# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

FEDERAL TRADE COMMISSION,

Plaintiff,

v.

Civil Action No. 1:20-cv-03590 (JEB)

**PUBLIC VERSION** 

META PLATFORMS, INC.

Defendant.

Plaintiff Federal Trade Commission's Post-Trial Memorandum

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#### INTRODUCTION

In 2004, a college student named Mark Zuckerberg recognized that the internet offered a fundamentally new way to satisfy the timeless human desire to connect with friends and family. He created a web application called Facebook, which "beat" the incumbent MySpace and won the "social networking use case" by offering a personal social network that connected users with "the people they care about." PX0292-008 & 4/14 (Zuckerberg ("MZ")) 158:21-159:17; *id.* 151:17-20 (agreeing Meta built "a better product and beat MySpace"); PX11079-001 (recognizing distinct use cases). Facebook's popularity grew because this new product offered something valuable and distinct both from other ways of communicating with friends and family (like sending an email or text message) and from passively consuming online entertainment (like watching a concert video).

Over the two decades that followed, much changed. Smartphones transformed how and when users access the internet. The number and variety of apps has skyrocketed. And Americans spend more and more time online. What has not changed? Hundreds of millions of Americans still desire to use apps to share their lives with friends and family. Meta, then and now, capitalizes on that need: "[C]onnecting with friends and family is one of the jobs to be done or core purposes that the Facebook application provides *today*." 4/14 (MZ) 163:22-25, 164:1-10 (emphasis added). Likewise, "connecting with friends and family is one of the jobs to be done that Instagram offers to users *at the present time*." *Id.* 181:13-19; 4/15 (MZ) 195:24-196:4 (emphasis added).

Of course, something else changed. Meta's days as a dorm-room startup with no choice but to compete are long gone. After out-competing MySpace, Facebook rapidly cemented formidable entry barriers that defeated even a "serious threat" such as Google+, because users knew that "my friends are on Facebook so I don't need to go anywhere else." *See* 4/14 (MZ) 151:16-20, 191:16-192:1; PX2437-003. Meta's entrenched monopoly in personal social

networking ("PSN") services allowed it to increase ad load and reap supracompetitive profits, which fueled a war chest that enabled Meta to quash actual and nascent competition—\$1 billion for Instagram, \$6 billion for Snap (which declined the offer), and \$19 billion for WhatsApp.

The antitrust laws have something to say about that. Section 2 of the Sherman Act bars Meta from maintaining its monopoly in PSN services "through means other than competition on the merits." *United States v. Microsoft*, 253 F.3d 34, 56 (D.C. Cir. 2001). And "it is hard to imagine an action that better fits the definition of conduct with anticompetitive effects than a monopolist's buying out its rivals." ECF No. 384 ("SJ Op.") at 57.

Why did Meta buy Instagram? To "neutralize a potential competitor." PX1136-003. In other words, "Instagram was growing so much faster than us that we had to buy them for \$1 billion," PX15138-001 & 4/15 (MZ) 38:12-41:18, because otherwise "if they grow to a large scale they could be very disruptive to us." PX1136-001.

Why did Meta buy WhatsApp? The risk that WhatsApp would create a social network was "the biggest threat we have ever faced as a company," PX11287-001, and "a potential recipe for [us] not [to] be around in a couple [of] years," PX12106-002. The WhatsApp purchase eliminated "a threat to [Meta's] core business," PX1103-006, and "buil[t] a competitive moat around [Meta] on mobile." PX10271-002.

The trial evidence confirmed this well-established history, and the legal principle that a monopolist may not entrench its monopoly by acquiring competitive threats is not in doubt. Meta's trial presentation instead advanced three main arguments centered on market definition. But the trial record and law contradict each of them.

First, Meta suggested that it competes against the entire internet (and the offline world to boot) for users' "time and attention." But there is no limiting principle to Meta's "time and

attention" market, SJ Op. at 35, and product markets only consist of "products reasonably interchangeable by consumers for the same purposes," *id.* at 18. Both Meta and third parties recognize that Facebook and Instagram serve the "core purpose of connecting with friends and family," 4/14 (MZ) 164:1-10, 181:13-182:8, and apps that are not designed to serve that purpose—like TikTok and YouTube—are not substitutes.

Second, Meta points out that its apps have increasingly added "unconnected" (non-friends and family) content, like short-form videos ("SFV") similar to those found on entertainmentfocused apps like TikTok and YouTube. But a monopolist's decision to layer additional features and content into its core monopoly does not immunize its monopoly power or expand the relevant market. A brick-and-mortar hypothetical confirms the logic: if the only supermarket in a town starts selling pet food, the supermarket would find itself in newfound competition with Petco and PetSmart. But those competitors would not alter the supermarket's dominance, because consumers cannot patron pet-store retailers to accomplish the purpose of buying groceries for the week. That conclusion holds even if the supermarket's pet food became popular and made up an increasing share of shoppers' grocery baskets. And it holds even if the same consumers purchase pet food alongside their other groceries. True, Facebook and Instagram integrate SFV into single applications alongside more conventional means of sharing with friends. But this integration makes no difference under the law because the consumer cannot accomplish the "same purpose" of friends and family sharing on TikTok or YouTube any better than the pet owner can purchase ingredients for lasagna at the pet store. See United States v. Google, 747 F. Supp. 3d 1, 110-16 (D.D.C. 2024) ("Google Search") (Google's incorporation of specialized vertical search queries into its general search engine did not erode its general search monopoly or expand the general search services market to include specialized search engines). Here, Meta's profitable expansion

into unconnected SFV—which brings Meta into competition with TikTok and YouTube for consumers who want to watch SFV—does not undermine Meta's monopoly power in PSN services.

Finally, Meta argues that consumers are spending less time on friends and family sharing. But declining demand is no defense to a monopolization claim. In any event, Americans continue to consume over a *billion* friends and family focused posts on Meta platforms each day, and Meta continues to collect tens of billions annually in ad revenue serving this demand.

The trial evidence showed that American people have a demonstrated and widely recognized demand for apps that enable them to share their lives with friends and family. Americans deserve the benefits of full and free competition in PSN services, as the law demands. They should not be saddled with Meta's monopoly and the continuing harms from Meta's neutralizing of its competitors. The Court should find Meta liable for violating the antitrust laws and set this case for a remedies proceeding.

#### LEGAL STANDARD

The FTC established its *prima facie* case that Meta violated Sherman Act § 2 and FTC Act § 5 by proving by a preponderance of the evidence: (1) Meta's possession of monopoly power, and (2) that Meta has maintained its power "other than through competition on the merits." SJ Op. at 16, 54 (cleaned up); *see LePage's Inc. v. 3M*, 324 F.3d 141, 167 (3d Cir. 2003). Meta can rebut the FTC's *prima facie* case only by demonstrating sufficient legally cognizable and "nonpretextual" justifications. SJ Op. at 79-81; *Microsoft*, 253 F.3d at 59. If Meta does, the FTC can "rebut that claim" or "demonstrate that the anticompetitive harm of the conduct outweighs the procompetitive benefit." *Microsoft*, 253 F.3d at 59.

In line with this Court's prior rulings, the FTC proved at trial that Meta is *currently* in

violation of Section 2. However, the FTC's request for prospective *relief* does not require proving a current *violation*. "[T]he court's power to grant injunctive relief survives discontinuance of the illegal conduct," including to prevent a "cognizable danger of recurrent violation." *United States v. W.T. Grant Co.*, 345 U.S. 629, 633 (1953); *FTC v. Accusearch Inc.*, 570 F.3d 1187, 1201 (10th Cir. 2009) (holding same when applying FTC Act § 13(b)); *U.S. Pub. Int. Rsch. Grp. v. Atl. Salmon of Me., LLC*, 339 F.3d 23, 31 (1st Cir. 2003). And settled doctrine permits litigants to seek prospective, equitable relief to address "continuing, present adverse effects" of "[p]ast exposure to illegal conduct." *O'Shea v. Littleton*, 414 U.S. 488, 495-96 (1974); *see also Wilk v. Am. Med. Ass'n*, 895 F.2d 352, 369 (7th Cir. 1990) (affirming injunction addressing, *inter alia*, "lingering effects" of an anticompetitive boycott that ended nearly a decade before trial); *NW Environ. Def. Ctr. v. Gordon*, 849 F.2d 1241, 1245 (9th Cir. 1988) ("[W]here the violation complained of may have caused continuing harm and where the court can still act to remedy such harm by limiting its future adverse effects . . . [t]he fact that the alleged violation has itself ceased is not sufficient to render a case moot."). !

Section 13(b) does not alter this law, because Section 13(b)(1)'s "is violating" language, at most, sets forth a reason-to-believe pleading standard as a prerequisite to "bring suit," not a merits inquiry. 15 U.S.C. § 53(b)(1); see also FTC v. Shire ViroPharma, Inc., 917 F.3d 147, 157-58 (3d Cir. 2019); ECF No. 589-1 at 12-13. Accordingly, the FTC may prevail on liability by proving pre-trial violations of Section 2, even if Meta somehow lacked monopoly power as of trial. In a remedies proceeding, the Court may then assess the FTC's entitlement to equitable relief based at least on a "cognizable danger of recurrent violation," W.T. Grant Co., 345 U.S. at 633, and the

<sup>&</sup>lt;sup>1</sup> The power to grant prospective, equitable relief to address ongoing harms from past law violations is important in many contexts. *See, e.g., Swann v. Charlotte-Mecklenburg Bd. of Ed.*, 402 U.S. 1, 15 (1971); *In re Flint Water Cases*, 960 F.3d 303, 334 (6th Cir. 2020).

"lingering effects" of Meta's anticompetitive conduct, Wilk, 895 F.2d at 369.

#### **ARGUMENT**

The FTC has shown that Meta maintained its monopoly power "other than through competition on the merits" by acquiring Instagram and WhatsApp when those apps threatened Meta's monopoly. Meta's monopoly power is made plain both by direct evidence, *infra* § I.B, and by its dominant share in the relevant market for PSN services, protected by entry barriers. *Infra* § I.C-F. In turn, the evidence shows that Meta's acquisitions harmed the competitive process and consumers. *Infra* § II. And Meta has failed to rebut the FTC's *prima facie* case by proving sufficient, legally cognizable procompetitive justifications at trial. *Infra* § III.

## I. Meta Has Monopoly Power Over PSN Services in the United States

Direct or "indirect or 'circumstantial evidence"—namely, the possession of a dominant share of a relevant market protected by entry barriers—can establish monopoly power. SJ Op. at 17 (quoting *Microsoft*, 253 F.3d at 51). The FTC established both at trial.

### A. PSN Services Are a Distinct Product Offering Serving a Distinct Consumer Purpose

Meta and third parties recognize that apps serve different "use cases" or "jobs to be done"—what antitrust case law calls a consumer's "purpose." *See Microsoft*, 253 F.3d at 52 (products in a market must be "reasonably interchangeable by consumers for the same purposes"). Mr. Zuckerberg testified that an app's "jobs to be done" describes "the core purpose of why people come to use a product." 4/14 (MZ) 163:22-25. As Mr. Coleman of X explained, firms focus on "what [users are] coming to our product to try to accomplish." 4/28 (Coleman) 30:16-31:8; PF 15 (similar from iMessage, LinkedIn).

