's startup culture. . . . The deep pockets of giants such as Facebook, Alphabet Inc.'s Google, Apple Inc. and Amazon.com Inc. make it increasingly difficult for startups to compete and stay independent. . . . Lately, the titans also appear to be imitating smaller rivals more aggressively.").

[28] Josh Constine, *Instagram Stories Hits 200m Users, Surpassing Snapchat as It Copies Its AR Stickers*, TECHCRUNCH (Apr. 13, 2017), https://techcrunch.com/2017/04/13/instagram-stories-bigger-than-snapchat/ [https://perma.cc/X4GH-RFBQ].

the Sherman Act. Part III will then analyze Facebook's social media business model, exploring how consumer-focused development and user-growth strategies interact with Facebook's advertising incentives as a platform-intermediary. Part IV will document specific instances of Facebook's current copycat campaign, explaining how Facebook responds to threats from both established rivals and nascent competitors. Finally, Part V will evaluate the exclusionary case against Facebook, exposing the inadequacies of current section 2 exclusionary theories. It will then turn to predatory copying as a new approach to understanding and identifying the relevant anticompetitive harms.

II. MONOPOLIZATION UNDER SECTION 2 OF THE SHERMAN ANTITRUST ACT

Section 2 of the Sherman Act makes it unlawful to "monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States."[29] In *United States v. Grinnell Corp.*, the Supreme Court established the current monopolization test. A successful monopolization claim requires proof of two elements: (1) "possession of monopoly power in the relevant market," and (2) "willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident."[30]

A. Monopoly Power and Attention Brokers

The first element of the *Grinnell* monopolization test—possession of monopoly power—poses a difficult challenge when applied to social media markets. As suggested above, most of the scholarship on social media markets has focused on the question of market power.[31] Because direct proof of

---

[29] 15 U.S.C. § 2 (2012).

[30] United States v. Grinnell Corp., 384 U.S. 563, 570–71 (1966).

[31] *See supra* note 21.

monopoly power is rarely available,[32] one of the most effective ways to prove monopoly power is to show that a firm possesses a dominant share of a relevant market, which is protected by entry barriers.[33]

In a typical monopolization case, then, the first step is often market definition. A product's relevant market includes those "commodities reasonably interchangeable by consumers for the same purposes."[34] Two products are in the same market if consumers view them as economic substitutes— meaning that a rise in the price of one product would drive consumers to switch to the other, less expensive product.[35] A narrow market definition will include fewer substitutes and

---

[32] United States v. Microsoft Corp., 253 F.3d 34, 51 (D.C. Cir. 2001) (en banc) (per curiam). Direct proof of monopoly power is evidence that shows that a firm can profitably raise prices substantially above the competitive level. *Id.*

[33] *Id.* The *Microsoft* court defined "entry barriers" as factors "that prevent new rivals from timely responding to an increase in price above the competitive level." *Id.* For a discussion of entry barriers in social media markets, see Waller, *supra* note 21, at 1786–93. Harbour & Koslov, *supra* note 21, at 777, have cited Facebook as a clear example of a tech firm that has created and exploited network effects, a kind of entry barrier created when the value of a network to a user increases in proportion to the number of other users. Although there is a growing consensus that advertising platform intermediaries, such as Google and Facebook, benefit from the network effects, Manne & Wright, *supra* note 21, at 208, have expressed skepticism towards the notion that network effects raise exclusionary concerns. They argue that network "feedback effects" are internalized by the dominant platform in the form of higher costs to advertisers; so, smaller platforms remain competitive to the extent that their advertising prices reflect their diminished reach. *Id.* The *Microsoft* court acknowledged this debate. *Microsoft*, 253 F.3d at 50 ("[T]here is no consensus among commentators on the question of whether, and to what extent, current monopolization doctrine should be amended to account for competition in technologically dynamic markets characterized by network effects. . . . Indeed, there is some suggestion that the economic consequences of network effects and technological dynamism act to offset one another, thereby making it difficult to formulate categorical antitrust rules absent a particularized analysis of a given market.").

[34] United States v. E.I. du Pont de Nemours & Co., 351 U.S. 377, 395 (1956).

[35] For a basic introduction to substitutes and complements, see ARLEEN J. HOAG & JOHN H. HOAG, INTRODUCTORY ECONOMICS 65–66 (2006).

therefore will indicate that a firm has a higher market share than they would have under a broader definition. Thus, antitrust enforcement agencies and plaintiffs generally argue for narrower market definitions, and antitrust defendants generally argue for broader market definitions. The debate over the correct definition is often highly contentious, and sometimes dispositive.

Defining product markets for internet platform intermediaries remains an unresolved problem in modern antitrust. Unlike traditional firms that sell their products to consumers, social media companies—and other advertising platform intermediaries such as Google—often offer their services to consumers for "free."[36] Instead of charging consumers, Facebook monetizes its product by selling ad space.[37] Professor Timothy Wu coined the term "attention broker" to describe companies, including Facebook, that attract consumer attention and then resell that attention to advertisers.[38] Unlike traditional platform intermediaries, which simply bring together buyers and sellers from two separate markets to facilitate transactions,[39] attention brokers "sit[] at the juncture between two different types of

---

[36] Platform businesses often differ from traditional business models because optimal pricing for one side of the platform "may result in setting price on a particular market side below measures of average variable or marginal cost incurred by customers on that market side," leading to platform businesses that "charge one side little or nothing." David S. Evans, *The Antitrust Economics of Multi-Sided Platform Markets*, 20 YALE J. REG. 325, 328 (2003). Thus, Facebook does not charge individuals to create profiles. *See Common Myths About Facebook*, FACEBOOK HELP CENTER, https://www.facebook.com/help/369078253152594 [https://perma.cc/SKF4-G8QS] ("Facebook is a free site and will never require that [users] pay to continue using the site."). However, individual Facebook users arguably do pay to use Facebook by transferring to Facebook the right to gather data, a valuable commodity. *See, e.g.*, Jennifer Zhu Scott, *You Should Be Paid for Your Facebook Data*, QUARTZ (Apr. 11, 2018), https://qz.com/1247388/you-should-be-paid-for-your-facebook-data/ [https://perma.cc/W2R2-ZYXL] (noting that "data ownership is not a privacy issue—it's an economic issue").

[37] *See infra* Part III.

[38] Wu, *supra* note 21.

[39] "Classic examples include credit card companies, shopping malls, or online firms like eBay" and Amazon. *See id.* at 18.

markets—a money market on the one side, and an attention market on the other."[40]

The unique structure of attention brokers poses a difficult choice for market definition: whether to focus on user markets or on advertising markets. Courts and antitrust enforcement agencies tend to focus on the advertising side of this equation, defining attention broker product markets based on the scope of the advertising market.[41] Thus, instead of looking at whether individual *consumers*—in Facebook's case, individual profile users—treat a product as a substitute, courts tend to evaluate whether *advertisers* would switch to a substitute in response to a price increase.[42] So, if an advertiser switches its business to another attention broker B in response to a price increase by attention broker A, then A's and B's products are in the same advertising market.

Under this model, Facebook is in the same product market as another attention broker if advertisers would respond to a small-but-significant price hike for ad space on Facebook by taking their advertisement business to the other broker.[43] Thus, even though Facebook's market might, from an intuitive, individual user point of view, consist solely of other social media companies (including Twitter, Snapchat, etc.) from among which users choose to spend their "social media" time, Facebook's advertising product market might be shared with a much broader range of attention brokers. Advertisers could conceivably respond to a Facebook price increase by shifting their advertisements not only to other social media companies, but also to search engines like Google, online

---

[40] *Id.*

[41] *See* Manne & Wright, *supra* note 21, at 220–23.

[42] For a critique of this method of market definition, see Wu, *supra* note 21.

[43] The significant and non-transitory increase in price (SSNIP) test, first implemented by the Justice Department for merger review, tests substitution by determining whether a hypothetical monopolist could profit from a price increase of five to ten percent for at least one year. Larger hypothetical price increases may result in overly broad market definitions. U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, HORIZONTAL MERGER GUIDELINES § 4.1, (Aug. 19, 2010), https://www.justice.gov/atr/horizontal-merger-guidelines-08192010 [https://perma.cc/ENF5-8VDW].

stores like Amazon, or even to non-internet-based attention brokers such as television networks or print newspapers.[44]

While the debate over market definitions provides valuable context for the subsequent discussion of business models and exclusionary conduct, this Note will not delve further into the question of how to properly define product markets for social media companies.[45] Therefore, in evaluating the merits of

[44] David Evans, in work done for Google, concluded that nearly everything on the web competing for attention is presumptively in the same market: "[A]ttention seekers compete with each other, at least to some degree, across even broadly defined products and service categories. When one attention seeker gets more attention some other attention seeker is probably getting less." David S. Evans, *Attention to Rivalry Among Online Platforms and Its Implications for Antitrust Analysis* (Coase-Sandor Inst. for Law & Econ., Working Paper No. 627, 2013). At least one district court has espoused a similar argument. *See* KinderStart.com, LLC v. Google, Inc., No. C06-2057JF(RS), 2007 WL 831806, at *6 (N.D. Cal. Mar. 16, 2007) ("[T]here is no logical basis for distinguishing the Search Ad Market from the larger market for Internet advertising. Because a website may choose to advertise via search-based advertising or by posting advertisements independently of any search, search-based advertising is reasonably interchangeable with other forms of Internet advertising. The Search Ad Market thus is too narrow to constitute a relevant market.").

[45] As noted at the beginning of this Section, product market definitions are, in practice, heavily litigated and highly technical. For a fuller discussion of whether "online social media market" constitutes a cognizable product market, see generally Waller, *supra* note 21. Of particular relevance, Waller notes that Facebook benefits from a host of network effects and other barriers to entry that provide "further information regarding whether the market shares are an accurate indication of true market power." *Id.* at 1786. See *infra* Part IV for a discussion of Facebook's network effects and entry barriers. Although Waller speculated that Facebook might be replaced with another new platform as Facebook itself replaced Friendster and Myspace before it, *see id.* at 1801, Facebook's continued and growing dominance since Waller's article was published in 2012 puts into question the Schumpeterian assumptions underlying that speculation. At the very least, Facebook's now decade-long dominance of the social media landscape makes it unique among peers: Myspace ceded dominance to Facebook a mere five years after it was launched, and Friendster ceded dominance to Myspace after a mere two years. See *infra* Part III for a discussion of the history of Friendster, Myspace, and early social media markets. As Oliver Williamson noted in 1972, "persistent dominance of an industry by a single firm is not to be expected." Oliver E. Williamson, *Dominant Firms and the Monopoly Problem: Market Failure*

potential monopolization cases against Facebook, this Note assumes arguendo that Facebook possesses monopoly power in an online social media market. With this assumption established, the next Section will turn to an overview of the body of law most relevant to this project: *Grinnell* part two, or proof of "willful acquisition or maintenance of [monopoly] power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident."[46]

B.   Exclusionary Conduct

In early monopolization cases under the Sherman Act, the DOJ[47] enforced the antitrust laws with little guidance and a large degree of doctrinal flexibility—cases were driven as often by political motives as by concrete economics.[48] Throughout the twentieth century, the judiciary fleshed out the vague commandments of the Sherman Act into a complex and rich body of law. Along the way, the courts altered some of the basic assumptions underlying the earlier cases. These shifts generated an antitrust law that arguably targets a different subset of conduct and prioritizes a different set of values than Congress originally intended when it passed the Sherman Act in 1890.

Considerations, 85 HARV. L. REV. 1512, 1514 (1972). This Note contends that such persistent dominance should be even more vigorously scrutinized in technological markets, where the pace of innovation makes such time periods seem "like an eternity." *See* United States v. Microsoft Corp., 253 F.3d 34, 49 (D.C. Cir. 2001) (en banc) (per curiam).

[46]   United States v. Grinnell Corp., 384 U.S. 563, 570–71 (1966).

[47]   The FTC was not established until the Federal Trade Commission Act of 1914, 15 U.S.C. § 41, nearly a quarter century after the Sherman Act.

[48]   *See* Marc Winerman, *The Origins of the FTC: Concentration, Cooperation, Control, and Competition*, 71 ANTITRUST L.J. 1, 2 (2003) ("From the Sherman Act's passage in 1890 through the passage of the Federal Trade Commission and Clayton Acts in 1914, antitrust was a 'movement' that inspired public agitation, not the specialized 'enterprise' that it later became.").

1. *Alcoa*, *Grinnell*, and the Beginnings of Anticompetitive Conduct Analysis

The first true guiding statement of modern monopolization law arrived over a half century after the Sherman Act, from the pen of Judge Learned Hand in *United States v. Aluminum Co. of America* ("Alcoa").[49] By the time that the DOJ brought its case against Alcoa in 1937, the aluminum manufacturer had been the subject of antitrust scrutiny for nearly three decades.