Meta and third parties also recognize that friends and family social networking ("PSN services" or "friends and family sharing") is a unique job to be done served by certain apps ("PSN apps") but not others. PF 15, 42, 48. For instance, Mr. Presser explained that people "use Facebook

to connect and network with friends and acquaintances," while they use TikTok "as an entertainment platform." 4/30 (Presser) 43:23-44:7 & PX13583-007, 44:21-45:4; see PF 59. He similarly recognized that Facebook and Instagram are "focused on users' interactions with existing friends and family" and understood that the "social network components" of Instagram are "why somebody would predominantly open Instagram." 4/30 (Presser) 51:18-22, 189:18-190:11. Mr. Filner of YouTube likewise recognized Facebook and Instagram as having a use case of "connecting with friends and family," while YouTube does not—"[t]he core use case of YouTube is watching video." 4/17 (Filner) 184:9-25, 151:23-24; see also PF 73-74 (similar evidence).

Meta's testimony and records concur. Mr. Zuckerberg has long characterized "Facebook [as] about real connections to actual friends." PX0307. And Meta's executives admit that Facebook still serves that purpose for consumers. 4/14 (MZ) 164:1-10; 5/14 (Alison) 175:13-19, 174:10-14; see PF 17-18. Meta's documents show unequivocally that Meta knows is Facebook's

PX3006-008, and that even in recent years, "our primary use case is interaction with friends and family," 5/14 (Alison) 163:19-24 & PX3008-039; PF 18.

So too for Instagram. Upon its launch in 2010, consumers used Instagram for the purpose of sharing their lives with friends and family, and this remains true today. PF 26-27, 30. Meta's executives publicly acknowledge that "it's part of [Instagram's] core identity to connect people with friends," PX0698; its documents consistently recognize that "[p]eople come to Instagram first and foremost to connect with friends and family," PX3003-003; and its most recent documents admit that "[o]ur friends use case remains resilient," PX12374-002.

While Meta has dominated PSN services for more than a decade, others have recognized this demand and attempted to serve it. Google+ and Path provided consumers with a PSN

experience but were unable to gain traction against Meta's monopoly. 4/14 (MZ) 195:20-196:2; PF 41. Snapchat is the only remaining PSN services competitor of meaningful size in the United States. PF 33-39. Snapchat has provided a PSN experience since the launch of its Stories feature in 2013, *see* PF 34, and Mr. Levenson recognized that

5/19 (Levenson) 34:2-4, 34:25-35:03; PX14959-003.

Notably, both Meta and third parties recognize that apps serving the purpose of friends and family sharing differ in kind from other types of apps. *See infra* § I.C.1(b). Meta's COO candidly assessed Google+ as presenting to Facebook, "for the first time, . . . real competition" that meant "consumers have real choice," notwithstanding Meta then (as now) facing a bevy of other apps that can occupy consumer attention. 4/16 (Sandberg) 196:14-201:15 & PX2527-001; *see also* 4/14 (MZ) 192:2-193:22 & PX2437-001 (the launch of Google+ represented "the first time that there is something to compare Facebook against head-to-head"). And Mr. Coleman of X described how the "job of being informed about what your friends and family are doing" (served by PSN apps) is different from the "job of seeing what's happening in the world" (served by X), and "[y]ou would build different products for them." 4/28 (Coleman) 33:25-34:11.

### **B.** Direct Evidence Demonstrates Meta's Monopoly Power

Direct evidence demonstrates that Meta has had "the power to control prices" and "exclude competition," *United States v. Grinnell*, 384 U.S. 563, 571 (1966), with respect to its PSN offerings in the United States since at least 2011. This proves Meta's monopoly power without the need to define a relevant antitrust market. *See* SJ Op. at 17 ("When plaintiffs can [] provide 'direct proof' of supracompetitive prices that remain protected from erosion through competition, 'the existence of monopoly power is clear." (quoting *Microsoft*, 253 F.3d at 51)); *Broadcom Corp. v. Qualcomm Inc.*, 501 F.3d 297, 307 & n.3 (3d Cir. 2007); *PepsiCo, Inc. v. Coca-Cola Co.*, 315 F.3d 101, 107-08 (2d Cir. 2002) ("[A] relevant market definition is not a necessary component of a

monopolization claim" where there is direct evidence of monopoly power); *Conwood Co., L.P. v. U.S. Tobacco Co.*, 290 F.3d 768, 783 n.2 (6th Cir. 2002) (same). Indeed, key aspects of Meta's behavior are incompatible with those of a firm facing vigorous competition. This evidence paints a clear picture of a firm that wields monopoly power.

Sustained supracompetitive profits. Competition prevents firms from earning sustained positive economic profits (i.e., profits exceeding a firm's cost of capital), PF 153, but Meta has earned extraordinarily high economic profits for years. PF 151. Expert testimony showed that Meta collects economic profits that are nearly four times (about 36%-41%) its cost of capital (10%). PF 151. This meets Meta economic expert Prof. Carlton's textbook definition of monopoly power, PF 153, and establishes monopoly power. See Town Sound and Custom Tops, Inc. v. Chrysler Motors Corp., 959 F.2d 468, 481 n.17 (3d Cir. 1992) ("[C]ourts can also infer market power from direct evidence of sustained supranormal profits . . . ."). Further, Meta's extraordinary profits continue unabated—\$130.5 billion in gross profit in 2024 alone—belying Meta's arguments that recent developments have eroded its monopoly power. PF 152.

Undisputed evidence also establishes that Meta's high profits are due in substantial part to Meta's monopoly power over Facebook and Instagram users. PF 154-56. Meta earns nearly all its revenue and profits from ads shown to users of Facebook and Instagram, and nearly half of that is from the United States. PF 154. Meta proffered no alternative evidence for the source of its supranormal profits; notably, Meta's experts openly disavow that Meta has market power over advertisers, eliminating that as a potential source. PF 156.

**Profitable increases in quality-adjusted price.** The record demonstrates Meta's "ability to degrade product quality"—i.e., to increase quality-adjusted price—"without concern of losing consumers," which is "proof of monopoly power." *See Google Search*, 747 F. Supp. 3d at 118.

Meta has imposed significant profitable increases in ad load on Facebook and Instagram despite the uniform industry understanding that "users don't like ads," and ads are a "tax" that reduces user engagement—ads are a price that users pay for Facebook and Instagram. PF 159-61. For instance, Meta more than tripled Facebook Feed's ad load between Q3 2014 and January 2025. PF 333. And in both 2015 and 2018, Mr. Zuckerberg increased Instagram's ad load, largely to ameliorate revenue and engagement issues on Facebook. PF 337-38.

Meta's executives attempted to brush away this behavior with testimony that ads are not so bad for consumers, but the evidence—apart from their self-serving testimony—is uniformly to the contrary. Mr. Systrom confirmed the (uncontroversial) principle that "the reason that increasing ads on Instagram would hurt engagement [is] because users don't like ads," 4/22 (Systrom) 148:17-20; *see also id.* 106:24-107:15, and third parties testified that users prefer not to see ads and that ad load reduces user engagement, PF 161. Meta's actions and records confirm this: Meta recognized that decreasing ad load on Facebook would help address "engagement issues," PX15112-008; and its user surveys show that sentiment has decreased as ad load has increased, indicating that users perceive higher ad load as a reduction in quality, PF 162.

Notably, even crediting Meta's unsubstantiated claims regarding improved ad quality, Meta has increased ad load rather than let users enjoy both higher-quality ads and a steady or lower ad load. *See* PF 163. Meta's behavior is consistent with a monopolist. PF 163; *see Google Search*, 747 F. Supp. 3d at 179-80 (raising text ad prices while capturing part of the "headroom" of the value of quality improvements to customers was evidence of supracompetitive pricing, as "Google simply could not take this approach in a competitive market").

Meta also has increased its quality-adjusted prices by degrading access to friends and family content, implementing poor privacy practices, and reducing other dimensions of quality.

PF VII.B, VII.D-F. Four separate user sentiment measures of overall quality of Facebook and Instagram have declined over years and show genuinely poor product quality experiences. PF 326-30. Yet Meta has lacked a competitive incentive to make improvements, instead favoring higher profits, PF 151-53, 158, 320-21—a clear signal of monopoly power. *See United States v. Dentsply*, 399 F.3d 181, 191 (3d Cir. 2005) (price increases and high profits were evidence of monopoly power); *McWane, Inc. v. FTC*, 783 F.3d 814, 832 (11th Cir. 2015) (same).

In the same vein, Meta's senior executives have recognized its underinvestment in the friends and family experience on Facebook and Instagram. PF 342. At one point during a in early 2022, executives noted that though "[f]riend sharing continues to be a big asset for Facebook . . . we're not investing as much in it." PX12497-001; *see also* PX14987-002 (by 2019, Meta had "gotten meaningfully less effective at two critical use cases for people on Facebook": "check[ing] in on what my friends and family are up to or talking about" and "shar[ing] what I'm doing, thinking, or interested in with the people I care about"). Meta's underinvestment has come despite users signaling their displeasure. PF 341-42. For example, in an October 2021 review of Meta's "Feed & Ecosystems," Meta reported that "many aspects of friend content today seem to frustrate users," and that friend content occupied "top user pain points" and "the top complaints on Feed," with users "want[ing] more friend posts" and "more friend actor diversity" on their Feeds. PX3008-040; PF 341.

Meta has similarly pursued poor privacy practices. Meta compiles "[a] ludicrous amount of data" about its users, 5/8 (Schultz) 266:22-24, which it leverages to drive its cash-cow advertising business, PF 348. Meta has also failed to protect user data, as exemplified by the Cambridge Analytica breach and others. PF 166, 349. Meta is well aware of user frustration regarding these privacy practices: Meta's surveys reveal that "[p]rivacy is the single biggest

detractor in our [Cares About Users] surveys" and that "concerns about privacy and data collection outweigh any potential benefits" of targeted ads. PF 328, 347, 350. But unchecked by competition, Meta's practices continue. PF 351-54; *see also* PF 346.

Inelastic demand and price discrimination. Meta's price discrimination by setting a higher quality-adjusted price for more inelastic users of Facebook and Instagram provides further evidence of monopoly power. *Infra* § I.C.1.c; PF 165-73; *see also FTC v. Whole Foods Mkt., Inc.*, 548 F.3d 1028, 1038 (D.C. Cir. 2008) (price discrimination against inelastic customers is a vehicle to "extract monopoly profits").

**Power to exclude.** Monopoly power includes the "power to exclude" competition, *Grinnell*, 384 U.S. at 571, and Meta and its experts openly claim this power, PF 174. They have suggested that, absent the acquisition, Meta could "significantly limit" Instagram's growth, going into "destroy mode." PF 174. Far from exonerating, Meta's statements are an assertion of monopoly power—no competitive firm has this contemplated ability to crush a rival at will or deter entry. *See, e.g., Dentsply*, 399 F.3d at 189-90 (ability to exclude rivals and lack of effective entry provided evidence of monopoly power).