Following the expiration of process patents in 1909, by virtue of which Alcoa had achieved a legal monopoly in aluminum production,[50] Alcoa began engaging in a series of anticompetitive practices.[51] A mere three years later, in 1912, the DOJ entered into a consent decree with Alcoa. This consent decree settled monopolization charges stemming from cartels Alcoa formed with foreign aluminum producers and their exclusive dealing arrangements with power suppliers. Alcoa undertook these activities to prevent other aluminum producers from attaining the large supplies of electricity necessary at the time for aluminum production.[52] In 1924, the Federal Trade Commission ("FTC") again accused Alcoa of wrongful practices, alleging that Alcoa violated the 1912 consent decree; the DOJ subsequently opened an investigation, which it closed in 1926.[53] That close brush—but successful avoidance of liability—created a tide of controversy, with "[h]igh profile Senate hearings focused on the DOJ's inaction and . . . the FTC's stated inability to

---

[49] United States v. Aluminum Co. of Am., 148 F.2d 416, 430 (2d Cir. 1945). At the time, a panel of the Second Circuit's senior judges was designated by special legislation as the court of last resort. Marc Winerman & William E. Kovacic, *Learned Hand,* Alcoa*, and the Reluctant Application of the Sherman Act*, 79 Antitrust L.J. 295, 299–300 (2013). The Supreme Court approved of *Alcoa* one year later in *Am. Tobacco Co. v. United States*, 328 U.S. 781, 811 (1946).

[50] Winerman & Kovacic, *supra* note 49, at 298.

[51] *Alcoa*, 148 F.2d at 430 ("[I]n 1909, when its last lawful monopoly ended, it sought to strengthen its position by unlawful practices.").

[52] Winerman & Kovacic, *supra* note 49, at 298.

[53] *Id.*

cooperate fully in the inquiry."[54] In 1937, the DOJ, then headed by future Supreme Court Justice Robert Jackson, took another shot at Alcoa. Following a two-year trial, the district court ruled for Alcoa.[55]

Writing for a unanimous panel, Judge Hand reversed the district court's ruling and found Alcoa guilty of monopolization.[56] Judge Hand established several core principles before evaluating Alcoa's pertinent conduct. Most importantly, he explained that mere possession of monopoly power is not an antitrust offense:

> [T]he origin of a monopoly may be critical in determining its legality. . . . This notion has usually been expressed by saying that size does not determine guilt; that there must be some 'exclusion' of competitors; that the growth must be something else than 'natural' or 'normal'; that there must be a 'wrongful intent,' or some other specific intent; or that some 'unduly' coercive means must be used. . . . [P]ersons may unwittingly find themselves in possession of a monopoly, automatically so to say: that is, without having intended either to put an end to existing competition, or to prevent competition from arising when none had existed; they may become monopolists by force of accident. Since the Act makes 'monopolizing' a crime, as well as a civil wrong, it would be not only unfair but presumably contrary to the intent of Congress, to include such instances. . . . The successful competitor, having been urged to compete, must not be turned upon when he wins.[57]

Judge Hand proceeded to dispel the notion that Alcoa was such a passive beneficiary of a monopoly, writing that Alcoa deliberately engaged in a course of conduct to "effectively anticipate[] and forestall[] all competition, and succeed[] in

---

[54] *Id.*

[55] *Id.* at 299.

[56] The court remanded the case to the district court to craft an appropriate remedy. *Alcoa*, 148 F.2d at 448.

[57] *Id.* at 429–30.

holding the field alone."[58] By opening up new production capacity in response to any increase in demand, Alcoa prevented potential competitors from entering the aluminum business. Alcoa argued that such conduct should be commended rather than condemned; it characterized its continued satiation of aluminum demand as "evidence of the skill, energy and initiative with which it has always conducted its business."[59] Judge Hand dismissed this defense, finding that Alcoa's conduct was not driven by its business acumen, but rather by its desire to crush potential competitors before they could challenge its dominance:

> It was not inevitable that [Alcoa] should always anticipate increases in the demand for ingot and be prepared to supply them. Nothing compelled it to keep doubling and redoubling its capacity before others entered the field. It insists that it never excluded competitors; but we can think of no more effective exclusion than progressively to embrace each new opportunity as it opened, and to face every newcomer with new capacity already geared into a great organization, having the advantage of experience, trade connections and the elite of personnel. Only in case we interpret 'exclusion' as limited to maneuvres not honestly industrial, but actuated solely by a desire to prevent competition, can such a course, indefatigably pursued, be deemed not 'exclusionary.' So to limit it would in our judgment emasculate the Act; would permit just such consolidations as it was designed to prevent.[60]

Thus, Judge Hand imposed a fairly limited exception to monopolization liability, available only to those "who do not seek, but cannot avoid, the control of a market."[61] This reasoning—in contrast to the modern paranoia with respect to accidentally condemning procompetitive, pro-consumer

---

[58] *Id.* at 430.

[59] *Id.*

[60] *Id.* at 431.

[61] *Id.*

behavior—seems borderline outlandish.[62] With the advent of price theory[63] and the availability of capital markets, modern antitrust doctrine generally presumes that new competitors will easily attract the investment necessary to enter monopolized markets in order to extract a piece of the monopoly rent.[64] According to this logic, Alcoa's own expanded production capacities alone could not possibly have excluded competitors.

As such, *Alcoa* arguably blurred the line between anticompetitive conduct and otherwise legitimate business strategies.[65] Although *Alcoa* would almost certainly come out differently today, the core principles espoused in Judge Hand's opinion became enshrined in the antitrust canon. In *Grinnell v. United States*, the Supreme Court fashioned Hand's overture on accidental monopoly into the second prong of a section 2 monopolization test, but expanded the liability defense beyond mere accident, stating the second prong as requiring "the willful acquisition or maintenance of that

---

[62] This disconnect is only further confounded by Judge Hand's admitted reluctance to enforce the Sherman Act: "I despise this whole method of dealing with a very real and very serious problem in our industrial life; but this is the way we have chosen, and we ought not to wince, because of the vagueness of the outlines, when we are faced with so clear an instance." Winerman & Kovacic, *supra* note 49, at 296 (citing Pre-Conference Memorandum from Judge Learned Hand to Judges Augustus N. Hand and Thomas W. Swan at 13–14 (Feb. 2, 1945) (on file in Learned Hand Papers, Harvard Law School Library, Box 207, Folder 17)).

[63] Price theory is a central tenet of the Chicago School. *See* Richard A. Posner, *The Chicago School of Antitrust Analysis*, 127 U. PA. L. REV. 925, 932 (1979). Price theory assumes that the market will allocate resources to "areas where they will earn the highest return." *Id.* at 928.

[64] These economic ideas also predated the Chicago movement. *See, e.g.*, MARC A. EISNER, ANTITRUST AND THE TRIUMPH OF ECONOMICS: INSTITUTIONS, EXPERTISE, AND POLICY CHANGE 105 (1991) (describing capital requirements as merely "objective technical demands of production and distribution," and concluding that "all firms are subject to the threat of potential competition . . . regardless of the number of firms or levels of concentration").

[65] *See* Winerman & Kovacic, *supra* note 49, at 302 (noting that "[t]o his critics, Hand embraced an utterly wrongheaded view of industrial organization, and he willingly engaged the antitrust system in a program that destroyed efficiency in pursuit of hazy egalitarian objectives").

power *as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.*"[66] After *Grinnell*, business savvy was once again a defense to monopolization.[67]

2. The *Microsoft* Revolution: Antitrust, Technology, and Exclusionary Conduct

In *United States v. Microsoft Corp.*,[68] the D.C. Circuit revisited and revised the antitrust canon established by *Alcoa*. Microsoft was engaged in a broad system of conduct aimed at preserving its monopoly in the operating system market against competitive threats from Netscape (a rival internet browser company), middleware, and Java.[69] The district court held Microsoft liable for four types of exclusionary conduct: (1) integrating Internet Explorer (Microsoft's own internet browser) into Windows (its operating system) to exclude other internet browsers; (2) creating exclusive dealing and licensing arrangements; (3) intentionally subverting Java technologies; and (4) its overall course of conduct.[70]

Like Judge Hand in *Alcoa*, the *Microsoft* court established a set of principles defining the contours of exclusionary conduct before turning to the specific behavior at issue. But while Judge Hand was quick to dismiss Alcoa's pro-consumer argument, *Microsoft* embedded a broad procompetitive defense at the center of its monopolization analysis:

---

[66] United States v. Grinnell Corp., 384 U.S. 563, 570–71 (1966) (emphasis added).

[67] The Supreme Court has since hesitated to condemn monopolies established via business acumen, observing that "[t]he opportunity to charge monopoly prices—at least for a short period—is what attracts 'business acumen' in the first place; it induces risk taking that produces innovation and economic growth." Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, L.L.P., 540 U.S. 398, 407 (2004) (dictum).

[68] 253 F.3d 34 (D.C. Cir. 2001) (en banc) (per curiam).

[69] *Id.* at 47, 58. Technically, the court defined the relevant market as Intel-compatible PC operating systems, a narrower market definition. *Id.* at 46, 50–54.

[70] *Id.* at 58.

> [I]f a plaintiff successfully establishes a *prima facie* case under § 2 by demonstrating anticompetitive effect, then the monopolist may proffer a "procompetitive justification" for its conduct. If the monopolist asserts a procompetitive justification—a nonpretextual claim that its conduct is indeed a form of competition on the merits because it involves, for example, greater efficiency or enhanced consumer appeal—then the burden shifts back to the plaintiff to rebut that claim.[71]

If the plaintiff fails to rebut the procompetitive justification, then the burden remains on the plaintiff to prove that the conduct's anticompetitive harms outweigh any procompetitive benefits.[72] Thus, where a legitimate procompetitive justification conflicts with a legitimate anticompetitive theory of harm, the *Microsoft* court relied on a balancing test to determine whether to impose liability for the underlying conduct.[73]

The *Microsoft* court also clarified and narrowed the concept of anticompetitive effects, writing that "to be condemned as exclusionary, a monopolist's act must . . . harm the competitive *process* and thereby harm consumers. In contrast, harm to one or more *competitors* will not suffice."[74] Thus, it was not enough for the plaintiffs to show that Microsoft's conduct harmed its emerging competitor, Netscape. Rather, the plaintiffs had the burden of proving that Microsoft's conduct was of the kind "which unfairly tends to destroy competition itself."[75]

Turning to the alleged exclusionary conduct, the court proceeded to apply this new framework to each category of harmful behavior. The *Microsoft* court engaged in a lengthy, highly detailed, and technical evaluation of the

---

[71] *Id.* at 59 (citations omitted).

[72] *Id.* The *Microsoft* court compared this analysis to the "rule of reason" approach used in horizontal agreement cases under section 1 of the Sherman Act. *Id.*

[73] *Id.* (describing the rule of reason as a "balancing approach").

[74] *Id.* at 58.

[75] *Id.*

procompetitive and anticompetitive arguments within each category.[76] For example, when considering Microsoft's technological integration of Internet Explorer ("IE") and Windows, the court found that the government had met its burden of showing that Microsoft's conduct deterred original equipment manufacturers ("OEM")—the companies that manufacture computers and other hardware—from pre-installing and supporting other browsers.[77] However, the court expressed hesitation towards condemning these activities because they represented product design choices.[78] The court recognized that questioning product design choices carries a greater risk of condemning pro-consumer innovation.[79] However, noting that "[j]udicial deference to product innovation . . . does not mean that a monopolist's product design decisions are per se lawful," the court concluded that Microsoft's choices "reduce[d] the usage share of rival browsers not by making Microsoft's own browser more attractive to consumers, but, rather, by discouraging OEMs from distributing rival products."[80] With the exception of the default browser override, the court found that "Microsoft failed to meet its burden of showing that its conduct serves a purpose other than protecting its operating system

---

[76] *See id.* at 59–80.

[77] Specifically at issue were Microsoft's choices to (1) remove IE from the "Add/Remove Programs" utility, preventing users from uninstalling the program, (2) in certain circumstances, override the user's choice of a default browser other than IE, and (3) commingle IE's code with other files such that any attempt to delete IE would cripple the operating system. *Id.* at 65.

[78] *Id.* ("As a general rule, courts are properly very skeptical about claims that competition has been harmed by a dominant firm's product design changes.").

[79] *Id.* ("In a competitive market, firms routinely innovate in the hope of appealing to consumers, sometimes in the process making their products incompatible with those of rivals; the imposition of liability when a monopolist does the same thing will inevitably deter a certain amount of innovation. This is all the more true in a market, such as this one, in which the product itself is rapidly changing.").

[80] *Id.*

monopoly."[81] For this and every other category of alleged harm, the court carefully scrutinized the evidence in the record supporting each of Microsoft's procompetitive justifications.[82]

Microsoft provides examples of several modern theories of anticompetitive conduct, but the case also provides something more important: context and comparison. The *Microsoft* court's thorough examination of the specific anticompetitive effects, potential procompetitive benefits, and the balance between those factors for each and every theory of harm, stands in stark contrast to Judge Hand's comparatively summary conclusion of anticompetitive harms in *Alcoa*. *Microsoft* demonstrates that modern monopolization enforcement, especially against tech companies, is a demanding and evidence-intensive endeavor.

3. Predatory Pricing and the Limits of the Monopolization Offense

In addition to the general exclusionary theories present in *Microsoft*,[83] antitrust law also has developed a set of specific

---

[81] *Id.* at 67. The court credited Microsoft's claims that it had "valid technical reasons" for overriding user browser choices in certain circumstances, noting that plaintiffs had failed to rebut the justification or show that it was outweighed by its anticompetitive effects. *Id.*

[82] *See, e.g.*, *id.* at 63–64 (concluding that Microsoft failed to provide sufficient evidence to show that licensing restrictions to OEMs were necessary to maintain platform stability and consistency and to prevent user confusion); *id.* at 67–71 (considering and rejecting Microsoft's argument that exclusive dealing arrangements with internet service providers were procompetitive because they allowed developers to focus on one browser); *id.* at 74–78 (analyzing Microsoft's efforts to sabotage the fledgling Java industry, and notably reversing liability for Microsoft's development of its own Java platform that was incompatible with the most popular Java provider because Microsoft's platform allowed users to run Java applications faster on Windows).

[83] In *Microsoft*, much of the court's analysis focused on exclusive dealing, but it also leaned upon general exclusionary principles, recognizing that "the means of illicit exclusion, like the means of legitimate competition, are myriad." *Id.* at 58. The *Microsoft* court also examined a product tying theory based on Microsoft integrating IE into Windows, *id.* at 84–97, and

theories of anticompetitive behavior. These theories establish specific standards, elements, or burdens that help to narrow and clarify the antitrust inquiry. Examples of such theories include exclusive dealing, refusal to deal, product tying, and bundling and loyalty discounts.[84] Although fully surveying these theories is beyond the scope of this Note, this Subsection will briefly summarize the current doctrine of one theory of exclusionary conduct: predatory pricing. Predatory pricing provides a useful example of an exclusionary theory that evolved in response to modern antitrust law's concern with price theory and the "consumer welfare" principle.[85]

Predatory pricing refers to the exclusionary strategy whereby a predatory firm prices its products below-cost in an effort to drive competitors out of business.[86] After clearing the field of competition, the predatory firm then resumes

also briefly touched on predatory pricing, but the plaintiffs did not press the theory on appeal, *id.* at 68.

[84] This list is not exhaustive, but covers some of the more popular theories.

[85] The "consumer welfare" principle asserts that antitrust law should focus solely on whether anticompetitive behavior decreases economic efficiency and raises prices for consumers. *See* Khan, *supra* note 21, at 720. In 1978, Robert Bork argued that Congress designed the Sherman Act to protect consumer welfare. ROBERT H. BORK, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF 56–61, 66 (1978); *see also* Robert H. Bork, *Legislative Intent and the Policy of the Sherman Act*, 9 J.L. & ECON. 7, 26 (1966) ("Congress' position with respect to efficiency cannot be explained on any hypothesis other than that consumer welfare was in all cases the controlling value under the Sherman Act."). In 1979, the Supreme Court adopted Bork's revisionist history of the Sherman Act. *See* Reiter v. Sonotone Corp., 442 U.S. 330, 343 (1979) (citing Bork for the proposition that "Congress designed the Sherman Act as a 'consumer welfare prescription'"). Many modern antitrust scholars have criticized Bork's "consumer welfare" analysis of the Sherman Act's legislative history. *See, e.g.*, Barak Orbach, *How Antitrust Lost Its Goal,* 81 FORDHAM L. REV. 2253, 2275 (2013) ("The legislative intent of the Sherman Act does *not* support Bork's consumer welfare thesis.").

[86] *See* Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 222 (1993) (describing the essence of a predatory pricing claim as when "[a] business rival has priced its products in an unfair manner with an object to eliminate or retard competition and thereby gain and exercise control over prices in the relevant market.").

monopoly pricing in order to recoup the losses from the predatory period. Although predatory pricing cases were commonplace in early antitrust enforcement,[87] the Supreme Court has since established a restrictive predatory pricing doctrine.[88]

In *Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp.*,[89] the Supreme Court established a special recoupment test for predatory pricing: plaintiffs "must demonstrate that there is a likelihood that the predatory scheme alleged would cause a rise in prices above a competitive level that would be sufficient to compensate for the amounts expended on the predation, including the time value of the money invested in it."[90] Thus, to satisfy the recoupment test, plaintiffs must prove: (1) that the defendant was pricing "below cost"; and (2) that the defendant had a reasonable prospect of recoupment.

The recoupment test expressed the Chicago School concern that false positives in predatory cases would significantly chill legitimate competition, because the "mechanism by which a firm engages in predatory pricing—lowering prices—is the same mechanism by which a firm stimulates competition[.]"[91] In practice, though, a reasonable prospect of recoupment is exceedingly difficult to show. In *United States v. AMR Corp.*,[92] the Tenth Circuit's analysis of the "below cost" prong of the

---

[87] The earliest predatory pricing case was Standard Oil Co. of N.J. v. United States, 221 U.S. 1 (1911), where Standard Oil charged monopoly profits in geographic areas where it had no competitors to fund predatory pricing schemes in competitive markets. *See* Khan, *supra* note 21, at 723. In response to the *Standard Oil* case, Congress created a supplementary statutory scheme, including the Clayton Act, 15 U.S.C. §§ 12–27, 29 U.S.C. §§ 52–53 (2012), and the Robinson-Patman Act, 15 U.S.C. §§ 13, 21 (2012), that successfully encouraged active antitrust enforcement against predatory pricing. Khan, *supra* note 21, at 723–25.

[88] *See* Khan, *supra* note 21, at 727–30. The Court adopted the Chicago School reasoning that below-cost pricing is irrational, and hence rarely occurs, because the entry of subsequent competitors makes recoupment unlikely. *Id.* at 726–28.

[89] 509 U.S. 209 (1993).

[90] *Id.* at 225.

[91] *Id.* at 226.

[92] 335 F.3d 1109 (10th Cir. 2003).

recoupment test focused exclusively on the allegedly predatory firm's average variable costs (AVC)[93]—the average of costs that vary with the level of output. Because AVC does not account for the full marginal cost of the allegedly predatorily-priced goods,[94] plaintiffs often have difficulty satisfying the first recoupment prong. The Tenth Circuit credited the Chicago School's influence in establishing "a consensus among commentators that predatory pricing schemes are rarely tried, and even more rarely successful."[95] As a result, the recoupment requirement has caused a substantial drop in the number of successful predatory pricing cases.[96]

Brooke Group and *AMR Corp.* reflect the continued influence of price theory and the Chicago School in modern antitrust law. Other exclusionary theories have evolved similarly permissive schemes in the name of avoiding over-enforcement and chilling procompetitive behavior.[97] Having established the general contours of the section 2 monopolization offense and its current cautious approach for

---

[93] *Id.* at 1120. The court elaborated that it did not intend to "favor AVC to the exclusion of other proxies for marginal cost," *id.* at 1116, but nonetheless rejected all of the government's alternatives and held that the government had failed to establish below-cost pricing because it was "uncontested that American did not price below AVC." *Id.* at 1120.

[94] Because AVC only accounts for costs that vary with the level of output, it discounts fixed costs such as "management expenses, interest on bonded debt, property taxes, depreciation, and other irreducible overhead . . . ." *Id.* at 1115.

[95] *Id.* at 1114 (quoting Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 589 (1986)).

[96] Khan, *supra* note 21, at 730 (citing D. Daniel Sokol, *The Transformation of Vertical Restraints: Per Se Illegality, the Rule of Reason, and Per Se Legality*, 79 Antitrust L.J. 1003, 1013 (2014)). For a critique of current predatory pricing doctrine, see generally *id.*

[97] *See, e.g.*, Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, L.L.P., 540 U.S. 398 (2004) (severely restricting the exclusive dealing doctrine and limiting the then-controlling precedent, Aspen Skiing Co. v. Aspen Highlands Skiing Corp., 472 U.S. 585, 611 (1985) (condemning exclusive dealing that sacrifices "short-run benefits and consumer goodwill in exchange for a perceived long-run impact" to exclude smaller rivals)).

avoiding false positives, this Note will now return to the discussion of Facebook and the social media business model.

III. THE BALANCING ACT: FACEBOOK'S SOCIAL MEDIA BUSINESS MODEL

Understanding the kinds of anticompetitive harms that might arise in the social media market requires understanding the market's business structures and incentives. As the reasoning in *Microsoft* suggests, a course of conduct that excludes competitors in one market may actually be procompetitive in another.[98] Different markets will have different barriers to entry, and a monopolist may try to exploit the barriers native to their market in order to effectively exclude competitors. As advertising platform intermediaries, Facebook and other social media platforms operate between the attention market for consumers and the traditional market for advertisers. Thus, it is valuable to consider what sorts of incentives arise from each of these markets, and how Facebook has responded to those incentives in the past. Examining Facebook's behavior before it obtained market dominance yields insights into how its current behavior might exclude competitors.

A. User-Focused Development

Although online social media has existed in some form since the beginning of the internet,[99] it took decades for the

---

[98] *See* United States v. Microsoft Corp., 253 F.3d 34, 58 (D.C. Cir. 2001) (en banc) (per curiam) ("Whether any particular act of a monopolist is exclusionary, rather than merely a form of vigorous competition, can be difficult to discern: the means of illicit exclusion, like the means of legitimate competition, are myriad. The challenge for an antitrust court lies in stating a general rule for distinguishing between exclusionary acts, which reduce social welfare, and competitive acts, which increase it.").

[99] Or, arguably, even before the internet. *See* Saqib Shah, *The History of Social Networking,* DIGITAL TRENDS (May 14, 2016, 6:00 AM), https://www.digitaltrends.com/features/the-history-of-social-networking/ [http://perma.cc/E5H2-CUTZ] ("[C]omputer networking was initially envisioned in the heyday of The Beatles as a military-centric command and control scheme. But as it expanded beyond just a privileged few hubs and

business model to evolve into its current form. While Facebook has dominated the social media world since the late 2000s, it was by no means the first social media revolutionary. As in many industries, Facebook built its empire on the backs of giants. While the first true precursor to today's social media networks emerged under the America Online umbrella in the 1990s, social networking found its first popular success in 2003's Friendster.[100]

Although Friendster was not the first website to introduce individual member profiles, it found success in an interface that allowed users to share traits and connect with other users through a "degree of separation concept."[101] Within three months, Friendster attracted over three million users,[102] prompting Google to offer to purchase Friendster for $30 million later in 2003.[103] But within a year, Friendster was in decline: the website suffered from technical difficulties and questionable management,[104] and CEO Jeff Winner resigned at the end of 2004.[105] Most importantly, though, 2003 proved a fateful year for the social media industry generally.[106] Friendster now had to compete with a "new crop of copycat

---

nodes, so too did the idea that connected computers might also make a great forum for discussing mutual topics of interest, and perhaps even meeting or renewing acquaintances with other humans. In the 1970s, that process began in earnest.").

[100] *Id.* The company made its Web debut in March 2003. Gary Rivlin, *Wallflower at the Web Party*, N.Y. TIMES (Oct. 15, 2006), http://www.nytimes.com/2006/10/15/business/yourmoney/15friend.html?_r =1 [https://perma.cc/2MWM-YUCE].

[101] Shah, *supra* note 99. This structure also made Friendster popular as an early online dating platform. *See id.*

[102] Devon Glenn, *The History of Social Media from 1978–2012 [Infographic]*, ADWEEK (Feb. 16, 2012), http://www.adweek.com/digital/the-history-of-social-media-from-1978-2012-infographic/ [http://perma.cc/EQH6-M5UP].

[103] Rivlin, *supra* note 100. At the behest of optimistic investors, Friendster founder Jonathan Abrams rejected Google's offer. *Id.*

[104] Shah, *supra* note 99.

[105] Rivlin, *supra* note 100.

[106] Shah, *supra* note 99.

sites" and other market entrants, including Myspace and LinkedIn.[107]

Despite its copycat label, Myspace built and innovated upon Friendster's concept. Myspace added features like blogs and tools that allowed users to "jazz up their profiles," which Friendster, with its technological issues, could not compete with.[108] Myspace "tempt[ed] the key young adult demographic with music, music videos, and a funky, feature-filled environment. It looked and felt hipper than major competitor Friendster right from the start."[109] "At Myspace, they rode the wave instead of fighting it, and encouraged users to do pretty much as they pleased."[110] By 2006, Myspace had over fifty times more monthly domestic visitors than Friendster[111]—it sat upon the social networking throne.

Myspace's rapid dominance of the social media scene attracted the attention of Rupert Murdoch's News Corporation, which purchased the site in 2005 for $580 million. [112] However, while Friendster had opened the door for Myspace's rise by popularizing social media among consumers, Myspace still faced a substantial challenge: monetization. Although Myspace attracted a large user base, those users were simply not interested in clicking ads.[113]

---

[107] Note that as early as 2006, the copycat label was being applied to insurgents in the social media market. Rivlin, *supra* note 100. Additionally, while Myspace originally used the spelling MySpace, it changed its name and adopted the lowercase "s" in 2010. Jennifer Pointer, *Newsflash: The Social Network Formerly Known as "MySpace" is now "Myspace,"* Webrevelation (Nov. 2, 2010), https://www.webrevelation.com/newsflash-the-social-network-formerly-known-as-myspace-is-now-myspace [http://perma.cc/76BN-V6LV].

[108] *See id.*

[109] Shah, *supra* note 99.

[110] Rivlin, *supra* note 100.

[111] *Id.*

[112] Lori Kozlowski, *New Life: How MySpace Spawned a Start-Up Ecosystem*, Forbes (May 15, 2012, 1:26 PM), https://www.forbes.com/sites/lorikozlowski/2012/05/15/how-myspace-spawned-a-startup-ecosystem/#3b48894340ba [http://perma.cc/4X52-PRVK].

[113] Kelleher, *supra* note 1.