### C. Meta's Dominance of the PSN Services Market Demonstrates Monopoly Power

Monopoly power can also be demonstrated indirectly through high market shares, protected by barriers to entry, in a relevant antitrust market. SJ Op. at 17. A relevant product market consists of "all products reasonably interchangeable by consumers for the same purposes." *Id.* at 18 (quoting *Microsoft*, 253 F.3d at 52). Here, consumers rely on PSN apps for the distinct purpose of social networking with friends and family, and both the *Brown Shoe* factors and hypothetical monopolist test ("HMT") show that non-PSN apps do not offer reasonable alternatives for this purpose. Accordingly, the evidence establishes a relevant market limited to PSN services in the

### United States.<sup>2</sup>

## 1. The Brown Shoe factors demonstrate that PSN services are a relevant market

The *Brown Shoe* factors illuminate the market definition inquiry: "whether two products can be used for the same purpose, and, if so, whether and to what extent purchasers are willing to substitute one for the other." SJ Op. at 19 (quoting *United States v. H&R Block*, 833 F. Supp. 2d 36, 51 (D.D.C. 2011)); *see also Google Search*, 747 F. Supp. 3d at 114 (same). They are "evidentiary proxies" that confirm whether different sets of products are "reasonably interchangeable." SJ Op. at 18-20.

PSN services constitute a relevant market if the evidence shows that "only PSN applications offer a core use and functionality that serves the demand for friends-and-family sharing." *Id.* at 37 (quotations omitted). Here, practical indicia—namely, their peculiar uses and characteristics—show that only PSN applications "offer a core use and functionality" that serve demand for friends and family sharing. Additional practical indicia confirm that the distinctions in use and functionality between PSN services and non-PSN services render the products different in kind, and not merely in degree, in serving that demand. *See Google Search*, 747 F. Supp. 3d at 110 ("The *Brown Shoe* practical indicia highlight the unique features of a [product in the relevant market] that make it distinct from other platforms."). In sum, a "pragmatic, factual approach," *United States v. Brown Shoe*, 370 U.S. 294, 336 (1962), demonstrates that PSN services are a distinct market because non-PSN apps do not provide consumers with reasonable alternatives for the particular purpose served by PSN apps.

(a) <u>PSN apps have "peculiar characteristics and use" for friends and family sharing</u>
When analyzing whether a product is able to "serve[] the demand for friends-and-family

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<sup>&</sup>lt;sup>2</sup> Meta did not dispute at trial that the United States is the relevant geographic market. PF 13.

sharing," SJ Op. at 37, actual product use assumes central importance. Here, the peculiar uses and characteristics of PSN apps demonstrate that they serve demand for friends and family sharing, and that non-PSN apps are poorly suited for, and do not serve, that demand.

### (i) PSN apps exhibit a "peculiar use" of friends and family sharing

As previewed above, Meta's apex executives and other industry participants testified that Facebook, Instagram, and Snapchat each have a core use of social networking with friends and family. *See supra* § I.A. Mr. Zuckerberg readily agreed that both Facebook and Instagram provide the job to be done, or "core purpose," of "connecting with friends and family." 4/14 (MZ) 1641:1-10, 181:13-182:8. And the current heads of both Facebook and Instagram agreed. 5/14 (Alison) 173:6-10; 5/8 (Mosseri) 86:11-87:11.

and

competes with Meta to serve the "use case of sharing with friends," 4/15 (MZ) 134:1-8. *See also* 4/23 (Lampe) 75:14-25; PF 33-38.

Likewise, trial testimony confirms that now-defunct PSN apps such as Google+ offered "the core use case[] for users to connect with friends and family," 5/15 (Horowitz) 94:16-19, and competed with Facebook to serve this "use case," 4/14 (MZ) 195:17-196:8.

Other widely used apps discussed at trial do not offer this core use case and consumers do not use those apps to accomplish it. *See infra* § I.C.3; PF 57-115. As one example, X's ordinary course documents and Mr. Coleman's testimony show that "Twitter is not that good for seeing what your friends and family are doing and/or that not that many people use it for that purpose." 4/28 (Coleman) 34:7-36:6 & PX15043-003-04; *see* PF 83-89. Thus, while X's "core use case" is "seeing what's happening in the world and talking about it," Facebook differs because "the heart of Facebook is seeing what your friends and family are doing . . . that's kind of the original core use case." 4/28 (Coleman) 8:11-24, 32:18-22.

Extensive ordinary course and other record evidence further confirms that non-PSN apps have "core uses" or "jobs to be done" that differ from PSN apps. *See, e.g.*, PF 42. This evidence includes Meta and third parties' own app store descriptions. *Compare, e.g.*, PX8013A-005-10, -023-28, -093-96 (Facebook, Instagram, and Path app store descriptions from 2010 to 2023 prominently mention connecting with friends and family), *with, e.g.*, PX8013A-097-101, PX8013A-049-60 (Pinterest describes itself as "the place to explore inspiration" and LinkedIn reaffirms its position as "a professional network").

Moreover, Prof. Hemphill's data analysis demonstrates that PSN apps and non-PSN apps are used differently: compared to non-PSN apps, PSN apps (a) have high rates of reciprocal connections, consistent with people sharing with people they know in real life rather than just following a public figure or having no connections at all; (b) have high rates of posting, indicating active sharing with friends and family rather than just passively consuming content; and (c) show notable spikes in activity on friend or family related holidays. PF 7-14, 22, 31, 65, 78.

Further, both ordinary course and expert surveys show that PSN apps are used for friends and family sharing, while non-PSN apps are not. PF 13, 49, 72, 95. For example, TikTok's surveys and "user research" "constantly" showed a distinction between apps such as Instagram and Facebook that "people would primarily use to connect with people that they already know," and apps such as TikTok and YouTube. Vid. (Morrison) 190:22-193:9; *see also* PF 72, 81, 88, 95, 98, 104, 105. And Mr. Malkiewicz's rigorous survey demonstrated that respondents most commonly selected keeping up with their friends and families' lives as the most important reason they used Facebook, Instagram, and Snapchat, whereas non-PSN apps are primarily used for other purposes, such as entertainment (TikTok, YouTube) and interest-based content and public discussion (X, Reddit). 5/7 (Malkiewicz) 160:23-165:16, 170:14-175:12.

## (ii) <u>PSN apps have "peculiar characteristics" that allow them to serve the purpose of friends and family sharing</u>

PSN apps possess a unique combination of characteristics and functionalities that non-PSN apps do not. PF 43-47. These design features make friends and family sharing possible and shape the prevailing norms on PSN apps. PF 47, 51.

First and foremost, PSN apps include a social graph of real-life friends and family connections. PF 44. Facebook, Instagram, and Snapchat all offer this feature. PF 44. PSN apps also have functionality and norms that cultivate this type of social graph, including (a) features that foster a norm of employing real-life identities and (b) design features that allow users to locate and build networks of connections with their real-life friends and family. *See, e.g.*, 4/14 (MZ) 161:14-162:6 ("[W]e try to design the product so . . . people use their real authentic identity[.]"); 5/14 (Alison) 208:2-13 ("[R]eal identity does help people connect with other people that they know in real life[.]"), 205:9-208:1 & PDX0072 (Meta enforces real identity requirement); *see* PF 44.

PSN apps also provide a shared social space in which users share personal updates and interact with their real-life friends and family. PF 45-46. PSN apps allow users to "define a private community" and limit personal life updates to a particular audience, which encourages users to share personal content that they would not share on services focused on public content consumption, such as X and TikTok. *See* 4/14 (MZ) 155:6-158:15; PF 45-46. Consumers opening Facebook, Instagram, and Snapchat thus enter broadcast sharing environments—surfaces like Feed and Stories—in which a network of personal connections regularly post, comment, or offer reactions regarding personal life events. PF 20, 29, 34, 36, 43-47. These spaces enable low-cost interaction with a broad network of friends and family in one "place"—even though the people in a user's network do not necessarily know each other—and thus dramatically reduce transaction costs compared to mobile messaging applications or email. PF 45, 107-11; *see infra* § I.C.3(c).

Non-PSN apps lack these distinctive characteristics. First, non-PSN apps lack a friends and family social graph. Some non-PSN apps lack a social graph entirely (YouTube, Pinterest, Reddit), or are based on a "content graph" (TikTok) or interest-based graph (X). See PF 62-63 (TikTok), 76 (YouTube), 86 (X), 92 (Reddit), 97 (Pinterest). Others have an "orthogonal" social graph: "Facebook connects friends and family, Linkedin connects co-workers, Nextdoor connects neighbors." See PF 50, 104, 105 (citing PX2389).

Second, non-PSN apps typically lack connection tools to build networks, and/or lack a norm of real-life identity, or lack both. PF 14, 47, 64 (TikTok), 77 (YouTube), 93 (Reddit). Apps that lack functionality allowing users to search for their real-life friends, such as iMessage and other mobile messaging services, do not enable users to rapidly establish connections and grow a social graph. PF 111. The same is true of services that lack a norm of real-life identity, such as TikTok, YouTube, and Reddit: even if such an app allows users to search for accounts or recommends accounts to follow, the feature does not help identify real-life friends unless the account reveals the actual identity of the user. PF 64, 76-78, 93; *cf.* 5/14 (Alison) 208:2-13.

Finally, non-PSN apps lack social spaces regularly used for friends and family sharing. Messaging apps are designed for private communication rather than broadcast sharing. *See infra* § I.C.3(c); PF 110. And while other social media apps such as TikTok, LinkedIn, and Strava have feeds, they consist of content devoted to entertainment, professional, or specialized interests. PF 59-72, 102-04.

# (iii) <u>A lack of "core use and functionality" for friends and family sharing means non-PSN apps are not reasonable substitutes</u>

As detailed above, PSN apps have a core use and functionality for friends and family sharing, while non-PSN apps do not. *Supra* § I.C.1(a)(i), (ii). Additional evidence confirms that these practical indicia resolve "the question of substitutability." SJ Op. at 39. In particular, the

evidence shows the salience of norms and network effects in shaping consumer behavior, which underscores why a lack of core use and functionality for friends and family sharing makes non-PSN apps not well suited for serving this demand. PF 10.

First, the FTC showed at trial that a social product is not useful for a particular purpose unless other people actually use it for that purpose. As Mr. Zuckerberg acknowledged, "if you are using a social app, an important part of the value is that the people you care about and the content you want to see needs to be there . . . [I]f, obviously, you sign up for an app and no one you know and nothing you are interested in is there, it doesn't matter how good the technology is." 4/16 (MZ) 48:15-25; PF 10; see also PF 144 (PSN services exhibit strong network effects).

Industry experience confirms that the norms of an app—how people normally use an app—shape how people are willing to use an app. PF 10-11. As Mr. Ortega of Strava colorfully described, no one would "share baby pictures" on Strava—a social app focused on fitness—unless "the baby is in a stroller during a run." 4/28 (Ortega) 101:23-102:16. This explains why the theoretical ability to build connections and engage with friends on non-PSN apps is not an actual, realistic alternative. PF 14.

In the same vein, apps with largely pseudonymous users like TikTok and Reddit are not good places for friends and family sharing because the norm of pseudonymity actively conflicts with users' ability to maintain relationships with friends and family. *See* PF 64, 93; 4/23 (Lampe) 96:8-97:2, 100:8-102:10 ("[T]he reason why [real-identity] is so important is because if I am looking for people to connect to from my offline life, I actually have to be able to find them to know who they are.");

For similar reasons, the norms governing consumers' use of an app are difficult to change,

and thus it is difficult for apps to successfully change their core use case.

Second, the evidence showed that the characteristics of an app are important to the purposes an app can serve: design elements and functionality both dictate whether a product is theoretically capable of being used for a particular purpose, and shape norms and actual usage. PF 9-11, 47, 67-71, 147; 4/23 (Lampe) 70:9-71:24 (explaining how "design choices of an online service in turn shape norms"). Norms and usage are shaped by the app's characteristics, including the default user experiences through which apps signal and foster their intended use. PF 11. Mr. Presser of TikTok described how the "For You" feed, where users discover unconnected video content based on their interests, is the "fundamental user experience" on TikTok, which explains why the overwhelming majority of content on TikTok originates from "people that would be strangers." 4/30 (Presser) 60:17-23, 149:13-16; see PF 66. By contrast, neither Facebook nor Instagram open onto Reels, choosing to center the user's experience on friends and family content in Feed and Stories. PF 20, 29. Similarly, in prompting (or not) people to use their real name in setting up accounts, apps can foster (or discourage) a norm of real identity that supports friends and family sharing. PF 44; cf. Vid. (Raymond) 250:13-252:17, 254:1-22 (discussing how Reddit, in contrast to Facebook, does not prompt users to give their real names).

## (b) <u>Industry participants and consumers recognize that PSN services differ from</u> other online services

Industry participants recognize that PSN services are different. PF II.A.2.c. Meta itself recognizes that Facebook and Instagram serve a distinct demand for friends and family sharing. *E.g.*, PX3008-039 ("Our [Facebook's] primary use case is interaction with friends and family."); PX12374-002 ("The two main jobs that people hire Instagram for are catching up with friends and being entertained."); PF 18, 30, 42. Snapchat recognizes the same. *E.g.*, PX8013A-110-17 (Snapchat self-describing as a "way to share the moment with your friends and family"); PF 36.

Likewise, TikTok recognizes that "social networking services," which "enable people to build and maintain social networks or relationships," differ from "content creation and sharing services"—like TikTok itself—and also from "communications services."

4/30 (Presser) 35:4-36:4; PF 42, 61, 112. Other third parties confirm this market reality. *E.g.*, 4/28 (Coleman) 35:1-22 & PX15043-004 (the only apps in X's competitive landscape "really good at" "seeing what my friends and family are doing" are Facebook, Instagram and Snapchat, and user research supported this conclusion); 4/28 (Roberts) 163:6-164:8 (Pinterest is not a social network because "Pinterest is not focused on connecting people to other people"); PF 50. Ordinary course documents and public statements, including Apple App Store descriptions, bear out the same point. *E.g.*, PX0823-002 (X App Store description, April 2025); PF 17, 26, 36.

Consumers recognize the same distinction. Meta's ordinary course surveys show that consumers understand that sharing with friends and family members is an important reason they use the feeds of Facebook, Instagram, and Snap, and that this is not true for non-PSN services. PF 25, 32, 35, 49, 72, 81, 88, 95; *see also* PX3431-001 (survey showing "Facebook was seen as the best app to keep up with family/friends who are far away" and "Instagram was seen as the best app for seeing interesting photos/videos shared by friends," whereas YouTube, Twitter, and

WhatsApp were best for different purposes). These results are confirmed by Mr. Malkiewicz's survey, which showed that consumers identified "keeping up with friends and family" as the most important reason they use Facebook, Instagram, and Snapchat, and at vastly higher rates than TikTok, YouTube, Twitter, or other applications. PF 25, 32.

The public recognition that PSN and non-PSN apps serve distinct purposes has particular evidentiary force in establishing that non-PSN apps are not reasonable substitutes, because public recognition shapes the norms that govern user activity, and thus dictates whether an app is useful to others for a particular purpose. *See* PF 10.

# (c) Consumers of PSN services are insensitive to quality-adjusted price increases and vulnerable to price discrimination

Evidence that consumers of Meta's PSN services are insensitive to quality-adjusted price increases and also vulnerable to price discrimination confirms the relevant market. *See* SJ Op. at 31-34; *Brown Shoe*, 370 U.S. at 325.

Extensive evidence shows that Meta has profitably raised quality-adjusted price on Facebook and Instagram, including more than tripling Facebook Feed's ad load over the last decade. *Supra* I.B. But despite significant user dissatisfaction—at times at the level of one of "the worst companies in the U.S."—Meta has not lost substantial business. PF 326, 329, 341, 350; *supra* I.B. Indeed, Meta's analysis of the Cambridge Analytica incident demonstrated that use of Facebook did not decline despite significant consumer displeasure. *See* PF 166, 328. Users' insensitivity to these profitable increases in quality-adjusted price demonstrates that non-PSN apps are not reasonable substitutes. *See FTC v. Staples*, 970 F. Supp. 1066, 1078 (D.D.C. 1997).

Additionally, Meta can and does price discriminate against its customers who have the greatest demand for friends and family sharing, which further confirms PSN services as a relevant market. *See Whole Foods*, 548 F.3d at 1038-39 (core customers with demand for relevant product

who were vulnerable to price discrimination confirmed the existence of relevant market); SJ Op. at 31-34. The "can" is not in dispute. Meta collects copious information about users and controls what every user sees any time they open an app. PF 343 (underinvestment and ranking algorithms), 345 (differentiation of social graphs), 348. Meta raised objections to the "does" at trial, but core elements of the evidence are undisputed. First, Meta's ad load system is intentionally designed to impose higher ad load on more inelastic users, including through practices such as the "needy user rule" that reduce ad load if users display flagging usage. PF 168. Second, undisputed evidence shows that Meta imposes higher ad load on user cohorts (older and longer-tenured users) that are more likely to value Facebook and Instagram to engage with friends and family. PF 171-72; see also SJ Op. at 33. And Meta's underinvestment in friends and family content also reduces quality for those users who value that experience. PF 170, 340-45.

Meta also price discriminates by placing more ads (i.e., raising quality-adjusted price) on Facebook Feed and Instagram Feed and Stories—the shared social spaces on which extensive friend and family sharing occurs—than on Reels and other app surfaces. PF 155, 169. Indeed, Meta's reaping of more than 80% of its North American ad revenue and more intensely monetizing Facebook Feed and Instagram Feed and Stories—the surfaces of the apps most closely associated with friends and family sharing—parallels key facts of *Whole Foods*. *See* PX8109-PX8110; PF 155; *Whole Foods*, 548 F.3d at 1039-40 (evidence supporting relevant market included that premium organic supermarkets earned most of their revenue from specialty organic perishables not available in regular supermarkets).

Notably, Meta's price discrimination results in most users receiving Meta's highest ad load levels, while only a minority receive relatively lower ad load, PF 173: a further indicator that Facebook and Instagram have many "core' users whose demand is relatively inelastic, which

signals that they have few other substitutes," *see* SJ Op. at 32 (citing *Whole Foods*, 548 F.3d at 1037-38). While this evidence is not legally required, *id.* at 37-38, it confirms that competition for marginal users does not constrain Meta's monopoly power.

### (d) PSN apps have unique production facilities

The "unique production facilities" factor is informative because it illuminates a would-be competitors' ability to shift into the PSN market. SJ Op. at 31 (citing *Rothery Storage & Van Co. v. Atlas Van Lines, Inc.*, 792 F.2d 210, 218 n.4 (D.C. Cir. 1986)). Here, a network of users engaged in friends and family sharing with their connections represents a "unique production facility" that PSN apps possess and non-PSN apps do not. PF 54. Due to network effects, other apps are unable to offer PSN services effectively even if they have the technical know-how to replicate Facebook and Instagram's features. PF 145-49; *infra* § I.F. Even competitors like Google failed. PF 147.

## 2. A hypothetical monopolist of PSN services in the United States would profitably raise quality-adjusted price above a competitive level

The HMT provides further evidence that PSN services are a properly defined relevant market. *See* SJ Op. at 20. In this case, the HMT asks whether a single firm controlling all PSN apps in the United States would profitably raise the quality-adjusted price compared to a competitive market. PF 131. Economists often must evaluate the HMT using qualitative evidence, particularly in monopolization cases. PF 133; *see McWane*, 783 F. 3d at 829-30 (affirming use of a qualitative HMT analysis because "courts routinely rely on qualitative economic evidence to define relevant markets") (cleaned up); *see also* 2023 Merger Guidelines § 4.3.C ("qualitative and quantitative evidence" used to apply HMT).

Prof. Hemphill found that the HMT is satisfied for PSN services in the United States, drawing on a wealth of qualitative evidence and quantitative analysis. PF 132. He demonstrated empirically that PSN apps and non-PSN apps are used in materially different ways by consumers.

PF 22, 31, 65, 78. And he explained the economic significance of the evidence: given norms and network effects, non-PSN apps that lack core use and functionality for friends and family sharing are inhospitable places for this form of consumer demand, and cannot discipline decisions to degrade quality by a hypothetical monopolist. PF 132. Direct evidence confirms this: Meta has reaped supracompetitive profits and used its control of Instagram to increase ad load and reduce quality for more than a decade. PF 132, 159. Indisputably, a monopolist owning not only Facebook and Instagram but also Snapchat, would also be able to recognize supracompetitive profits.

### 3. Prominent non-PSN apps are not reasonable substitutes

Non-PSN apps do not "offer a core use and functionality that serves the demand for friends-and-family sharing," and should be excluded from the relevant market. *See* SJ Op. at 37; PF II.A.3.a (video); II.A.3.b (interest-based); II.A.3.c (specialized); III.A.3.d (messengers).

### (a) TikTok

Multiple TikTok witnesses established that, unlike Facebook and Instagram, TikTok does not serve the demand for friends and family sharing. Mr. Presser testified unequivocally that TikTok does not offer "social networking services" in the United States today. 4/30 (Presser) 37:11-38:17, 38:18-39:9; 41:20-23; ; see also 35:4-13 (defining "social networking services" as "online platforms which people use to build and maintain social networks or social relationships"); Two other senior TikTok executives—V Pappas and Blake Chandlee—confirmed this. PF 59. All three witnesses explained that TikTok is an "entertainment platform," not a social network. 4/30 (Presser) 43:21-44:7 & PX13583-007; Vid. (Pappas) 14:8-15:10, 22:4-23:2; Vid. (Chandlee) 19:10-21:16 & PX11521-002.

 Objective data confirms these differences as TikTok has

See PF 65, 71. And TikTok's ordinary course consumer

surveys further confirm that, unlike PSN apps, TikTok is not "primarily use[d] to connect with people that they already know." Vid. (Morrison) 190:22-193:9; see also supra § I.C.1.a.

TikTok's characteristics also differ markedly from those of PSN apps. Most notably, TikTok is not based on a social graph, but instead on a "content graph." 4/30 (Presser) 46:15-25, 47:10-21; Vid. (Pappas) 21:11-22; Vid. (Chandlee) 17:7-21. Further, TikTok has a norm of pseudonymity or anonymity, which is inconsistent with friends and family social networking. PF 64; *see* 4/30 (Presser) 62:8-22, *cf.* 5/14 (Alison) 208:2-13.

Like TikTok itself, see PF 59-67, other industry participants confirmed that TikTok lacks the uses and characteristics of PSN apps. For example, testified that ; see also

TikTok's core use has not been altered by its attempts to offer "aspects of personal socialization," including a "Friends" tab that presents content from reciprocal connections, and messaging functionality. 4/30 (Presser) 44:8-45:4; PF 68. Mr. Presser explained that features were developed to be "additive to the entertainment experience," 4/30 (Presser) 63:1-9, and have not altered "the predominant purpose for which users open the TikTok application," which is "to be entertained." 4/30 (Presser) 189:18-190:11, 191:3-25. TikTok's experiences with such features confirm the difficulty of altering the norms of a service: after three years, the "Friends" tab has

been unsuccessful and receives only "very miniscule" usage. Id. 55:9-56:21; see also

#### (b) YouTube

Mr. Filner testified that "[t]he core use case of YouTube is watching video"—not engaging in friends and family sharing. 4/17 (Filner) 151:23-24. As Google explained: "A user comes to YouTube primarily to find and consume video content," whereas "users go to social media platforms to connect to other end-users, usually within an identified social circle . . . [t]hose are not the reasons that users generally visit YouTube." PX13494-002, -006-07. Accordingly, "[u]sers generally use social media platforms [e.g., Facebook] and YouTube for different purposes," *id.* at -006, and YouTube does not compete for "use cases that only social media platforms such as Facebook can satisfy," 4/17 (Filner) 183:5-18 & PX13494-012.