In a twist of fate, Myspace's early success paved the path for Facebook's rise to dominance. After it was purchased by News Corporation, Myspace focused on growing its business and generating revenue.[114] Meanwhile, Facebook was crafting a website tailored to maximize user-experience.[115] In comparison to the clutter and chaos of individualized Myspace profiles and banner ads, Facebook "opted for a cleaner, Google-like interface that resonated with a broader audience."[116] But where Facebook curbed customizability, it embraced the functions most desired by users.[117] Facebook declined to adopt any one business model, allowing it to react quickly to trends in how users were using the platform.[118] This was the era of "Move Fast and Break Things."[119] At the end of the day, this approach allowed Facebook to create a better product for its users. Mike Jones, the former head of Myspace, recalled that "the world had been trained by Myspace that social networking was interesting, but the actual product had been perfected by Facebook."[120]

---

[114] *See* Yinka Adegoke, *Special Report: How News Corp Got Lost in Myspace*, REUTERS (Apr. 7, 2011, 11:22 AM), https://www.reuters.com/ article/us-myspace/special-report-how-news-corp-got-lost-in-myspace-idUSTRE7364G420110407?sp=true   [https://perma.cc/8H3K-NLGM] ("Zuckerberg's great strength . . . was that he and his team were focused on product development and innovation while Myspace had become too concerned with revenue and meeting traffic targets[.]"); Adam Hartung, *How Facebook Beat MySpace*, FORBES (Jan. 14, 2011, 12:36 AM), https://www.forbes.com/sites/adamhartung/2011/01/14/why-facebook-beat-myspace/#3a6acbe3147e [http://perma.cc/4H32-5LMT].

[115] *See* Hartung, *supra* note 114.

[116] *See* Kelleher, *supra* note 1.

[117] *See* Hartung, *supra* note 114.

[118] *Id.* Hartung describes Facebook's strategy as "White Space management," writing that "[Facebook's] founders kept pushing the technology to do anything users wanted. If you have an idea for networking on something, Facebook pushed its tech folks to make it happen." *Id.* Kelleher, *supra* note 1, similarly notes that, in contrast to Myspace, "Facebook bided its time, rather than rushing to a clear business model."

[119] *See supra* note 5 and accompanying text.

[120] Harrison Jacobs*, Former MySpace CEO Explains Why Facebook Was Able to Dominate Social Media Despite Coming Second*, BUS. INSIDER (May 9, 2015, 6:13 AM), http://www.businessinsider.com/former-myspace-

As Facebook expanded, it continued to integrate features that were popular with users—even if the users did not know it at the time. In 2006, for example, Facebook launched the news feed feature, which allowed users to view new content in a centralized format, rather than having to visit individual friends' profiles.[121] While the news feed is now widely considered to be the core of Facebook's main platform,[122] the initial user reaction was mixed, if not hostile.[123] Mark Zuckerberg, Facebook's founder, released a blog post following the launch of the news feed entitled "Calm Down. Breathe. We hear you." to address public outcry.[124] Zuckerberg's post explicitly addressed one of the main user complaints: that the news feed was "overwhelming and cluttered."[125]

The user backlash to the news feed launch reflects the same anti-clutter user preferences that helped Facebook topple Myspace. But where Myspace was constrained by its centralized business structure,[126] Facebook continued to experiment and adapt. The news feed was one of many

---

ceo-explains-why-facebook-was-able-to-dominate-social-media-despite-coming-second-2015-5 [http://perma.cc/UQ9A-JWKG].

[121] Mathew Ingram, *How Facebook's Most Hated Feature Became the Future of the Company*, FORTUNE (Sept. 6, 2016), http://fortune.com/2016/09/06/facebook-news-feed-anniversary/?xid=soc_socialflow_facebook_FORTUNE [http://perma.cc/4KNS-JNDN]. There is conflicting history on whether the news feed was a true Facebook innovation, or whether the idea was launched in response to similar functionalities on Twitter and other competitors. *See* Bobbie Johnson, *Facebook Patents the 'News Feed' - But Was It Really First?*, GUARDIAN (Feb. 26, 2010), https://www.theguardian.com/technology/2010/feb/26/facebook-patent [http://perma.cc/DZ92-346C] (noting that competitors such as Twitter and Flickr had activity streams that pre-dated Facebook's news feed).

[122] *See* Ingram, *supra* note 121.

[123] *See* Samantha Murphy, *The Evolution of Facebook News Feed*, MASHABLE (Mar. 12, 2013), https://mashable.com/2013/03/12/facebook-news-feed-evolution/#tw2xXqINNPqp [http://perma.cc/4PHD-XM5X].

[124] *Calm Down. Breathe. We Hear You.*, FACEBOOK (Sept. 6, 2006, 1:45 AM), https://www.facebook.com/notes/calm-down-breath-we-hear-you/2208197130/?_tn_=H-R [https://perma.cc/2NDX-5Y6H].

[125] *Id.*

[126] *See* Hartung, *supra* note 114.

popular Facebook features that was initially developed by outsiders before being integrated into the main platform.[127] When a feature or application proved popular—such as with photos,[128] and later news feed[129]—Facebook kept them around. When the apps or features intruded too much on Facebook's core platform they were either dropped or moved onto separate platforms. In 2014, for example, Facebook pulled its Messenger feature from the Facebook mobile app and forced users to download a second application if they wanted to use Messenger on their phones.[130]

The separation of the Messenger app from Facebook's main mobile app provides an example of the core tension of Facebook's social media business strategy: consolidation versus specialization. When Facebook first released Messenger the goal was consolidation.[131] Facebook noticed that online communication was spread over a variety of mediums—including text, email, and social media platforms—and saw the opportunity to centralize that communication on Facebook.[132] As one journalist noted upon the launch of Messenger, "Facebook has a problem with how we communicate. Namely, that it's through too many different

---

[127] *See* Michael V. Copeland, *Facebook is Going Places. Where Will Foursquare Go?*, FORTUNE (Aug. 18, 2010), http://fortune.com/ 2010/08/18/facebook-is-going-places-where-will-foursquare-go/ [http://perma.cc/ZEU2-J558].

[128] *Id.*

[129] *See* Murphy, *supra* note 123.

[130] Steven Tweedie, *Mark Zuckerberg Reveals Why You Were Forced to Download Facebook's Separate Messenger App*, BUS. INSIDER (Nov. 7, 2014, 9:58 AM), http://www.businessinsider.com/why-is-facebook-messenger-a-separate-app-2014-11 [http://perma.cc/SVH5-FYST]. Zuckerberg's concern for protecting Facebook's mobile app, even at the expense of Messenger, may have arisen from the dominance of Facebook's mobile revenue streams over those from its traditional webpage. In 2017, Facebook's mobile ad revenue accounted for up to eighty-seven percent of the company's total advertising revenue, with the greatest driver of growth coming from news feed advertising. *See* Ingram & Sadam, *supra* note 10.

[131] *See* Scott Olster, *Facebook's Messaging: Rise of the IM Generation*, FORTUNE (Nov. 16, 2010), http://fortune.com/2010/11/16/facebooks-messaging-rise-of-the-im-generation/ [http://perma.cc/Q96X-8CEX].

[132] *See id.*

media. . . . Facebook's solution is to consolidate the whole thing. Which of course means that they'll control it, too. It wants all of your messages to be fed through the same place—Facebook."[133] But four years later, that consolidation proved too much. Zuckerberg attributed the divorce of Messenger from Facebook's mobile app to the need for a streamlined user-experience: "Messaging is becoming increasingly important. On mobile, each app can only focus on doing one thing well, we think."[134] In other words, over-consolidation was degrading user experiences. Facebook's gamble in launching Messenger as a separate app paid off, and today Messenger has more than 1.3 billion monthly users, making it the most popular SMS replacement in the Western world.[135]

Not all of Facebook's experiments were as successful as Messenger. For example, in December 2012, Facebook launched Poke, an app for sending photo and video messages that would disappear within ten seconds.[136] Poke did not gain much user traction, and Facebook pulled the app in 2014.[137] In June 2014, Facebook launched Slingshot, an app that required users to send a photo to a friend in order to view that friend's own photo message—the app was pulled in December 2015.[138] Facebook did not leave underused features to collect dust, because that dust could contaminate the app's more popular features.

In 2018, Facebook reaffirmed its primary value to consumers: interconnectivity. As part of a "New Year's Resolution" to "Fix Facebook,"[139] Zuckerberg announced changes to the news feed designed to "show[] more posts from friends and family" and less from "public content, including

---

[133] *Id.*

[134] *See* Tweedie, *supra* note 130.

[135] Josh Constine, *Facebook Messenger Day Hits 70M Daily Users as the App Reaches 1.3B Monthlies*, TECHCRUNCH (Sept. 14, 2017), https://techcrunch.com/2017/09/14/facebook-messenger-1-3-billion/ [http://perma.cc/3V3Q-QHDM].

[136] Chaykowski, *supra* note 26.

[137] *Id.*

[138] *Id.*

[139] Seetharaman, *supra* note 6.

videos and other posts from publishers or businesses."[140] The changes were designed to encourage users to use the website more actively—as opposed to passively scrolling through the news feed—by prioritizing posts that generate higher user interaction (as measured by likes, comments, and shares).[141] Of course, Facebook is a business, and while Zuckerberg framed his announcement in terms of social responsibility,[142] the changes are also consistent with Facebook's strategy for monetizing its users' attention through ad revenue. In order to understand Facebook's strategy, it will be helpful to understand how Facebook monetized its product in the first place.

B.   Monetizing Attention: How Facebook Revolutionized Social Media Advertising

Myspace and Friendster may have popularized online social media, but Facebook made it a viable business model.[143] As an attention broker, Facebook relies on attracting large numbers of users by providing them with free content.[144] Facebook then sells advertising space that it presents alongside the free content.[145] However, when Facebook first entered the social media market, this model had a fundamental problem: consumers did not click on advertisements.[146]

---

[140] Jonah E. Bromwich & Matthew Haag, *Facebook Is Changing. What Does That Mean for Your News Feed?*, N.Y. Times (Jan. 12, 2018), https://www.nytimes.com/2018/01/12/technology/facebook-news-feed-changes.html [https://perma.cc/ZF7C-6MEC].

[141] *Id.*

[142] *See generally* Deepa Seetharaman, Lukas I. Alpert & Benjamin Mullin, *Facebook to Overhaul How It Presents News in Feed*, Wall St. J. (Jan. 11, 2018, 11:39 PM), https://www.wsj.com/articles/facebook-considers-prioritizing-trustworthy-news-sources-in-feed-1515714244 (on file with the *Columbia Business Law Review*).

[143] *See* Kelleher, *supra* note 1.

[144] *See* discussion, *supra* notes 36–40 and accompanying text.

[145] *See* discussion, *supra* notes 36–40 and accompanying text.

[146] *See* Kelleher, *supra* note 1.

Myspace's click-through rates—defined as the percentage of times that people click on an ad[147]—"were 4 in 10,000 [0.04%]—a fifth of the rate for banner ads on web sites in general."[148] Myspace's problem was that "the only information anyone seemed to want on Myspace was what their friends were up to."[149] Myspace's response to the low click rate was to put "multiple banner ads on pages, making the poorly designed pages even more unbearably cluttered."[150] Thus, Myspace's attempt to monetize its users' attention only exacerbated the clutter and chaos, accelerating its eventual defeat by Facebook's cleaner design.[151]

Facebook solved the click-through problem by employing a similar strategy to the one it used to develop its consumer content: experimentation. One of Facebook's key innovations was to "reach out to the smallest advertisers with self-serve ads on its social-network site."[152] Facebook provided these small advertisers with basic tutorials, and then provided performance data to allow the advertisers to tweak their ads in response to what worked.[153] Facebook also provided advertisers with a startling amount of customizability in selecting their target demographic—today, advertisers can select up to ninety-eight personal data points based on information such as location, age, generation, gender,

---

[147] Nathan Mendenhall, *2017 Facebook Advertising Benchmarks*, SOCIAL MEDIA TODAY (Mar. 31, 2017), https://www.socialmediatoday.com/marketing/2017-facebook-advertising-benchmarks [https://perma.cc/5Z3K-V5N4].

[148] Kelleher, *supra* note 1.

[149] *Id.*

[150] *Id.*

[151] *See id.*

[152] Kevin Kelleher, *How Facebook Fixed the Social Advertising Problem*, FORTUNE (Nov. 23, 2010), http://fortune.com/2010/11/22/how-facebook-fixed-the-social-advertising-problem/ [https://perma.cc/9MH4-V246].

[153] *Id.*; *see also Capturing Attention in Feed: The Science Behind Effective Video Creation*, FACEBOOK (Apr. 20, 2016), https://www.facebook.com/iq/articles/capturing-attention-feed-video-creative [https://perma.cc/R9FJ-JNY4] (providing mobile advertisers advice on how to optimize advertisements for Facebook's mobile app).

language, education level, field of study, ethnic affinity, income and net worth, and even the square footage of a user's home.[154] This service to advertisers is mutually beneficial: although Facebook provides the advertising metrics for free, advertisers' experiments provide "unprecedented insight into what makes people click ads on [Facebook's] site."[155]

Thanks to this arrangement, Facebook has gained a unique understanding of what kinds of advertising are effective on social media.[156] Although Facebook does not release information about its average click-through rate, a 2017 study of 256 U.S.-based Facebook advertising campaigns found an average click-through rate of 0.90%,[157] or ninety out of 10,000—a 2250% increase over Myspace's click-through rate. With a feedback loop between information and ad performance, Facebook also gains the benefit of a substantial network effect: as more advertisers work with Facebook, more information gets fed into the system. With more information behind each ad choice, advertisers get the benefit of being able to target a demographic with more and more precision, and they have greater confidence that they know exactly how well the ad will perform.