YouTube lacks the uses and characteristics of PSN apps. Data shows that the uses of YouTube differ:

PX13494-002; Mr. Filner testified that YouTube does not "have a social graph based on friend and family connections," and that facilitating connections with friends and family is "not its focus." *Id.* 174:7-14. He also confirmed that YouTube lacks a Stories feature, any requirement that users have an account (let alone an account tied to their real identity), and messaging. PF 76-77, 147; *see also* PX13494-007 ("Because YouTube does not have a social networking purpose, it does not offer core features of social media platforms that are designed to facilitate social interaction between users.").

Industry and public recognition confirms that YouTube is an "entertainment platform" and not a "social network." Vid. (Pappas) 88:5-89:7; *see also* 4/30 (Presser) 42:3-6 (YouTube does not "offer personal social networking services"); PF 81 (survey evidence). And as detailed above,

YouTube's experience with adding limited social features underscores that it is unable to serve the demand for friends and family networking, as the additional features

were deprecated. *Supra* § I.C.1.a.iii; PF 79. This is consistent with Meta's own observation that whereas Instagram and Snapchat "are all about sharing," YouTube is "passive consumption." PX11972-002. YouTube's

explains why Google attempted to launch a separate personal social networking service (Google+) in 2011, and why Meta viewed Google+, not YouTube, as providing "real competition" for the first time. PX2527-001; PF 41.

#### (c) iMessage and mobile messaging apps

Mobile messaging apps, which focus on communications "with individuals and small groups," 4/29 (Shah) 228:20-25, are not reasonable alternatives. PF 106, 110.

Meta and other industry participants recognize that mobile messaging applications are not PSN services. PF 112. For example, Mr. Zuckerberg informed Meta's Board of Directors that "[t]here are many countries where WhatsApp is the leading messaging service and Facebook is the leading social network," PX15115-001, and other ordinary course documents clearly distinguish apps offering the "social networking use case" (e.g., KakaoStory) from those offering the "messaging use case" (e.g., KakaoTalk). PX11079-001; *see also* PX11080-001 ("DESPITE KakaoTalk launching a full social networking competitor called KakaoStory . . . we have once again overhauled to be the top pure social network in Korea."); PX2518-002 ("Facebook is a social network; WhatsApp is a real-time messaging service.");

see PF 112.

Industry recognition that mobile messengers and PSN services differ is borne out by their

distinct uses. Users of mobile messaging apps "want to exchange urgent messages with a single recipient or a small group of their inner circle." PX3002-002; PF 107-08. This purpose shapes both norms regarding what types of content people share, and expectations for how users of mobile messengers should engage with content. Specifically, the norms of messaging apps demand more prompt responses—multiple trial witnesses testified that users view a mobile message as a time-sensitive communication to which a response is expected, unlike a broadcast post which does not carry that expectation. PF 108-09.

Mr. Shah of Apple testified that iMessage is fundamentally unlike PSN services. *See* 4/29 (Shah) 215:13-15 (testifying that Apple does not "currently offer a personal social networking service like Facebook or Instagram"). Because Apple is attempting to serve a mobile messaging use case, Apple's services are "optimized for communicating with another individual or with a small group, a group up to 32 people," 4/29 (Shah) 223:13-19. This leads to iMessage's distinct functionality and characteristics: iMessage lacks a social graph and friend-finding tools, which leads to a "distinctive experience." 4/29 (Shah) 239:23-240:7. It also lacks a "feed," which leads to "meaningful differences between the form of communication that you would participate in in a Messages app versus an app that's about broadcasting with a feed." 4/29 (Shah) 237:1-10. Likewise, a person's contact list on a mobile messaging app is not a substitute for the social graph provided by PSN apps because a contact list does not contain the same universe of people, and mobile messaging apps do not allow people to grow their list of contacts by searching for phone numbers they do not already have. PF 111, 113.

The existence of group chats does not allow mobile messengers to serve the core use and functionality of PSN apps because an attempt to use a group chat to engage in broadcast sharing would result in an overwhelming volume of messages and violate mobile messaging norms of

urgency and rapid response. *See* PF 108-10; 4/23 (Lampe) 144:8-145:20. Further, group chats do not allow each user to design the sort of "private community" that each user is able to construct in a PSN app, *see* PF 45, so users are not encouraged to share the same types of personal content in group chats that they would share to a bespoke set of their friends and family members. PF 108-10; 4/23 (Lampe) 143:13-144:7.

Likewise, the existence of the "share sheet"—a feature of certain apps that allows users to pass certain information from one app to another—does not mitigate the different uses and characteristics of mobile messengers and PSN apps. PF 113. The ability to transmit, via mobile messenger, content sourced from other apps does not alter the uses or characteristics of the mobile messaging service. *Id.* Further, revealingly, "share sheets" cannot enable users to share core friends and family content—a post or story shared by a Facebook friend—through a text message. *See* PF 113; 5/14 (Alison) 179:22-182:17.

Meta recognizes these realities, which is why it has repeatedly characterized messaging apps as a complement to broadcast sharing, rather than as a substitute. PF 114. *Cf. Google Search*, 747 F. Supp. 3d at 115 (complementary goods do not belong in the same relevant market).

### D. Meta's Arguments Do Not Undermine the Market for PSN Services

Meta failed to show that any non-PSN app is a reasonable substitute for PSN services, and its arguments criticizing the relevant market are flawed for multiple reasons.

### 1. A market for time and attention is baseless

Meta's assertion that it competes with non-PSN apps for "time and attention" fails to refute the relevant market for PSN services. *See* SJ Op. at 34-35 (it is "beyond cavil that companies can operate in multiple and concentric relevant markets"). A "time and attention" market would include an "infinite range of possible substitutes" and is uninformative to an antitrust case, where "the purpose of the inquir[y] into market definition" is to determine "the potential for genuine

adverse effects on competition." *FTC v. Ind. Fed 'n of Dentists*, 476 U.S. 447, 460 (1986); *see also* SJ Op. at 20, 35; 4/28 (Coleman) 30:2-31:8 (jobs to be done framework more informative than discussions of competition for attention).

# 2. <u>Unconnected content in Facebook and Instagram does not undermine the relevant market for PSN services or Meta's monopoly power</u>

Meta's argument that it competes with non-PSN apps that offer unconnected content, such as unconnected SFV, fails to undermine the relevant market or Meta's monopoly power. As this Court observed, products within a relevant market commonly compete with out-of-market products, both within a broader overall market and for components of a particular product offering. *See, e.g.*, SJ Op. at 20-21, 34-37; *H&R Block*, 833 F. Supp. 2d at 54. But the relevant question is whether the products at issue are "reasonably interchangeable by consumers for the same purposes." *Microsoft*, 253 F.3d at 52 (cleaned up). As detailed below, Meta's efforts to increase time spent through unconnected content in no way expands the relevant market beyond PSN apps, because Meta's efforts have no effect on any non-PSN app's ability to serve the strong and ongoing demand for friends and family sharing. PF 116, 125-29.

The trial record makes plain that, notwithstanding Meta's inclusion of unconnected content in Facebook and Instagram, those apps remain firmly rooted in friends and family sharing and demand for that "job" remains enormous. PF 20-25, 29-32. Mr. Zuckerberg concedes that "friend sharing" on Facebook and Instagram "continues to be a thing that people care about," as do Mr. Alison and Mr. Mosseri. 4/14 (MZ) 181:20-182:8; PF 120-21. More than a hundred million Facebook and Instagram users in the United States post each month, with tens of millions of personal posts. PF 22, 31; *see also* 5/13 (Hemphill) 52:18-53:16 & PDX0090-132-35 (PX8146-8147) (broadcast sharing on Facebook and Instagram remains large). And even using Meta's overly restrictive classifications of what counts as "friend" content, Facebook and Instagram users

in the United States consumed *dozens* of pieces of friend content per day in January 2025. PF 24, 31. Likewise, the vast majority of users use Facebook and Instagram to share with friends and family, even if they spend some time on unconnected content. PF 121. For instance, unrebutted data indicates that almost no one uses the apps only for Reels. PF 121. And a 2024 Pew Research survey similarly confirmed that over 90% of Facebook users and over 80% of Instagram users come to the apps to keep up with friends and family. PF 25, 32.

Meta's increase in unconnected content shows Meta's interest in earning even more money by increasing time spent of users who are already on the apps to engage with friends and family. Meta's ordinary course documents make this plain. By 2021, Facebook and Instagram had been widely adopted in the United States, leaving Meta less able to increase total time spent simply by adding more users. Cf. 5/12 (Schultz) 174:22-176:4 (agreeing that Facebook's growth rate has slowed because it "has simply run out of Americans"); PF 119. Increasing time spent per user held the promise of increasing total time spent, but time spent per DAU on Feed and Stories had largely stabilized on Facebook by 2017, and on Instagram in early 2018—i.e., before TikTok achieved a significant position. See DX522 at 17; PF 59. This did not mean that friend content was no longer highly valued by users—to the contrary, the evidence from this period establishes that friends and family sharing represented the core use of Feed and Stories, and that users highly valued friend content. PF 120-21; DX522 at 3. Rather, Meta viewed interspersing unconnected content with friend content as a way to grow time spent, as the volume of potential unconnected content generally outstrips what a person's friends post. 5/8 (Mosseri) 161:24-162:18 (describing friend content as having a finite quality while there are "billions" of daily pieces of unconnected content to show people); PF 119.

Accordingly, Meta launched initiatives aimed at "shifting . . . towards Public Content,"

while resolving to "protect our core use case" and explicitly recognizing that "[o]ur primary use case is interaction with friends and family." PX3008, -039 & 5/14 (Alison) 162:12-165:3; *see also id.* 173:14-174:9 & PX10236-002 (June 2022 strategy document describing "discovery engine"); DX522 at 3 (strategy to achieve incremental growth in time spent from "entertainment/video" even as "people report connecting with close friends as the most important activity on IG"); PF 123.

Notably, throughout Meta's increase of unconnected content on Facebook and Instagram, friend content has remained highly valued by users—

PF 120;

PX3390-062 (October 2022 analysis concluding that original feed and stories posts "enjoy[] the strongest network effects"), -074 &

Confirming this, Meta received user blowback from increases in unconnected content on Instagram, PF 122, learning from this that unconnected content recommendations "should not displace friends and family content," PX12372-032, PF 123. To the same end, Meta has routinely described unconnected content on Facebook and Instagram as an intertwined or "symbiotic" part of the apps' friends and family sharing experience—rather than as an attempt to replace friend content or even replicate the passive consumption approach of TikTok and YouTube. *See* PF 117-18 (unconnected content on Facebook and Instagram intertwined to allow engagement with friends), PF 123. And data similarly reveals that Reels is generally providing incremental growth in time spent, not materially impacting Feed and Stories. PF 124.

In turn, Meta's incorporation of unconnected SFV into Facebook and Instagram brings Meta into competition with TikTok and YouTube but does *not* mean that TikTok and YouTube are reasonable substitutes for consumers to accomplish friends and family social networking—only PSN apps serve that purpose. PF 116, 125-26, *see also* PF 60-67, 73-78.

Google Search is instructive. In that case, Google argued that the general search engine ("GSE") market was too narrow in part because Google had "developed verticals" beyond general search that put it in direct competition with "specialized vertical providers" ("SVPs") like travel-booking sites and e-retailers such as Amazon. 747 F. Supp. 3d at 111-14 (D.D.C. 2024). Google had integrated those verticals into its overall search offering, and results from its new verticals appeared on its general search page. See id. at 42. Despite this integration of travel and shopping results that directly competed with SVPs, the court rejected Google's arguments, holding that SVPs were properly excluded from the market:

No one disputes that an SVP can serve the same purpose as a GSE for an individual query on a particular subject matter. A user can, for example, use either Google or OpenTable to find a nearby Japanese restaurant, or turn to Google or Amazon to shop for a blender. But no SVP can fulfill a user's varied needs in the same manner as a GSE. Few SVPs can provide answers to noncommercial queries or take a user to a desired location on the web through a navigational query. And no SVP can answer long-tail queries like a GSE. Thus, an SVP may be reasonably interchangeable with a GSE for a discrete purpose but for not the "same purposes."

*Id.* at 114 (quoting *Microsoft*, 253 F.3d at 52).

So too here. A consumer might encounter the same SFV on Instagram Reels as on TikTok or YouTube. And Meta consequently claims "fierce" competition with non-PSN apps for that content. (Google did, too. *Id.* at 113-14 ("Google does perceive and respond to competitive pressure from other platforms, particularly SVPs.")) But consumers cannot turn to TikTok or YouTube for friends and family sharing. *See, e.g.*, PF 60-67, 73-78. As such, SFV competition for content integrated into the Facebook and Instagram apps—like the integration of specialized search results into Google's search product—does not undermine Meta's monopoly of PSN services or warrant inclusion of non-PSN apps into the relevant market: they do not offer the same "cluster of services," *United States v. Conn. Nat'l Bank*, 418 U.S. 656, 662, 664 (1974), and do not serve the demand for friends and family sharing. *See* SJ Op. at 37; *Grinnell*, 384 U.S. at 572-

73 (finding a relevant market for central-station security services even though parts of that service offering were also available separately); *Whole Foods*, 548 F.3d at 1053-54 (upholding relevant market for premium organic groceries even though such grocers carried goods available in regular supermarkets); *FTC v. Kroger Co.*, 2024 WL 5053016, at \*10-11 (D. Or. Dec. 10, 2024) (Costco and other popular food supply stores excluded from relevant market of traditional supermarkets, because they were not substitutes for the purpose of a one-stop-shopping experience).

In a sense, Meta's position that consumers who desire to consume SFV can turn to TikTok and YouTube in addition to Facebook and Instagram argues about a different potential market in a different case—but that does not undermine the PSN services market because "it is beyond cavil that companies can operate in multiple and concentric relevant markets." SJ Op. at 34-35.

Trial evidence confirmed these firmly established legal principles. Meta recognized that Google+ represented a "complete replacement" for Facebook—not a competitor for a discrete part of the Facebook app. 4/14 (MZ) 192:23-193:18; PF 126. But this is true only of services like Google+ that compete to offer consumers "the use case of online sharing with friends." 4/14 (MZ) 195:23-196:2; *see also* PX10598-008 ("generic time spent threat" from mobile messengers different from threat posed by those that moved into "core social networking product areas" and posed a "direct threat to our primary products"). Snap executives likewise explained that Snapchat competes only with PSN services for the friend sharing use case offered by Snapchat Stories, while it competes with non-PSN services for the SFV use case served by its Spotlight feature, and messaging services for its messaging features. Vid. (Andreou) 24:7-25:19; PF 50. And other parts of the record, including Meta's exercise of monopoly power, confirm that Meta is not constrained from exercising monopoly power by TikTok, YouTube, or other non-PSN apps. PF 127-29.

Moreover, the logic of Meta's position is deeply flawed. The *Cellophane* fallacy anticipates

that a monopolist will typically encounter competition with what would be more distant substitutes in a competitive market. See 5/13 (Hemphill) 35:9-16 (discussing Microsoft feeling hemmed in by competition); 5/21 (Carlton) 184:12-185:12 (agreeing monopolist will raise price to the point of facing competition from other products); see also SJ Op. at 40 (discussing Cellophane fallacy). Additionally, as Prof. Hemphill explained, a monopolist's expansion of services around its core monopoly (like AT&T's expansion beyond its monopolies in local telephone service) does not reduce the monopolist's power, even if doing so brings it into competition with other service lines. 5/27 (Hemphill) 63:9-65:4; PF 116, 126. Indeed, it would turn Section 2 on its head to allow a monopolist to escape antitrust scrutiny by successfully expanding outside its core monopoly—when a dominant firm reaches out into the turf of other firms, it shows its power rather than weakness. See 5/27 (Hemphill) 63:9-65:4; PF 116-18;

Microsoft, 253

F.3d at 73-74 (Microsoft used its dominance of operating systems to foreclose competition for browsers); *C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1367 (Fed. Cir. 1998) (biopsy gun manufacturer liable under Section 2 for "leverag[ing] its monopoly power in the guns [market] to obtain a competitive advantage in replacement needles"). To hold otherwise would enable monopolists to use their secure monopoly position and profits to launch additional services and avoid liability for unlawful acts by claiming the monopoly is a smaller part of the larger business.

# 3. Meta's "shrinking monopoly" defense fails

Meta's claim that friends and family sharing is declining does not undermine the relevant market or Meta's monopoly. As an initial matter, Meta's argument is legally irrelevant because a shrinking market is no less deserving of antitrust protection than a static or growing one. *See, e.g.*, *FTC v. Peabody Energy Corp.*, 492 F. Supp. 3d 865, 879-880, 898 (E.D. Mo. 2020) (enjoining merger although out-of-market competitive pressures caused demand and prices in the relevant

market to decrease); *FTC v. Swedish Match*, 131 F. Supp. 2d 151, 167-68 (D.D.C. 2000) (enjoining merger despite declining demand for relevant product). In any event, as detailed above, demand for family and friends sharing remains huge. *Supra* I.D.2.

Allowing Meta to escape liability due to the changing proportions of connected and unconnected content would be especially problematic given that Meta's PSN monopoly has enabled it to underinvest in friends and family content and harm the user experience. *Supra* I.B.; PF VII.B-F. As detailed elsewhere, Meta has underinvested in the friends and family experience and ramped up ad load, which hurts both the growth of friend content and the amount of friend content viewed per session. *Supra* I.B., PF 159-61, 342-43. It would be perverse indeed for Meta's underinvestment and degradation of quality—expressions of its monopoly power—to be exonerating. PF 130, 157-64, 170, 342-44.

# 4. Meta's experts failed to undermine the relevant market for PSN services

Meta's experts leaned on five studies purporting to show "substitution" between PSN apps and non-PSN apps to rebut the FTC's market definition. PF 176. But these studies have all the flaws identified by the Court at summary judgment. *See* SJ Op. at 41-43; ECF 363-1 at 23-30. Each fails numerous elements of the "SSNIP" test—an accepted methodology for defining relevant markets—which calls for observing reactions to a small but significant non-transitory increase in price ("SSNIP"). *See* PF 177, 183-87; 2023 Merger Guidelines 4.3.A; *FTC v. Sysco Corp.*, 113 F. Supp. 3d 1, 33-34 (D.D.C. 2015). And they fall prey to the *Cellophane* fallacy by measuring consumer behavior in an already-monopolized market. PF 178; *see* SJ Op. at 40.

Prof. Carlton attempted to wave away the flaws by claiming that the studies show TikTok and YouTube should be included in the market because they are "closer substitutes" than Snapchat. These studies do not purport to show that consumers were able to satisfy demand for friends and family sharing when they temporarily "switched" to another app during the large and transitory

stimuli, nor that Meta is unable to exercise monopoly power. PF 176-77, 180. Indeed, consumers who use Facebook or Instagram for friends and family sharing cannot temporarily accomplish that purpose on another platform without an existing friends-and-family social graph in another app, so people temporarily biding time on TikTok or YouTube is not informative for analyzing substitution for PSN services. PF 180.

Prof. Carlton's position is flawed for other reasons. First, the Merger Guidelines and courts reject identifying market participants based on a rigid order of supposed diversion. See United States v. Aetna, 240 F. Supp. 3d 1, 37-41 (D.D.C. 2017); ECF No. 363-1 at 26; PF 180. Second, the studies' transitory and large stimuli overstate switching to non-PSN apps compared to a properly run SSNIP, and thus do not even accurately measure order of diversion. PF 180. Third, Prof. Carlton is not committed to his own approach, which absurdly implies that Candy Crush an online game—is a closer substitute to Facebook and Instagram than Snapchat. PF 181. Nor would his approach invalidate a market of only Facebook and Instagram, which the evidence also supports. PF 180. Fourth, the studies show that large portions of users in the studies switched to no other online service—for example, 39% of Facebook users in Prof. List's pricing experiment reduced overall time on their phones—which likewise indicates the lack of reasonable substitutes for Meta's PSN services. PF 182. Finally, Prof. Carlton never opined that the level of observed "substitution" in his studies was economically significant enough to undermine Meta's exercise of monopoly power or a PSN services market, and thus his analysis leads nowhere. PF 179; ECF No. 363-1 at 28-29; Whole Foods, 548 F.3d at 1040 (cross-shopping does not defeat relevant market).

#### E. Meta Has a Sustained Dominant Share of the Relevant Market

From 2011 to the present, Meta has possessed "a dominant share of a relevant market that is protected by entry barriers." *See Microsoft*, 253 F.3d at 51; PF 138-43. Multiple metrics, including monthly active users ("MAU"), daily active users ("DAU"), broadcast posts, and time

spent, demonstrate that Meta has possessed at least a 60% market share in the domestic PSN services market from 2011 to present. PF 139, 141; *see FTC v. Facebook*, 581 F. Supp. 3d 34, 47-48 (D.D.C. 2022) ("[C]ourts ordinarily find [shares in excess of 60%] sufficient to establish monopoly power[.]"). Moreover, Meta's market dominance has been remarkably stable over time, including in recent years. PF 139-140. Indeed, in 2025, Meta's market shares exceed as measured in MAU, DAU, and time spent—

PF 140.

Meta and its experts can hardly contest market share after the PSN services market is defined, and indeed failed to do so at trial—instead merely "resuscitating [their] market-definition complaint[s]" and arguing for lower shares only by including firms outside the relevant market. See SJ Op. at 44. Meta's position fails doubly. First, the FTC and Prof. Hemphill followed the standard approach to calculating market shares by only including firms in the relevant market in the market share calculations. PF 138; ECF No. 519-1 at 11. This standard approach is applied even when relevant markets exclude firms that might offer a piece of the relevant product offering. See, e.g., Google Search, 747 F. Supp. 3d at 114, 119 (market shares calculated based on general search queries despite specialty search providers offering some of the same "individual quer[ies] on a particular subject matter"); Sysco, 113 F. Supp. 3d at 53-54 (market shares calculated for sales of broadline distributors despite specialty distributors offering some of the same food items).