With Facebook's growth and expansion into the mobile app ad market, this network effect only grew stronger. Today, Facebook generates more than eighty-seven percent of its total ad revenue from mobile advertising.[158] One analyst referred to Facebook's suite of mobile apps as "the de facto mobile advertising monopolies."[159] Part of this success is due to Facebook's ability to integrate advertising into the mobile app's news feed content, which has allowed it to continue to

---

[154] *See* Caitlin Dewey, *98 Personal Data Points that Facebook Uses to Target Ads to You*, WASH. POST (Aug. 19, 2016), https://www.washingtonpost.com/news/the-intersect/wp/2016/08/19/98-personal-data-points-that-facebook-uses-to-target-ads-to-you/?utm_term=.3f4e2d4f560b [https://perma.cc/T5T6-A4UU].

[155] Kelleher, *supra* note 152.

[156] *Id.*

[157] Mendenhall, *supra* note 147.

[158] Ingram & Sadam, *supra* note 10.

[159] *Id.*

increase the feed's ad load without alienating consumers.[160] In contrast to Myspace's cluttering banner ads, Facebook's news feed ads blend into the rest of the site's content. This strategy works, in part, thanks to the unique relationship between Facebook users and advertisers: "they become friends."[161] According to Kelleher, "Facebook has found that people are much more likely to click on a company's page if it appears to be endorsed by their friends."[162] Facebook routinely uses "Likes" to "promote 'Related Posts' in the news feeds of the user's friends . . . [T]he users themselves have possibly never seen the story, liked the story or even know that it is being promoted in their name."[163] With more users comes more likes, which Facebook can then use for more integrated advertisements to fuel its click-through revenue.

These strategies built Facebook into an extraordinarily profitable company. In 2008, one year before Facebook overtook Myspace in unique monthly visitors,[164] Facebook had $272 million in revenue and a negative cash flow of $56

---

[160] News feed ads are a form of "native advertising," which "aims to eliminate obstruction to the user experience in a mobile app[] through its seamless integration with the app content." ELENI MAROULI & JACK KENT, IHS TECH, THE FUTURE OF MOBILE ADVERTISING IS NATIVE 4 (2016), https://scontent-lga3-1.xx.fbcdn.net/v/t39.2365-6/12427056_89768251 7015706_590297266_n.pdf?_nc_cat=111&oh=a15c7f6b2edbf96bcdca7828b9 6b7529&oe=5C5ADAF2 [https://perma.cc/E6V9-TE3R]. "Ads that feel organic to the experience are more likely to get noticed and less likely to annoy [] visitors." *Maximize Your Revenue with Native Ads*, FACEBOOK AUDIENCE NETWORK, https://www.facebook.com/audiencenetwork/ products/native [https://perma.cc/94Y5-MW5K].

[161] *See* Kelleher, *supra* note 152.

[162] *Id.*

[163] *See* Anthony W. Kosner, *Facebook Is Recycling Your Likes to Promote Stories You've Never Seen to All Your Friends*, FORBES (Jan. 21, 2013, 8:04 AM), https://www.forbes.com/sites/anthonykosner/2013/01/21/ facebook-is-recycling-your-likes-to-promote-stories-youve-never-seen-to-all-your-friends/#541947d917aa [https://perma.cc/36VB-UNSS].

[164] *See* Chloe Albanesius, *More Americans Go to Facebook than MySpace*, PCMAG (June 16, 2009), https://www.pcmag.com/article2/0,2817,2348822,00.asp [https://perma.cc/E66B-A9C7]. In May 2008, Facebook had less than half as many unique monthly visitors as Myspace. *Id.*

million.[165] A year later, it had tripled revenues to $777 million, and posted its first profit of $229 million.[166] Facebook has continued its meteoric rise: in 2017, the company reported $40.7 billion in revenue, and $15.9 billion in profit.[167]

IV. FACEBOOK'S COPYCAT CAMPAIGN

Facebook established its dominance among social media users due to two elements of its business strategy: (1) rapid innovation in response to consumer analytics and usage trends, and (2) a focus on streamlining user experiences and purging excess clutter. In recent years, however, Facebook's monopolization of the social media market has flipped both basic tenets on their heads. While Facebook was rarely an independent innovator, preferring instead to refine and integrate applications and features in a symbiotic relationship with developers,[168] today Facebook wields its market power to prevent disruptive innovations and to entrap both developers and consumers, potentially at the expense of Facebook's user experience.

---

[165] *Facebook's Revenue and Net Income from 2007 to 2017*, STATISTA, https://www.statista.com/statistics/277229/facebooks-annual-revenue-and-net-income/ [https://perma.cc/VUL5-XTFA].

[166] *Id.*

[167] *Id.*

[168] Facebook was not the first social media platform to introduce now central features such as a "like" button, a real-time news feed, an activity feed, or live video streaming capability. *See* Alex Hern, *Facebook Live Is Changing the World—But Not in the Way It Hoped,* GUARDIAN (Jan. 5, 2017), https://www.theguardian.com/technology/2017/jan/05/facebook-live-social-media-live-streaming [https://perma.cc/P5RB-XBFK] (describing how Facebook's live-stream feature followed the success of other livestreaming apps such as Meerkat and Twitter-subsidiary Periscope); Johnson, *supra* note 121 (suggesting that Facebook's news feed built off of the activity feeds pioneered by competitors such as Twitter and Flickr); Corrinne Litchfield, *The Rise and Fall of FriendFeed, the Social Network That Brought You the 'Like' Button*, KERNEL (May 15, 2016), http://kernelmag.dailydot.com/issue-sections/features-issue-sections/16642/friendfeed-history-glue-together-web/ [https://perma.cc/29US-VSGC] (describing how startup FriendFeed pioneered both the "like" button and real-time news feed before being acquired by Facebook in 2009).

A. Identifying Entry Barriers

Facebook's main strategy to exclude competitors centers on exploiting the entry barriers to social media markets. Although certainly not a necessary element of exclusionary conduct, exploiting such entry barriers is one effective way for monopolists to exclude competitors. These barriers provide a natural amplifier for exclusionary pressure. In *Microsoft*, for example, the court condemned Microsoft for exploiting the applications entry barrier, which locked in both consumers and developers as a kind of network effect.[169] Developers were more likely to create applications for an operating system that already had a large number of users, and users were more likely to choose an operating system that had a large selection of available applications. Much of Microsoft's conduct at issue in that case, including undermining Java and limiting the distribution of middleware browsers, was aimed at eliminating alternative channels of application distribution.[170]

Facebook's social media business model suggests that Facebook benefits from a set of interconnected network effects that pose a substantial entry barrier to potential competitors. First, as many commentators have argued,[171] the social media

---

[169] United States v. Microsoft Corp., 253 F.3d 34, 55 (D.C. Cir. 2001) (en banc) (per curiam) ("[T]he 'applications barrier to entry' . . . stems from two characteristics of the software market: (1) most consumers prefer operating systems for which a large number of applications have already been written; and (2) most developers prefer to write for operating systems that already have a substantial consumer base."); *id.* at 56 ("Because the applications barrier to entry protects a dominant operating system irrespective of quality, it gives Microsoft power to stave off even superior new rivals."). The court did not explicitly refer to this "chicken and egg" problem as a network effect, but the underlying logic is the same: "the utility that a user derives from consumption of the good increases with the number of other agents consuming the good." *Id.* at 49.

[170] *See id.* at 75–78.

[171] *See, e.g.*, Harbour & Koslov, *supra* note 21, 776–77 ("Success in the Web 2.0 world relies on the creation and exploitation of network effects. . . . One current example is the tremendous growth in the number of Facebook users."); Waller, *supra* note 21, at 1788 ("Facebook benefits from a host of both direct and indirect network effects. The sheer number of users in the

market has substantial network effects that lock in users. This means that as more consumers use Facebook, individual consumers are less likely to leave Facebook for a competitor's service because their connections—what makes social media valuable for consumers—are on Facebook, not the competitor's service. To break the network effect, a challenger would have to be able to quickly capture an individual consumer's network.

Second, the social media market has similar network effects that lock in advertisers. The more advertisers that use Facebook, the more accurate Facebook's on-site advertising effectiveness becomes. While Facebook might still compete with other advertisers such as Google, Facebook users' willingness to share vast amounts of personal data—by filling in the data on their profile, checking in at a Place, clicking "Like" on a company's page, or using any of the myriad other features from which Facebook collects user information—allows Facebook advertisers to tailor their advertisements to increasingly specific demographics, enabling more precise and effective advertisements with higher click-through rates.[172] A nascent competitor for advertising may find it difficult to compete with the flexibility and effectiveness provided by Facebook's ad network, which is only likely to grow stronger with time.[173]

---

system is the most obvious such effect and makes its network immensely more valuable than any of its competitors."); Chris Butts, Note, *The Microsoft Case 10 Years Later: Antitrust and New Leading "New Economy" Firms*, 8 Nw. J. Tech. & Intell. Prop. 275, 290 (2010) ("In the social networking space, the network effect manifests itself in a similar way to the operating system space in that the more users of the platform there are, the higher the switching costs, the greater the network externalities, and the more benefit to using the platform for users.").

[172] *See* Travis Holland, *How Facebook and Google Changed the Advertising Game*, Conversation (Mar. 12, 2017, 3:19 PM), http://theconversation.com/how-facebook-and-google-changed-the-advertising-game-70050 [https://perma.cc/FUZ2-3GNY].

[173] *Id.* ("With Facebook and Google dominating, many other web publishers are at a loss as to what to do. They find it difficult to find the 'right solution to the big question of driving payment for quality content.'"). Holland attributes Facebook's success to its ability to provide marketers with precisely targeted ads using its users' personal data. *Id.*

Third, the social media market has a network effect for applications, which also facilitates Facebook's efforts to perfect the balance between consolidation and specialization. As noted above, Facebook's early strategy involved rapid experimentation with a variety of apps and features; the successful apps were integrated into the platform, while the less-successful apps were abandoned.[174] This history of app and feature development gives current application developers a base of knowledge with which to tailor their applications to Facebook's user experience. In addition to designing applications that will be compatible with Facebook in order to take advantage of Facebook's larger user base, application developers can also draw on the lessons imparted by the successes and failures of past applications.[175] In comparison, a nascent competitor trying to attract app developers can only offer a blank slate, with few points of reference on which kinds of applications and features will resonate with its user base.

Furthermore, consumers benefit from Facebook's developed expertise in balancing available apps versus specialization and a streamlined user experience; they have access to a broad number of applications, without the burden of too many unnecessary applications that would clutter the platform. In comparison, a nascent competitor would have to try to strike this balance between consolidation and specialization from scratch; they might try to offer too many applications, which might drive away overwhelmed users in a reminiscent of Myspace's decline, or offer too few, and thus hurt themselves with both consumers and with application developers, who will be less incentivized to pour resources into development.[176]

---

[174] *See supra* notes 115–138 and accompanying text.

[175] Facebook reported that "roughly 100 million apps and businesses use Facebook's developer tools or have a Facebook page that drives installations to apps." Dwoskin, *supra* note 16.

[176] Even established, experienced competitors face an uphill battle when they try to retool their platforms in order to avoid direct competition with Facebook. For example, journalist David Pierce describes Snapchat users' hostility towards Snapchat's 2017 overhaul—which he attributes as a reaction to Instagram's copying campaign—as "a hatred that burned with

As a result of these interlocking grids of network effects, Facebook enjoys dominance in a market surrounded by many barriers to entry. This suggests that Facebook has a monopoly in the social media market.[177]

B.   Copying Competitors Out of Existence

Recently, Facebook has come under increasing criticism for blatantly copying the apps and features of competitors.[178] While copying is neither new nor secret in the social media world, Facebook's recent conduct nonetheless represents a departure from the status quo. Facebook has blatantly copied rival apps and features since its founding, but over time its motivation for copying has shifted away from embracing new pro-consumer innovations and towards stamping out competitors. Facebook, as an entrenched monopolist, occupies

---

the fury of a thousand suns." David Pierce, *The New Snapchat: Less Social, More Fun*, WALL ST. J. (Feb. 22, 2018, 10:25 AM), https://www.wsj.com/articles/the-new-snapchat-less-social-more-fun-1519143235?mod=searchresults&page=1&pos=2 (on file with the *Columbia Business Law Review*).

[177] *See* Waller, *supra* note 21, at 1786 ("[H]igh entry barriers confirm that the market shares are a meaningful indication of power and may even understate the ability of the firm in question to harm competition and consumers.").

[178] *See, e.g.*, Chaykowski, *supra* note 26 (documenting a series of "Snapchat-cloning attempts" by Facebook); Dwoskin, *supra* note 16 (describing Facebook's "aggressive strategy" to "mimic the most successful features of rival companies' apps," including businesses for an "online fundraising tool, food delivery, offline meetups, and its 'On This Day' feature"); Feldman, *supra* note 16 ("Facebook is completely unafraid of leveraging its enormous social graph to make use of its competitor's innovations and choke those competitors out."); Morris & Seetharaman, *supra* note 25 ("Zuckerberg told employees they shouldn't let pride get in the way of serving users, another way of saying they shouldn't be afraid to copy rivals. . . . The message became an informal internal slogan: 'Don't be too proud to copy.'"); Kurt Wagner, *Facebook Copied Snapchat a Fourth Time, and Now All Its Apps Look the Same*, RECODE (Mar. 28, 2017, 8:00 AM), https://www.recode.net/2017/3/28/15079774/facebook-stories-snapchat-instagram-copy [https://perma.cc/EQA4-SUVM] ("Facebook has shown that it likes to stick with what works—and what works is copying competitors.").

a unique position that allows it to copy apps and features with little regard for how those features might conflict with its core platform functionality and user experience.