Second, Meta's objections are factually meritless. Even if one believes that user time spent on unconnected content on Meta's apps should not be counted as output within the relevant market, Meta plainly has a dominant share. PF 141. Importantly, Meta's objections have no impact on MAU and DAU measures. As detailed above, *supra* I.D.2, the record indicates that most users open Facebook and Instagram for friends and family sharing "even if some (or even most) of their time spent on Meta's products does not strictly relate to such sharing," making it reasonable to

count them in the MAU and DAU shares. *See* SJ Op. at 46 (emphasis in original). As for time spent—an additional, but not necessary metric—Meta still possesses a dominant share of even if one excludes time spent on contested Facebook and Instagram surfaces, such as Reels. PF 141. And Meta has a dominant share of Feed and Stories broadcast posts, a direct measure of broadcast sharing on PSN apps. *Id.* These additional estimates confirm that the conclusion that Meta has a dominant share is robust and that Meta's competitive significance as a provider of PSN services is not overstated in any of Prof. Hemphill's estimates, even if one considers time spent on unconnected content to not be a close part of Meta's PSN services.

Meta even has a dominant share if one deviates from standard practice to include certain usage of non-PSN apps in the market share estimates. Prof. Hemphill explained that if one includes all usage of TikTok in the relevant market, Meta would still have a dominant share of as measured in MAU and DAU, and a share as measured by time spent. PF 143. These shares are sufficient to establish monopoly power. See, e.g., US Airways, Inc. v. Sabre Holdings Corp., 2022 WL 874945, at \*9 (S.D.N.Y. Mar. 24, 2022) (controlling "between forty-nine and fifty-two percent of the market . . . is enough to support a finding of monopoly power when combined with other evidence"); Areeda & Hovenkamp, Antitrust Law ¶ 801 (endorsing market shares of "50-60 percent" as sufficient to show market power in "network industries"). Further, Meta has a dominant share based on MAU, DAU, and time spent, even including incidental usage of other social media apps to interact with friends and family—despite the lack of evidence that these apps are reasonable substitutes for the relevant product. PF 142.

At bottom, the assessment of market power and market definition is functional rather than formalistic—indeed, courts have not hesitated to evaluate market power based on "in-between" markets that differ from those proposed by the parties. *Epic Games, Inc. v. Apple, Inc.*, 67 F.4th

946, 978 (9th Cir. 2023); see also United States v. Cont'l Can Co., 378 U.S. 441, 452–53 (1964) (harm to competition in relevant market as defined by the court). And here, "[w]hichever way the data is sliced . . . the story is the same: Meta's share of the relevant market has exceeded (sometimes greatly) the level typically associated with monopoly power." SJ Op. at 44.

### F. Meta's Dominant Position is Protected by Entry Barriers

Meta's dominant position is protected by "commonly recognized types of barriers to entry," including "network effects and switching costs." *Facebook*, 581 F. Supp. 3d at 51; PF 144-49.

Start with ordinary course documents. Meta has assessed how network effects and switching costs protect its dominance: "We are hard to compete with, our network effects are substantial, your friends are all here, you have made a big investment in your Facebook identity and network and that's hard to leave behind, and furthermore, every day, our users increase that investment in Facebook." PX1204-003. Likewise, Meta executives have observed that "it's super hard to kill something with real network effects," 5/8 (Schultz) 244:19-245:7, and that it "will be very tough for a user to switch if they can't take those photos and associated data/comments [that they have on Facebook] with them," PX1155-002.

Next, look at expert testimony. Prof. Hemphill demonstrated using Meta's data that usage on Facebook and Instagram displays network effects—users are more engaged when their networks are larger. PF 144 (citing PX8083 and PX8084). And Meta's own expert, Prof. List, has even acknowledged in his academic writing that Facebook benefits from network effects and "lock-in." *See* 5/19 (List) 168:25-171:18; *see also* 5/21 (Carlton) 180:18-20 (Prof. Carlton concedes that Facebook and Instagram exhibit network effects).

Finally, look at industry history. PF 147. Path attempted to enter the PSN services market and failed. PF 41. Google+, owned by one of the wealthiest and most successful firms in history,

failed. PF 41, 147; *see also Google Search*, 747 F. Supp. 3d at 122-23 (failed entry indicates entry barriers). And even outside of PSN services, apps like TikTok and YouTube have had little to no success with even rudimentary social features, PF 147, confirming a wealth of other evidence that consumer norms of behavior are difficult to change. PF 10, 65, 78-79.

Meta's executives attempted to argue that "contact importers" make entry easy, and that other factors have reduced the salience of network effects. But this defies reality. PF 149. Recent history, including TikTok's and YouTube's experiences with social features, does not suggest any reduced salience of network effects. PF 147, 149. And contact importing failed to save Google+ and Path, or help other apps gain traction. PF 41, 70, 149.

# II. Meta's Acquisitions of Instagram and WhatsApp Constitute Anticompetitive Conduct that Harmed Competition and Consumers

A monopolist's acquisition of "actual competitors or nascent threats" is anticompetitive under Section 2 "because such action tends to maintain monopoly by means other than competition on the merits." SJ Op. at 61; *see also id.* at 57 ("[I]t is hard to imagine an action that better fits the definition of conduct with anticompetitive effects than a monopolist's buying out its rivals.").

Meta's acquisitions of Instagram and WhatsApp were anticompetitive. Copious trial evidence shows that Meta "reasonably viewed [each app] as a nascent competitor," providing "highly probative evidence that the acquired firm constituted such a threat." SJ Op. at 64. Moreover, "objective evidence" establishes that both firms were capable of threatening Meta and could "reasonably have matured into a real competitor"—indeed, Instagram already was competing vigorously against Facebook before the acquisition.

### A. Instagram Was a Rapidly Growing and Dangerous Competitor in PSN Services

Instagram was a potent PSN services competitor to Facebook before Meta decided to buy it. PF IV.A. By 2010, the "shift to mobile" created an opportunity for new services to leverage

smartphones' improved features, including high-quality cameras. PF 192. Meta was vulnerable. PF III. Facebook had achieved dominance in PSN services as a desktop website but struggled to adapt to mobile as quickly as "mobile first" start-ups, and Meta's poor technical choices hampered Facebook's ability to launch new features. PF 197, 225; *see* PDX0022.

Instagram capitalized on this opportunity. Its founders launched their new mobile-first app in October 2010 as a way for people to share their lives on the go through photos. PF 200, 202. Instagram was an instant and sustained success. PF 204. It attracted almost 19 million registered users in its first fifteen months and 100 million registered users in less than two years. *Id*.

It was beloved by its users, and by 2012, Instagram's photosharing engagement was growing faster than Facebook's. PF 208, 218, 227, 234; PX15138-001.

Instagram was well positioned to sustain its "[e]xponential, unstoppable" trajectory. 4/22 (Systrom) 30:12-31:2; PF IV.A.2. It stood out for reasons beyond user growth—for example, its engagement metrics were exceptional. PF 209, 218. It brought on board members and investors offering nearly limitless capital, deep industry expertise, and broad connections. PF 211. And other tech companies—including Twitter, Google, and Apple—were circling Instagram as potential acquirers. PF 220.

Instagram's runaway success alarmed Meta. Instagram, like Facebook, offered a friends and family sharing experience. PF 200-03. Meta's executives recognized—and feared—that Instagram was building a "parallel network," and understood that as Instagram grew, an increasing amount of friends and family sharing would be lost to Instagram. PF 215. Meta executives also justifiably feared that an established technology player could acquire Instagram. PF 220.

At first Meta attempted to outcompete Instagram by improving Facebook's mobile photo-

sharing capabilities. PF IV.C. Unable to directly update the Facebook app, Meta tried to launch a new app called "Facebook Camera." 4/23 (Stoop) 32:10-33:12, 42:9-43:3; PX12409-012; PF 225. The Facebook Camera project focused on the threat posed by Instagram: within a few months of Instagram's launch, the Facebook photos team "focused almost exclusively on a new mobile photo app as we gawk at Instagram's simple photo-sharing app taking off." PX2357-001.

Progress was slow, and a frustrated Mr. Zuckerberg repeatedly exhorted employees to move more quickly to address the threat of Instagram. PF 227-29. Despite these efforts, Meta was failing to significantly dent Instagram's growth. By early 2012, Mr. Zuckerberg acknowledged

PX1102. By April 2012, just prior to the acquisition, nothing had changed: Mr. Zuckerberg informed employees that "right now . . . we're behind," that Instagram was "growing really quickly

... and it's going to be tough to dislodge them." PX15180 at 4:26-48.

He was right. On the eve of the acquisition, Instagram rivaled Facebook in certain engagement metrics on mobile, PF 218, and had just launched an Android version that ignited further growth. PF 205, 217. Sensing that Meta was behind, Mr. Zuckerberg decided it was worth "paying a lot of money" for Instagram to avoid trailing Instagram "in . . . how one of the core use cases of Facebook will evolve in the mobile world." PX1102; see also 4/16 (Sandberg) 276:3-14 (Mr. Zuckerberg made the decision to acquire Instagram). Mr. Zuckerberg privately informed his CFO that Instagram had an "established" network and a "meaningful" brand, and he worried that "if they grow to a large scale they could be very disruptive to us." PX1136-001.

So Meta bought Instagram. Why? To "neutralize a potential competitor." *Id.* at -003. Mr. Zuckerberg determined that the "really expensive — probably ~\$1 billion" price was worth

paying because Instagram was "pretty threatening" and could "hurt [Meta] meaningfully."

According to Sheryl Sandberg, the price was "way too much . . . but we knew that."

PX2522-001 & 4/16 (Sandberg) 235:13-236:6. Mr. Zuckerberg subsequently explained to Meta employees that paying up for Instagram "was a no brainer" because Instagram had grown into a

"mega-network" that was "on the path to win" had Meta not acquired it. PX2501-001-02. In short, as Mr. Zuckerberg later explained privately to his COO, "Instagram was growing so much faster than us that we had to buy them for \$1 billion." PX15138-001 & 4/15 (MZ) 40:4-41:18.

#### B. WhatsApp Was a Nascent Threat to Offer PSN Services

As with Instagram, Meta acquired WhatsApp to protect its PSN monopoly. In 2012 and 2013, Meta executives repeatedly referred to mobile messengers bootstrapping into social networks as "the biggest threat we have ever faced as a company," PX11287-001, the "biggest threat to our product that I've ever seen," PX10454-002, and "a potential recipe for [us] not [to] be around in a couple [of] years from now," PX12106-002. *See also* PF 243, 245. Peter Deng described Meta's mindset succinctly: "we're all terrified." PX10454-002. Meta was already struggling with bootstrapped PSN services in Asia: in 2012 and 2013, KakaoStory and LINE beat Meta's PSN apps in Korea and Japan. PF 242. In 2013, Mr. Zuckerberg warned Meta's Board that messengers offering PSN services represented Meta's "biggest competitive vector"—the strategy was already "working reasonably well" in Asia and threatened Meta's position in the United States too. *See* PX2521-001; PF 249.

Meta feared that WhatsApp would follow the example of Asian messengers and offer PSN services. In August 2013, Mr. Zoufonoun wrote that the "scary part" of WhatsApp's rapid growth was "that this kind of mobile messaging is a wedge into broader social activity/sharing on mobile we have historically led in web," and Mr. Olivan replied: "Trust me – this keeps me awake every night." PX12127-001; PF 245. And founding Facebook Messenger team member Ben Davenport

testified that "it was a reasonable conclusion" that WhatsApp could have "leveraged its mobile network to bootstrap a social network." Vid. (Davenport) 209:21-210:2; PF 244.