Much of Facebook's early copying left space for the copied service to continue competing. For example, in 2010 Facebook launched Places, which some commentators noted looked suspiciously similar to Foursquare,[179] a location check-in app founded in 2009.[180] However, Places left sufficient room for Foursquare to operate, with Facebook effectively inviting Foursquare to integrate into Facebook's platform.[181] Zuckerberg announced Places by stressing that Facebook was offering something "substantially different from other services out there," with the implication that Foursquare and other location-based apps could "continue to keep their users happy while more tightly integrating with Facebook."[182] In fact, Facebook offered an application programming interface to allow Foursquare to layer its service on top of Places.[183] Today, Foursquare remains in operation, although it redesigned and removed its core "check-in" feature.[184]

This sort of "benevolent copycatting"—a term this Note will use to describe such symbiotic relationships—may have some benefits for the copied rival. When Foursquare integrated with Facebook, it arguably gained better access to

---

[179] *See* Copeland, *supra* note 127; Kelleher, *supra* note 1 ("All this follows the unveiling of Places, a check-in feature that looks an awful lot like Foursquare.").

[180] *See* Jennifer Van Grove, *Foursquare Goes Global with Launch in 50 New Cities*, MASHABLE (Nov. 19, 2009), https://mashable.com/2009 /11/19/foursquare-50-more-cities/#2HtXxZV7NqqC [https://perma.cc/5EFC-RUW9].

[181] *See* Copeland, *supra* note 127.

[182] *Id.*

[183] *Id.*

[184] *See* Ashley Feinberg, *Foursquare 8.0: A Lot More Yelp-Like, a Lot Less Fun*, GIZMODO (Aug. 6, 2014, 10:00 AM), https://gizmodo.com/the-redesigned-yelp-like-foursquare-is-finally-here-an-1616784644 [https://perma.cc/6XL3-VG5K].

Facebook's then more than 500 million users.[185] Similar integrations, including that by the casual gaming company Zynga helped the integrated company drive new business on top of Facebook's core platform.[186] However, it is important to note that such benevolent copycatting does not necessarily benefit everyone: Scott Stern, a management professor at the Massachusetts Institute of Technology, notes that app developers realize they might be better off being acquired instead of competing, and therefore have an incentive to design their apps with that goal in mind.[187] Such acquisitions "can be 'a very good win for the founders, [but] might be at the expense of a more competitive landscape.'"[188] When app developers create their products with Facebook integration in mind, they lose the incentive to create any product that will not integrate well with the platform; this further reinforces Facebook's dominance in applications, securing its market power from competitors.[189] Thus, benevolent copycatting can still create an entry barrier that helps maintain Facebook's monopoly in the social media market.

Other developers, especially those in direct competition with Facebook, have not fared as well as Foursquare or Zynga. When Facebook cannot acquire or integrate a rival company, its copying evolves into an aggressive strategy to poach the rival's potential users and prevent defections from their own

---

[185] Copeland, *supra* note 127 (noting that Foursquare, Yelp, and other companies affected by the Places launch had "already integrated their services with Facebook").

[186] *Id.*

[187] *See* Morris & Seetharaman, *supra* note 25.

[188] *Id.*

[189] This logic appears in the *Microsoft* decision, where the court condemned Microsoft's exclusive dealing provisions with application developers. United States v. Microsoft Corp., 253 F.3d 34, 71–73 (D.C. Cir. 2001) (en banc) (per curiam). As part of these agreements, developers agreed to use Internet Explorer as their default browsing software for their applications. *Id.* at 71. The court endorsed the district court's finding that by locking in the developers, Microsoft's deals "increase the likelihood that the millions of consumers using applications designed by [independent software vendors] that entered into agreements with Microsoft will use Internet Explorer rather than Navigator." *Id.* at 72.

user base.[190] This strategy came to the fore when Google launched its own social media platform, Google+, in June 2011.[191] Zuckerberg and Facebook started a "war" to "crush" the potential competitor.[192] Arguably, Google+ was itself a copy of Facebook,[193] and a better-executed one at that: Google+ had a "cleaner and more minimalist" design than Facebook, no ads, and superior photo-sharing capabilities.[194] This combination of features mirrored the capabilities which allowed Facebook to displace Myspace as the dominant social

[190] To conceptualize how this kind of copycatting prevents user defections, imagine a political election in which an established politician fends off a new rival by copying the ideas in the rival's platform that give them unique appeal among voters. If the established politician adopts some form of these ideas into their platform, then voters might be less likely to invest the time and resources necessary to research the rival—sticking to the familiar, established politician requires no such investment. While this might seem like a success in the free exchange of ideas (as the voter preferences are now also reflected in the established candidate), it also leaves the possibility that the established candidate might be less effective at implementing the new idea than the rival, or that the established candidate might merely be paying lip service to the rival's ideas. Similarly, Facebook may not need to re-create a rival's feature as well as the rival in order to secure the gains from copying them. And Facebook could provide lip service to its users, copying the rival's feature long enough to starve the competitor out of the market, and then removing the feature once the rival is no longer a threat—this strategy is similar to the predatory pricing theory of harm described in Part II, especially if Facebook believes that the new feature does not actually improve their platform or otherwise does not integrate effectively with their business strategy. Compare such lip service to an established politician who copies a rival's pledge to increase funding for schools, but then fails to follow through or later pulls that funding because it conflicts with their prioritized goal of lowering taxes—by the time the voters catch on, the election is already over.

[191] Vic Gundotra, *Introducing the Google+ Project: Real-Life Sharing, Rethought for the Web,* GOOGLE: OFFICIAL BLOG (June 28, 2011), https://googleblog.blogspot.com/2011/06/introducing-google-project-real-life.html [https://perma.cc/BBD5-9W5E].

[192] Antonio García Martínez, *How Mark Zuckerberg Led Facebook's War to Crush Google Plus*, VANITY FAIR (Summer 2016), https://www.vanityfair.com/news/2016/06/how-mark-zuckerberg-led-facebooks-war-to-crush-google-plus [https://perma.cc/H6DW-CFSP].

[193] *Id.*

[194] *Id.*

media platform. Furthermore, Google+ was integrated with other Google products like Gmail and YouTube; former Facebook product manager Antonio Martínez compared Google's strategy to Microsoft's exploitation of its Windows monopoly to crush Netscape.[195] According to Martínez, Google+ "hit Facebook like a bomb. [Zuckerberg] took it as an existential threat comparable to the Soviets' placing nukes in Cuba in 1962."[196]

While Facebook responded to Google+ in part by doubling down on quality control,[197] Facebook also copied parts of Google+'s design. In March 2013, Facebook launched its first ever major update to News Feed.[198] The new design was cleaner, more organized, and put more emphasis on pictures—almost immediately, people began commenting on the similarities to Google+.[199] By April 2014, the Google-Facebook war had mostly run its course.[200] Martínez attributed Facebook's victory to its strong user network: "Once everyone and his mother was on Facebook, they weren't leaving it, even when the internet's most used site (i.e., Google Search itself) was used as inducement to join."[201] In 2018, Google announced plans to shut down Google+, concluding that "the work required to maintain [the platform] was not worth the effort, considering the meager use of the product."[202]

---

[195] *Id.* According to Martínez, Google could leverage its search monopoly to "bankroll taking over social media as well." *Id.* Recall that Microsoft leveraged its Windows operating system monopoly to promote its internet browser, Internet Explorer, over Netscape. See *supra* notes 68–70, 76–81 and accompanying text.

[196] *Id.*

[197] *See id.*

[198] Murphy, *supra* note 123.

[199] *See* Samantha Murphy, *Is Facebook the New Google+?*, MASHABLE (Mar. 7, 2013), https://mashable.com/2013/03/07/facebook-google-plus/#WIDrl3wkNsqB [https://perma.cc/7Y2E-M5NF].

[200] *See* Martínez, *supra* note 192.

[201] *Id.*

[202] Daisuke Wakabayashi, *Google Plus Will Be Shut Down After User Information Was Exposed*, N.Y. TIMES (Oct. 8, 2018), https://www.nytimes.com/2018/10/08/technology/google-plus-security-disclosure.html [https://perma.cc/Q3XD-HCZM]. Notably, Google shut down

While the Google-Facebook war may be over, the trauma of the conflict and the lessons from Facebook's victory continue to shape Facebook's strategy for staying ahead of the competition. Since its war with Google+, Facebook has developed strategies and acquired sophisticated technology with the goal of anticipating and excluding new competition. Former Facebook executives and employees report that Zuckerberg remains "sensitive to anything that might disrupt Facebook, even the teeniest startup."[203] In October 2013, Facebook purchased Onavo, a mobile data analytics company.[204] Facebook has used Onavo's technology to create an internal database to track rivals, including young startups performing unusually well.[205] The tool gives Facebook "an unusually detailed look at what users collectively do on their phones."[206] Onavo can track how consumers use their phones, even when they are not using Facebook products, allowing Facebook to see how consumers are reacting to new features on other apps and platforms.[207]

Google+ in response to a data security breach that "exposed the private data of up to 500,000 users." *Id.* Facebook, which struggled with a similar data breach scandal in 2018 when a private organization, Cambridge Analytica, "improperly gained access to the personal information of up to 87 million Facebook users," remains in operation. *Id.*

[203] Morris & Seetharaman, *supra* note 25.

[204] *See* Ingrid Lunden, *Facebook Buys Mobile Analytics Company Onavo, Reportedly for Up to $200M… And (Finally?) Gets Its Office in Israel*, TECHCRUNCH (Oct. 13, 2013), https://techcrunch.com/2013/10/13/facebook-buys-mobile-analytics-company-onavo-and-finally-gets-its-office-in-israel/ [https://perma.cc/N2WB-TRFG].

[205] Morris & Seetharaman, *supra* note 25.

[206] *Id.*

[207] *See* Dwoskin, *supra* note 16. "[C]ritics say that Facebook isn't clear enough about its affiliation with Onavo, implying that users might never know that the company uses the data from the app [to monitor rivals.]" Rachel Sandler, *People Are Furious About Onavo, a Facebook-Owned VPN App That Sends Your App Usage Habits Back to Facebook*, BUS. INSIDER (Feb. 14, 2018, 7:31 PM), http://www.businessinsider.com/what-is-facebooks-onavo-protect-virtual-private-network-app-2018-2 [https://perma.cc/XJR5-MD6Z] (further noting that Facebook prompts users to download Onavo under the pretense of protecting their accounts).

Facebook uses Onavo's data to quickly mimic the most successful features of rival companies' apps. Most prominently, Facebook took this approach in response to its longtime rival Snapchat.[208] In August 2016, after many attempts to copy Snapchat's features,[209] Facebook released a new feature, Stories,[210] on its Instagram app.[211] Commentators immediately labeled Stories as a Snapchat clone.[212] A few months later, in March 2017, Facebook launched Stories on Facebook itself, on both its mobile and website platforms.[213] By April 2017, Instagram Stories surpassed 200 million daily users—nearly forty million more than Snapchat.[214] Stories accumulated more daily active users in eight months than Snapchat had in three and a half years.[215] As of August 2017, Snapchat's user growth slowed by eighty-two percent,[216] and the company posted over $443

---

[208] *See* Dwoskin, *supra* note 16.

[209] See Chaykowski, *supra* note 26, for a list of earlier Snapchat-copying attempts.

[210] *Id.*

[211] Facebook acquired Instagram, a rival photo sharing app, in 2012. *See Facebook Buys Instagram*, *supra* note 19. Professor Wu argues that this acquisition showed a clear failing by antitrust authorities to recognize the anticompetitive potential of mergers between attention brokers. Wu, *supra* note 21.

[212] *See, e.g.*, Chaykowski, *supra* note 26 ("There's no denying Instagram's new ephemeral "Stories" copies many aspects of Snapchat. From its name to the format . . . it's reasonable to call Instagram's feature a Snapchat clone."); Dwoskin, *supra* note 16 (describing Facebook's "aggressive strategy" to "mimic the most successful features of rival companies' apps," including key elements of Snapchat); Feldman, *supra* note 16 ("The disappearing-video format . . . was invented and pioneered by Snapchat, before being shamelessly ripped off by Instagram.").

[213] *See* Wagner, *supra* note 178.

[214] *See* Feldman, *supra* note 16.

[215] *See* Constine, *supra* note 28.

[216] JuJu Kim, *Best of the Week: Snapchat is Losing the Fight Against Instagram, For Now*, DIGIDAY (June 30, 2017), https://digiday.com/icymi/best-week-snapchat-losing-fight-instagram-now/ [https://perma.cc/E49V-GUC9].

million in quarterly losses[217]—presumably due in part to advertisers prioritizing resources toward developing ads for Instagram.[218]

Zuckerberg's preoccupation with fledgling competitors also reversed the trend of benevolent copycatting and integration. Silicon Valley correspondent Elizabeth Dwoskin notes that Facebook, with Onavo information in hand to help identify popular features, has reversed course and started to limit third party developers' use of the Facebook platform and instead build those same features internally.[219] With the ability to track consumer preferences, Facebook no longer has any incentive to outsource app development; it can allow new competitors to experiment, and then swoop in with its own version of the app. This practice gives Facebook a "new reputation as a threat to start-ups," in contrast to past history "when a wave of start-ups, from dating and food-delivery apps to political consultancies, were able to grow by targeting their customers' friends—and friends of friends—on Facebook."[220]

Facebook's copycatting of new companies may cause significant anticompetitive harms, leading to decreased investment in startups and decreased innovation.[221] According to interviews with over a dozen top investors, including Sequoia Capital and Union Square Ventures, "[w]hen venture capitalists hear pitches from entrepreneurs, they say that one of the first questions they ask is how easy would it be for Facebook to copy the idea. It is increasingly the reason they decline to invest."[222] Although the executives of some smaller competitors, such as Meetup.com executive Scott Heiferman, see Facebook's copycatting as a positive sign

---

[217] Seth Fiegerman, *Snapchat's Losses Soar, User Numbers Not So Much*, CNN BUS. (Aug. 10, 2017, 6:05 PM), http://money.cnn.com/2017/08/10/technology/business/snapchat-earnings/index.html [https://perma.cc/W79C-FXPB].