Meta initially responded by trying to win in messaging, hoping to create a "moat" around its PSN monopoly by ensuring that no other messenger could grow large enough to successfully bootstrap a PSN service. PF 315. Meta invested heavily in that endeavor. PF 236, 258. But Meta's efforts failed. WhatsApp was the "clear category leader" globally when Meta acquired it. PX10232-016; PF 237. WhatsApp's scale, growth, and engagement metrics were described as "rare air" by its lead investor and "exceptional" by venture capital expert Prof. Rim. PF 261. Further, it was sizeable and growing rapidly in the United States: Meta informed its Board in February 2014 that WhatsApp had 20 million U.S. users, PF 269; and WhatsApp was adding over 48,000 new U.S. users a day in early 2014, PF 268, putting it on track to add another 18 million U.S. users that year. Industry players recognized that such metrics constitute "very strong" growth PF 268. And Meta recognized that further feature development could allow WhatsApp to "tip," or win, the mobile messaging market in the United States. PF 250.

Confirming Meta's subjective fears, WhatsApp was objectively equipped to offer a PSN app. Meta informed its Board of Directors in 2013 that WhatsApp had "all the ingredients for building a mobile-first social network," PX1103-006, and Mr. Zuckerberg testified that WhatsApp could have become "a very formidable competitor" in social networking, 4/16 (MZ) 95:1-11; see PF 244. Not only did WhatsApp have the examples of Kakao, LINE, or WeChat to follow, but it also had ample support in doing so—Sequoia Capital, a "top-tier investor in technology," provided it with comprehensive assistance from "strategic items" to "recruiting" to "introductions." 4/17 (Goetz) 62:17-22; PF 263.

WhatsApp also had a need to monetize. Mr. Goetz, Mr. Zuckerberg, Prof. Rim, and Prof.

Tucker all agreed WhatsApp was unprofitable and unsustainable, providing an undeniable incentive to bootstrap a PSN offering. PF 276-77, 279. Brian Acton was the only witness who testified that WhatsApp did not face a financial situation requiring it to change its monetization model, and he failed to provide any reason that WhatsApp could have sustained its ballooning losses—from \$54 million in 2012 to \$138.1 million in 2013. PF 276, 279-80. At the time of the acquisition, WhatsApp had at most two years of cash left and its costs were only rising. PF 277.

Unsurprisingly, contemporaneous evidence shows that the WhatsApp founders were "iterating" on new monetization plans in June 2013; this is normal, as founders' plans commonly evolve in consultation with venture capital backers. PF 281. Sequoia referred to the potential to monetize WhatsApp as a social network in its Series B investment memo. PX10232-003-04; PF 281-82. Mr. Goetz also testified that he had started discussing the creation of a separate social app with the founders. PF 282. By the time of the acquisition, WhatsApp was checking references for Meta's head of advertising monetization to become WhatsApp's CFO. PF 283.

Sequoia was not the only industry player to see PSN services as a likely path for WhatsApp. Google saw that potential as early as 2010. PF 290. Meta itself justified the acquisition price by comparing WhatsApp's monetization potential to messaging apps that bootstrapped PSN services. PF 301. Morgan Stanley likewise highlighted WhatsApp's potential as a social network in a deck meant to pitch WhatsApp to potential acquirers, and WhatsApp hired Morgan Stanley shortly thereafter because of this work. PF 286.

Meta's portrayal of WhatsApp as a "simple" SMS replacement ignores that WhatsApp was continually evolving and becoming "more featureful." 5/20 (Acton) 166:13-15; PF 247. For all Meta's claims that the founders disliked the idea of ads in the WhatsApp *messaging app*, *see* PF 280, Meta ignores the alternative route taken by Kakao—launching a separate PSN app that leaves

the messenger intact. PF 241. As Mr. Zoufonoun explained, "[O]ne critical wedge could be . . . us[ing] their brand to launch a second separate app that gets marketed heavily in their first WhatsApp app[], and that app is a clone of Facebook Blue, and . . . they unseat or take away customers from us." Vid. (Zoufonoun) 291:2-12; PF 246. And for all Meta's speculation about the WhatsApp founders' likely behavior, in fact the founders sold their company to a PSN juggernaut believing that the purchase price was based on monetizing via ads and without concrete assurances that such monetization would not occur. PF 302-04. This is not surprising given their obligations to investors, employees, and families—the monetization pressures highlighted by Prof. Rim. PF 278, 303. Post-acquisition, Meta dictated WhatsApp's direction, to the point that Mr. Acton left \$800 million on the table as he exited, so Meta could "take [WhatsApp] into the future as they wanted" (i.e., to try ads). PF 305-07.

The threat to Meta that WhatsApp would offer PSN services was magnified by the risk that WhatsApp would be acquired and the acquirer would do so. As early as 2010, Google had sought to acquire WhatsApp to "[s]upercharge [Google's] mobile social initiatives," including contemplating "grow[ing] [WhatsApp] into a mobile social network." PF 290. Meta executives worried that an acquisition of WhatsApp by Google could "bolster Google's social network offerings"; that "Google's case for acquiring WhatsApp ha[d] only gotten stronger" over time; and that it would be "very, very bad" if WhatsApp fell into Google's hands. Vid. (Davenport) 191:10-14; PX1297-001; PX10453-002; PF 256. Tencent, the parent of WeChat, was also interested in WhatsApp. PF 254, 287-88.

Meta's long-simmering fear of WhatsApp came to a boil in February 2014 when, days after receiving a Morgan Stanley presentation noting that a Google acquisition of WhatsApp could determine the social network winner on mobile, PF 257, Meta learned that WhatsApp was meeting

with Google's CEO. PF 294. Meta moved in "a frenzy" to acquire WhatsApp for \$19 billion, or 11% of Meta's market capitalization, and at a premium of \$10.9 billion, or 135%. 5/20 (Acton) 185:8-23; PF 294-95, 297. Meta's \$19 billion offer was made and agreed to without any formal valuation, without any evaluation of deal synergies, and without any plans to monetize WhatsApp. PF 296, 300. Meta lost billions more post-acquisition. PF 316. Instead, PF 301. The significant premium, in other words, was "to secure an avoidance of competition"—clear anticompetitive conduct. PF 298.

# C. Meta's Acquisitions of Instagram and WhatsApp Helped Meta Maintain Its PSN Monopoly and Harmed the Competitive Process

A plaintiff seeking injunctive relief establishes a prima facie case by demonstrating that a monopolist eliminated nascent threats through non-merits competition. *See Microsoft*, 253 F.3d at 79-80. No additional evidence is required to establish harm to the competitive process or contribution to the maintenance of monopoly because a "rather edentulous test" for causation applies when a monopolist's own anticompetitive conduct has made a comparison between the monopolized market and a competitive one unknowable—the monopolist (not the public) "is made to suffer the uncertain consequences of its own undesirable conduct." *Id.* at 79.

Nonetheless, the trial evidence showed that acquiring Instagram and WhatsApp helped Meta maintain and entrench its monopoly. By acquiring Instagram, Meta shut off vigorous head-to-head competition. Before joining Meta, Instagram's executives independently sought to improve and grow the app and never "refrain[ed] from taking any action that [they] thought would help Instagram grow because of concern that it would hurt Facebook." 4/22 (Systrom) 81:19-25; PF 310. After Instagram became a part of Meta, that changed. Mr. Zuckerberg made clear to Mr. Systrom that "Instagram shouldn't try to gain users by telling users that they should try Instagram

instead of Facebook Blue." 4/22 (Systrom) 81:13-18; PF 310. Meta also let up on its competitive efforts to improve photo sharing on Facebook "since we are acquiring Instagram." PX1116-001-02; PF 311. Likewise, by acquiring WhatsApp, Meta eliminated the risk that WhatsApp would bootstrap a PSN service and exert direct competitive pressure on Meta. PF 309.

Through both acquisitions, Meta also frustrated new entry into PSN services by bolstering already high entry barriers. PF 318; *see also Microsoft*, 253 F.3d at 55 (Microsoft's conduct reinforced "applications barrier to entry"). Meta recognized that controlling and operating Instagram prevented new applications from gaining "traction" using any "social mechanics" similar to Instagram's. PX1136-003; PF 314. And Meta operated WhatsApp as a moat in mobile messaging, losing billions to keep the app running while inhibiting another mobile messenger from gaining scale and entering the PSN market. PF 315, 317.

# D. Meta's Anticompetitive Conduct Has Caused Ongoing Harm to Consumers

"[T]he Section 2 requirement to demonstrate anticompetitive effects is <u>not</u> a requirement to separately show consumer harm." SJ Op. at 54 (emphasis in original). Rather, the law presumes that harm to "the competitive process <u>thereby</u> harms consumers." *Id.* (emphasis in original) (quoting *Microsoft*, 253 F.3d at 58). Nonetheless, evidence of consumer harms provides further "confirmation that the acquisitions were anticompetitive." *Id.* at 61.

As detailed above, Meta was able to raise ad load on Instagram, knowing that if the degraded experience drove users to Facebook, Meta would still benefit. *See also* PF VII.C. Meta has also raised ad load dramatically on Facebook, using its control (and increases) in Instagram's ad load to sustain Facebook's higher ad load. PF 334-36. The acquisitions allowed Meta to underinvest in features, for example by discontinuing its efforts on Facebook Camera, "since we're acquiring Instagram." PX1115; PF 311. And they empowered Meta to degrade the friends and family sharing experience of its apps, including by manipulating the social graph of Instagram to

reduce friend recommendations to minimize "cannibalization" of Facebook. PF VII.D. In addition, Meta's underinvestment in Instagram's integrity systems has resulted in significant integrity failures, including in preventing the risk of child exploitation. PF VII.E, 359-61. Unsurprisingly, Meta's own user sentiment surveys and other user feedback reveal that users' perception of Facebook's and Instagram's overall quality has gotten worse since the acquisitions. PF VII.B.

Brief episodes where Meta faced competition illuminate the consumer harm. When it faced PSN competition, Meta responded by competing—going into "lockdown" in response to Google+, developing features in response to Path, and scrambling to improve Facebook's mobile photo sharing experience in response to Instagram. PF 322-23; *supra* II.A. Likewise, after Snapchat launched Stories, Meta reacted similarly to the rise of Instagram: by investing in improving its own apps while trying to buy Snapchat (this time, for \$6 billion). PF 324. And Meta's monopoly has cost consumers the ability to choose between competing PSN apps on important dimensions like their privacy and content moderations policies. PF 352; 4/15 (MZ) 175:17-178:15.

# III. Meta Has No Legally Cognizable Procompetitive Justifications

Meta has advanced no justifications or affirmative defenses that meet the requirements to justify its anticompetitive acquisitions. *See* SJ Op. at 79-83; ECF No. 519-1 at 19-25. Meta's justifications involve conduct that is not a form of "competition on the merits," and are pretextual because Meta acquired Instagram and WhatsApp to insulate itself from competitive threats. PF 363. The alleged benefits are also not merger specific, many are outside the relevant market, and they are not close to the required "overwhelming" showing of "extraordinary" benefits necessary to rebut the FTC's prima facie case. *Id.*; ECF No. 519-1 at 20, 24-25.

#### **CONCLUSION**

The Court should find Meta liable for unlawfully maintaining its monopoly power.

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