[218] *See* Kim, *supra* note 216.

[219] *See* Dwoskin, *supra* note 16.

[220] *Id.*

[221] *See supra* note 27.

[222] *See supra* note 27.

that their business is on to something,[223] investors are less optimistic. Scott Sandell, managing partner of the venture capital firm New Enterprise Associates and former product manager for Microsoft, said of the copycatting phenomenon: "We don't touch anything that comes too close to Facebook[.]"[224]

Startups are not the only ones harmed by Facebook's copycatting. If Facebook's conduct makes it harder for new startups to fund their ideas, then consumers are deprived of the innovations that such companies might otherwise bring into the market. Furthermore, Facebook's conduct might also cause harm to Facebook's products. Not only does insulation from competition decrease Facebook's incentive to innovate,[225] but copycatting may also degrade the user experience by insulating Facebook from the need to balance consolidation with specialization. In other words, Facebook's apps are becoming bloated.[226] In an article exploring Facebook's copycatting of Snapchat, journalist Brian Feldman noted that Facebook had adopted a "kitchen-sink approach[,] introducing to its app as many features and doodads as possible" in a way that made the app "almost unusably overstuffed."[227] Facebook has further resorted to inserting the same features into multiple apps, a practice that homogenizes the apps to the detriment of consumers.[228] For example, by the time that Facebook integrated Stories into its main

---

[223] Dwoskin, *supra* note 16. Heiferman commented that "whenever you figure something out, if you crack the code on that, then Facebook comes along and copies it. . . . There's certainly fire under our feet to go faster and bolder, and I guess you could say that's the good thing about competition." *Id.* Ben Rubin, the founder of Houseparty—one of the recent targets of Facebook's copycatting—similarly said that he had "no problem with the copying," describing it as "just business" and a "distraction," even as Houseparty's board pressured him to consider selling the company to Facebook. Morris & Seetharaman, *supra* note 25.

[224] *See* Dwoskin, *supra* note 16.

[225] *See supra* note 178.

[226] *See* Wagner, *supra* note 178.

[227] Feldman, *supra* note 16.

[228] *See* Wagner, *supra* note 178 (characterizing this kind of copying as an "unabashed defense strategy").

platform in 2017, the feature was already present on three other apps in Facebook's suite: Instagram, Messenger, and WhatsApp.[229] This undermines the unique identities of Facebook's apps, depriving consumers of variety and choice. The days when Facebook took care to avoid overwhelming consumers with too many apps and features[230] appear over.

Facebook can afford to overstuff its apps because of a combination of network affects and its own copycat conduct. Feldman argues that,

> [F]or all of Facebook's problems, it knows that people won't leave it, since that would also mean cutting off a primary means of contact with their social circles. What that ultimately means is that Facebook's dominant size and expansive social graph will block out any competitors, simply by mimicking the most attractive new features.[231]

In addition to harming consumers, Facebook's conduct may be against its own interests—at least if its goal is to create better products, rather than simply exclude competitors. When Facebook promotes a feature in order to poach consumers from their competitors, such as Facebook's promotion of Stories, that promotion choice often comes at the cost of advertising space.[232] In order to effectively foreclose a competitor, it will often not be enough for Facebook simply to make a copied app or feature available. Instead, Facebook

---

[229] *Id.*

[230] *See supra* notes 115–138 and accompanying text.

[231] Feldman, *supra* note 16.

[232] Christian Fuchs correctly describes the space of a user's screen that is filled with ads as a commodity that Facebook sells to advertisers. *See* Christian Fuchs, Culture and Economy in the Age of Social Media 163 (2015). If Facebook chooses to fill more of the user's screen with new features, this either cuts into ad space, or cuts into existing user content. For example, when Facebook integrated Stories into the top row of its mobile app, see Joe Svetlik, *Facebook Stories: What Is It and How Does It Work?*, BT (July 27, 2018, 11:51 AM), https://home.bt.com/tech-gadgets/internet/social-media/facebook-stories-what-is-it-and-how-does-it-work-11364169985164 [https://perma.cc/9R7B-RRJX], Stories took up space previously dedicated to the news feed (which, as previously noted, is where Facebook places many of its ads). *See* Ingram & Sadam, *supra* note 10.

may sometimes have to make the new app or feature prominent enough such that its users begin to use the Facebook version before they are exposed to the competition.[233]

But, as noted above, social media consumers are sensitive to over-cluttering and ad-ridden products;[234] so, social media companies must strike a careful balance between content and advertising, or they risk alienating consumers. New features like Stories take up valuable screen space, reducing the space that Facebook could otherwise allocate for advertising. New features could alternatively displace other forms of content that has already proven popular with users; the sacrifice is the same, as users would see less of the content they already prefer in proportion to the constant level of advertising. In either case, Facebook can rely on its network effects and entry barriers to insulate itself from losing users.

The laundry list of copycatting described above generates anticompetitive harms that should be proscribed by the antitrust laws. The final Part of this Note evaluates current antitrust doctrine's ability to cognize copying as a form of exclusionary conduct and to address its resultant harms.

V. FACEBOOK AND PREDATORY COPYING

By copying popular features and applications, Facebook harms consumers, competitors, advertisers, and competition itself. As with most forms of monopolistic behavior, consumers will tend to bear the greater part of the cumulative harms. Facebook potentially harms consumers in a number of ways: (1) product degradation, as Facebook fails to maintain a balance between consolidation and specialization absent competitive incentives, or actively sacrifices that balance to foreclose competition; (2) lost innovation benefits from

---

[233] For example, when Facebook launched its live-streaming service, it "aggressively pushe[d] video to the top of newsfeeds while it [was] still live[] in an effort to encourage [user] interaction[.]" *See* Hern, *supra* note 168. Facebook's prioritization of live-streaming on its main platform allowed it to crush the incumbent live-streaming app, Periscope. See *id.*

[234] *See supra* notes 115–138 and accompanying text.

startups who cannot secure funding, or who tailor their apps and features to Facebook's platform with the goal of acquisition; (3) higher attentional costs, in the form of more ads;[235] and/or (4) higher prices for advertised goods, as higher advertising costs are passed on to consumers.[236]

Despite the potential anticompetitive harms outlined above, current antitrust law lacks the tools to fully conceptualize copycatting as a form of exclusionary conduct; accordingly, a new exclusionary theory is needed.

A. A Modern Alcoa?

Because Facebook's copycat campaign bears numerous facial similarities to the exclusionary conduct at issue in *Alcoa*, modern antitrust law may struggle to properly appreciate the resultant economic harms.

In the social media business, new features and applications do not only represent new products, but also potentially new sources of demand. Companies compete not just for the current population of social media users, but also for the residual attention yet unclaimed by any social media platform.[237] Especially where new features are novel and

---

[235] See Wu, *supra* note 21, for a discussion on how monopoly power allows attention brokers to subject consumers to more advertisement in exchange for the same amount of content; this increased advertising is the monopoly rent. The increased attentional cost paid by consumers is another form of product degradation.

[236] If Facebook uses copycatting as a strategy to preserve its monopoly, it can then continue to extract a monopoly rent either by increasing the advertising on its platform (extracting the rent directly from consumers by subjecting them to more ads in exchange for less content), or by charging higher prices to advertisers who find it necessary to use Facebook or else lose out to competitors who do use social media advertising. In a more competitive marketplace, those advertisers could take their business to a different social media platform that offered lower advertising rates.

[237] *See* Wu, *supra* note 21, at 24. New features and applications can pull attention from other commercial activities (such as watching television, or surfing the internet), or even capture attention from attentional "greenfields"—time and attention occupied by non-commercial providers such as "friends, family, hobbies, taking walks and so on." *Id.* For example, live video streaming might inspire people to pull out their phones to record

untested, companies would be taking a substantial risk of losing users to their rivals by *not* copying the latest trend. These incentives help to explain why rapid innovation—the "Move Fast and Break Things" mentality—was so important to Facebook's early growth strategy.

From this perspective, "copying" in a social media market would represent nothing more than responding to the increase in demand for social media. Just as an aluminum company does not have a perfect supply and demand curve posted on the board room wall, social media companies have to engage in a bit of guesswork to determine where new demand will emerge, and how to "supply" that demand.[238] But in the aluminum industry, the company that makes the best guess about new demand does not receive a legal monopoly over the increased demand—such a rule would corrupt the competitive process and prevent more efficient firms from entering the market.[239] Insulating a social media firm from competition by preventing other companies from copying a new feature would similarly chill competition in the social media market. Therefore, to the extent that copying is analogized to competing for new increases in demand, copying is procompetitive because it allows more companies to compete for the users interested in a particular kind of application.

---

something on their daily walk, and then continue to use their mobile device to watch for reactions and Likes. The potential to capture even some of that aggregated time might justify taking risks with new features and applications.

[238] Supply, in this analogy, would be a function of both feature availability and product design.

[239] Legal monopolies of this kind exist as a product of patent, copyright, and other forms of intellectual property law. The monopoly privileges are "intended to motivate the creative activity of authors and inventors by the provision of a special reward, and to allow the public access to the products of their genius after the limited period of exclusive control has expired." Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 429 (1984). This Note does not advocate for extending intellectual property protections to app development, but rather suggests that antitrust law should scrutinize tech monopolists that have the ability and incentive to exploit copying as an anticompetitive strategy.

In *Alcoa*, however, the monopolist did not simply engage in guesswork about where new demand would emerge: Alcoa "*stimulated demand* and opened new uses for the metal, but not without making sure that it could supply what it had evoked."[240] The court thus found that Aloca proactively maintained its monopoly. Similarly, Facebook's copycatting has arguably evolved past merely reacting to the market. Using Onavo, user analytics, and intensive monitoring of competitors, Facebook can craft new features and applications not only to fulfill demand, but also to stimulate it and guide its growth towards Facebook's own platform. However, antitrust law certainly should not punish using advanced analytics to foresee demand, and Facebook would likely succeed in arguing that its conduct has procompetitive, pro-consumer effects.

Another argument against Facebook's use of analytics is that it employs that information not to satiate new demand, but to *manipulate* new sources' demand in order to preserve its monopoly in the current pool of social media users. Facebook has a different set of incentives compared to rival social media companies with regard to expanding the total number of social media users. While Facebook, like its competitors, would obviously like to capture these new users, it also has an interest in preventing its competitors from acquiring *any* new users because those new users help to build the competitors' overall user networks, even if it came at a minor cost to Facebook's own user growth. Allowing a rival social media company to expand its user network would also allow it to gradually overcome the network effect as a barrier to entry, placing it in a better position to compete for existing social media users.

Therefore, Facebook has an incentive to adopt features and applications that sacrifice short-run benefits and consumer goodwill in order to prevent rival companies from gaining a network foothold. This logic explains Facebook's recent

---

[240] United States v. Aluminum Co. of Am., 148 F.2d 416, 430 (2d Cir. 1945) (emphasis added).

"kitchen-sink approach"[241] and its apathy towards balancing consolidation and specialization.[242] Copying a new application or feature, like Stories on the Facebook app,[243] might make little business sense in terms of product design and user experience, but Facebook nonetheless has an incentive to launch a version simply to ensure that it maintains the network dominance that supports its monopoly. Because such conduct would have the ancillary effects of degrading Facebook's product and inhibiting innovation among its competitors,[244] it produces cognizable antitrust harms.

Viewed in this light, Facebook's conduct goes beyond the exclusionary behavior in *Alcoa*. If Facebook is actually sacrificing its own product integrity and business interests in order to exploit network effects, then a plaintiff may be able to present a valid anticompetitive argument.

If *Alcoa* was still controlling law, an antitrust case against Facebook might be fairly straightforward. Facebook's copycatting, at minimum, shows that it "embrace[d] each new opportunity as it opened," and "face[d] every newcomer with new capacity already geared into a great organization."[245] Although it is no longer a controlling precedent, *Alcoa* provides a useful comparison for cognizing Facebook's anticompetitive conduct and identifying how tech markets might function differently than traditional markets, such as those for aluminum ingot, by insulating user attrition from the effects of product degradation. Thus, we should hesitate to dismiss a theory of harm connected to Facebook's copycat behavior simply because it superficially resembles *Alcoa*. However, with the more cautious approach of current antitrust law, *proving* that Facebook's copying actually degrades its user experience may be exceedingly difficult, especially in light of the history of copying in the social media

---

[241]   Feldman, *supra* note 16.

[242]   See *supra* notes 228–233 and accompanying text.

[243]   *See* Wagner, *supra* note 178 ("You don't need Stories in four apps.").

[244]   Rival companies have less incentive to innovate if they know that Facebook's copying will limit the number of users that they can hope to gain from their efforts.

[245]   *Alcoa*, 148 F.2d at 431.

industry and the volatility and general unpredictability of consumer trends. Facebook will likely present a compelling procompetitive narrative for its copycat campaign.

B. *Microsoft* Revisited: Facebook's Procompetitive Arguments

Although *Microsoft* outlines a framework for assessing general exclusionary conduct in the tech market, that framework is unsuited to assess anticompetitive effects in the social media market where the primary consumer harms are caused by stifled innovation, product degradation, and, most significantly, non-monetary prices. Without traditional cash markets or concrete exclusionary theories to guide the analysis, a court may not be able to accurately assess the validity of a plaintiff's anticompetitive arguments as against Facebook's procompetitive justifications. Given the *Microsoft* court's caution against false positives,[246] an antitrust case against Facebook may be an uphill battle.

As with *Alcoa*, under a *Microsoft* framework an antitrust plaintiff would first have to show that Facebook's conduct has an anticompetitive effect. In addition to the above argument regarding Facebook's kitchen-sink approach to copying, a plaintiff could also argue that Facebook's copycat campaign has deliberately targeted startup companies and exploited a capital investment entry barrier. Although modern antitrust law has largely adopted the Chicago School position that capital requirements are not an entry barrier, the success of Facebook's copycatting campaign in throttling investment to new startups[247] suggests that this position might be worth reconsidering in tech markets that have substantial network effects.

A social media startup trying to survive[248] in the era of Facebook's copycatting has several options: (1) design a

---

[246] *See supra* Section II.B.2.

[247] See *supra* notes 221–227 and accompanying text.

[248] Here, the word "survive" means that the company has the potential to realize a rate of return to justify capital investment. The word "survive" might be misleading, as many startups that fail to adopt one of the survival

product that avoids direct competition with Facebook and its suite of applications;[249] (2) design a product with the goal of being acquired by Facebook; or (3) overcome the network effects entry barrier and compete with Facebook on a full scale. None of those options allow truly competitive, pro-consumer entry into the social media market.

The first option quite obviously does not put competitive pressure on Facebook, except to the extent that Facebook wants to expand beyond its current social media monopoly. Facebook should not receive any antitrust leniency simply because it only monopolizes *one* kind of market. The second option, acquisition, may prove profitable for some developers, but it also only permits a narrow band of innovation.[250] In *Microsoft*, the court condemned similar efforts to keep developers focused on designing applications that worked on the Windows operating system.[251] Here, the development strategy is even more limited, as Facebook has used Onavo and other tools to eliminate the need to outsource application development.[252] The final option, overcoming network effects, would require creating an entirely new Facebook. While modern antitrust law assumes that firms can easily enter monopolized markets, Google+'s failure to overcome Facebook's network effects—even with the weight of Google's search monopoly, brand, arguably superior product, and platform's integration with popular services like Gmail and

---

strategies are simply never created in the first place. Instead, the threat of being copied removes the incentive to enter the market.

[249] For example, by designing a product with a closed network. Capital investment is more available for closed networks than it is for social media applications. *See* Dwoskin, *supra* note 16 ("Investors also now say they are eager to invest in closed networks that they think Facebook will not wade into—like social apps for distinct groups, such as health-care professionals—or ideas like blockchain, which would enable consumers to transfer their information without letting a large company become a hub of data.").

[250] *See supra* text accompanying note 188.

[251] *See Microsoft*, 253 F.3d at 71–72.

[252] *See* Dwoskin, *supra* note 16 ("Facebook has curtailed [developer] access by limiting what third parties can do within Facebook and is building some of the same features on its own.").

YouTube[253]—suggests that price theory assumptions may break down in tech markets with interlocking grids of network effects.

Despite all of these anticompetitive arguments, Facebook still has a compelling procompetitive justification: product design. Fundamentally, all the forms of copycatting described in this Note have ultimately been design choices: which features and applications to include on Facebook, and which to ignore and exclude. The *Microsoft* court stressed the dangers of questioning product design choices, and only condemned Microsoft's design choices where those choices generated exclusionary effects without "making Microsoft's own browser more attractive to consumers."[254] Unlike some of Microsoft's choices, Facebook's product design decisions do not clearly lack a legitimate business motive. The copied features and applications are attractive to at least some consumers, as demonstrated by the fact that the innovating rivals had enough success with these features to warrant Facebook's attention. Facebook can argue that its design choices are merely aimed at catering to these consumer preferences, a pro-consumer behavior that the antitrust law ought to encourage.

This argument is undercut by Facebook's demonstrated paranoia towards any competitive threat. Following the Google+ war, Facebook's copying strategy, at least towards startup developers, showed a significant shift away from symbiotic cooperation and toward anticompetitive stagnation. Recall the reports of former Facebook executives and employees regarding Zuckerberg's sensitivity towards disruptive startups,[255] along with Facebook's recent shift to restrict third-party developers.[256] When paired with Facebook's increasing bloat,[257] these reports suggest that Facebook may no longer be copying applications to respond to

---

[253] *See* Martínez, *supra* note 194 and accompanying text (noting that Google+ had better photo sharing, a cleaner design, and no ads).

[254] *Microsoft*, 253 F.3d at 65.

[255] *See supra* note 203 and accompanying text.

[256] *See* Dwoskin, *supra* note 16.

[257] *See* Wagner, *supra* note 178.

consumer trends and to maximize user experience, but rather to quash potential competitors.

Unfortunately, without concrete evidence that Facebook's conduct has resulted in higher prices for consumers or advertisers, or intentionally subverted competitors in the way that Microsoft sabotaged Java, the circumstantial evidence regarding Facebook's copycatting intent is likely insufficient to establish antitrust liability.[258] The best argument, under *Microsoft*, might be that Facebook's overall course of conduct has generated significant anticompetitive harms that outweigh any procompetitive benefits of Facebook offering its own versions of every conceivable application and feature. However, this solution is not workable: the evidence required to establish liability would probably not outweigh modern antitrust law's aversion to false positives. Even if it did, the process might take so long that the competitive marketplace would have completely changed by the time a court imposed liability. This in turn would undercut the effectiveness of any potential remedies, or even discourage plaintiffs, private or public, from bringing litigation in the first place.[259] Antitrust law needs a way to quickly cognize and quantify intangible anticompetitive harms from product degradation and diminished innovation in tech markets. One way to

---

[258] *See Microsoft*, 253 F.3d at 59 ("[I]n considering whether the monopolist's conduct on balance harms competition and is therefore condemned as exclusionary for purposes of § 2, our focus is upon the effect of that conduct, not upon the intent behind it. Evidence of the intent behind the conduct of a monopolist is relevant only to the extent it helps us understand the likely effect of the monopolist's conduct.").

[259] *See id.* at 49 ("As the record in this case indicates, six years seems like an eternity in the computer industry. By the time a court can assess liability, firms, products, and the marketplace are likely to have changed dramatically. This, in turn, threatens enormous practical difficulties for courts considering the appropriate measure of relief in equitable enforcement actions, both in crafting injunctive remedies in the first instance and reviewing those remedies in the second. Conduct remedies may be unavailing in such cases, because innovation to a large degree has already rendered the anticompetitive conduct obsolete (although by no means harmless). And broader structural remedies present their own set of problems, including how a court goes about *restoring* competition to a dramatically changed, and constantly changing, marketplace.").

accomplish this might be to narrow the antitrust inquiry with a new concrete exclusionary theory: predatory copying.

C. The Predatory Copying Framework

A predatory copying framework would allow robust antitrust enforcement in tech markets by accounting for the intangible harms of copycatting while simultaneously protecting legitimate procompetitive copying from liability. While general exclusionary theories might capture some copycat conduct, Facebook's copycatting campaign demonstrates that it might be extremely difficult to win copying claims on a timeline that would provide adequate remedies. Revising the exclusionary jurisprudence to reflect the hidden costs of copycatting and facilitate speedier enforcement would require greater consideration of a monopolist's intent.

A predatory copying doctrine would create a presumption of anticompetitive harm when a plaintiff provides *prima facie* evidence that: (1) a predatory firm's market structure plausibly incentivizes copying for reasons other than competition on the merits; (2) the alleged copying substantially forecloses competition in the relevant market; and (3) the copying was motivated by exclusionary purposes.

There are several reasons in favor of presuming anticompetitive harms under these conditions. First, as established above, the evidentiary burden to prove that copying decreases innovation effectively preempts copying claims under general exclusionary theories because the innovation costs are substantially borne by companies that have never entered the market.[260] The deterrent effect of copying poses far greater potential harms to innovation than any exclusionary effect toward existing competitors.

---

[260] *See* Dwoskin, *supra* note 16 ("[I]nterviews with two dozen top investors and entrepreneurs suggest [Facebook's copying] is having a profound impact on innovation in Silicon Valley, by creating a strong disincentive for investors and start-ups to put money and effort into creating products Facebook might copy.").

Second, once a monopolist establishes a reputation for copying, this reputation can create a psychological deterrent, which may outlast the market conditions that facilitate the effectiveness of the predatory copying.[261] Such a reputation could continue to depress competitive conditions, outlasting the market conditions that provide the evidentiary proof of exclusion.

Third, in order to mitigate against false positives, a substantial foreclosure requirement largely limits the doctrine's reach to those markets where predatory copying exploits network effects or other entry barriers.[262] Finally, the markets where monopolists have anticompetitive incentives to copy and where that copying can foreclose substantial competition—namely, tech markets that have network effects—may also be markets where monopolists have access to substantial market analytics to rebut an established presumption. These factors help justify giving intent a greater weight in the exclusionary analysis.

When applied to Facebook, the predatory copying framework creates a presumption that Facebook's copycatting generates anticompetitive harms. First, as established above, Facebook has an incentive to copy its rivals' features and applications in order to prevent competitors from gaining a network foothold, even if copying would sacrifice the integrity of Facebook's main product. Second, the aggregate of Facebook's copycatting conduct likely forecloses a substantial portion of the social media market. Because existing social media users are often locked into Facebook by network effects,[263] the main way for competitors to establish a network

---

[261] *See* Ip, *supra* note 16. Facebook's copying of Snapchat's Stories feature serves as a cautionary tale for potential competitors: "Snap's shares have sunk below the price at which the company went public last March as losses have mounted, which won't encourage new entrants. Once a company like Google or Facebook has critical mass, 'the venture capital looks elsewhere.'" Ip, *supra* note 16.

[262] *See Microsoft*, 253 F.3d at 69 (noting that substantial foreclosure tests can help screen out false positives).

[263] *See* Waller, *supra* note 21, at 1788 ("Facebook benefits from a host of both direct and indirect network effects. The sheer number of users in the

foothold is to introduce apps and features that either increase the total pool of social media users or capture a new attentional greenfield among existing users. Where Facebook launches its own application to compete for these new sources of demand, there is little risk of anticompetitive harm because Facebook's new app would have less of a network advantage. But when Facebook integrates the new feature into the main Facebook platform, that integration raises the possibility that Facebook is sacrificing its user experience by over-consolidating its platform.[264] Finally, evidence of Facebook's exclusionary intent, such as Facebook's covert use of Onavo to spy on competitors,[265] Facebook's attempts to intimidate rivals into acquisition,[266] and testimony from former Facebook employees about Facebook's copycat philosophy,[267] satisfies the final predatory copying prong.

Finally, Facebook is in a good position to rebut a predatory copying charge if it can proffer evidence that it adopted an alleged copied feature for purely legitimate business reasons. While its acquisition of Onavo may cut against Facebook in terms of exclusionary intent, the analytics provided by Onavo and Facebook's own extensive data collection could show that Facebook had reasonable grounds to believe that a given feature or app would improve the user experience or help monetize existing attention pools. Although Facebook and other predatory copiers might obscure or downplay their internal data that might reveal exclusionary intent,[268] the predatory copying framework still increases the probability of a successful antitrust suit, and thereby deters at least the most blatant offenses.

---

system is the most obvious such effect and makes its network immensely more valuable than any of its competitors.").

[264] *See* Wagner, *supra* note 178.

[265] *See* Dwoskin, *supra* note 16.

[266] *See, e.g.*, Morris & Seetharaman, *supra* note 25 (discussing Facebook's course of conduct towards potential rival Houseparty).

[267] *See supra* note 178.

[268] For example, if Facebook's internal analysis predicted that integrating a new application would harm user retention.

The predatory copying framework thus provides a sensible and workable balance between identifying the anticompetitive harms associated with predatory copying while mitigating the risks of false positive prosecutions.

VI. CONCLUSION

Although price theory and Schumpeterian models of competition provide an optimistic outlook for sustained competition and creative destruction in winner-take-all industries like social media, antitrust law cannot grow complacent towards these markets. Twentieth-century antitrust frameworks and modes of analysis may fail to keep pace with the dynamism and innovative business models within high tech industries, especially those that challenge traditional understandings of monetary costs and consumer harms. A predatory copying framework would allow courts to cognize otherwise intangible anticompetitive harms, such as product degradation and stifled innovation, that antitrust law currently neglects in the attentional economy. By focusing the anticompetitive inquiry on market incentives, substantial foreclosure, and anticompetitive intent, the framework gives antitrust plaintiffs a fighting chance to challenge the new kinds of exclusionary strategies employed by tech monopolists such as Facebook.

As people continue to integrate technology deeper into their daily lives, the economic and societal stakes of protecting competition rise higher and higher. The caution and hesitancy of the past thirty years of antitrust enforcement are outdated and ill-suited to address these challenges. Courts should not stand in the way of a robust antitrust law that challenges unwarranted consolidations of power and prevents entrenched monopolies. When it comes to protecting innovation in the markets, courts should not be afraid of a little bit of innovation in the law.