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19
 20 UNITED STATES DISTRICT COURT
 21 NORTHERN DISTRICT OF CALIFORNIA
 22 SAN JOSE DIVISION

23 FEDERAL TRADE COMMISSION,
 24 Plaintiff,
 25 v.
 26 META PLATFORMS, INC., et al.,
 27 Defendants.

Case No. 5:22-cv-04325-EJD

**DEFENDANTS’ PROPOSED
 POST-HEARING FINDINGS OF FACT
 AND CONCLUSIONS OF LAW**

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 Judge: Hon. Edward J. Davila

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PROPOSED POST-HEARING FINDINGS OF FACT

I. The Merging Parties and the Proposed Transaction

1. Defendant Meta Platforms, Inc. (“Meta”) is a publicly traded corporation organized under Delaware law and headquartered in Menlo Park, California. *See* DX1237 at 11 (Meta Platforms, Inc., December 31, 2021 Form 10-K).

2. Meta manufactures virtual reality (“VR”) devices – including the Quest 2 (which sells for \$399 or \$499 depending on the model) and the Quest Pro (\$1,499) – and operates a VR platform from which VR users can access thousands of VR applications (“apps”). *See* Pruettest. 273:20-23; *see also* DX1230 (Carlton Rep. ¶¶ 37, 44, 49) (discussing VR devices); DX1233 (Zyda Rep. ¶¶ 82, 84 & Fig. 1) (describing Meta’s current VR market penetration).

3. Defendant Within Unlimited, Inc. (“Within”) is a privately held company organized under the laws of Delaware with headquarters in Los Angeles, California. *See* DX1072 (Merger Agreement at 3).

4. Within is a VR app developer that makes Supernatural – a VR fitness and wellness app with approximately [REDACTED] (as of October 2022) who pay \$19 per month or \$180 per year for access to a library of guided and unguided exercise courses, trainer-led workouts, and meditation sessions – which Meta distributes on its VR platform. *See* Koblin Test. 604:2-25 (describing Supernatural price, distribution, and services); DX1230 (Carlton Rep. ¶ 77) ([REDACTED]); DX1232 (Vickey Rep. ¶ 30, Tbl. 1 & n.51) ([REDACTED]).

5. On October 22, 2021, Meta and Within signed an Agreement and Plan of Merger pursuant to which Meta would acquire all of Within in a transaction valued [REDACTED]. *See* DX1072 (Merger Agreement §§ 1.1, 1.3); PX0054 (Bosworth 156:4-7) (purchase price).

6. By its terms, either party can terminate the Merger Agreement if the transaction has not closed by April 23, 2023. *See* DX1072 (Merger Agreement § 7.1(b)).

7. The Federal Trade Commission (“FTC”) seeks a preliminary injunction under Section 13(b) of the Federal Trade Commission Act, 15 U.S.C. § 53(b), barring Meta’s acquisition

1 of Within, pending a trial before an Administrative Law Judge of the FTC, review by the FTC
2 Commissioners, and appeal to a federal court of appeals. *See* Am. Compl. (Dkt. 101-1) at 2.

3 8. The FTC alleged in the original complaint that Supernatural competes broadly with a
4 host of other VR apps, including Meta’s own game Beat Saber, such that the acquisition was likely
5 to harm competition in a “broad” VR fitness market. *See* Compl. (Dkt. 1) ¶¶ 50, 109, 117, 123
6 (alleging the “broad” market in which Supernatural competes against many other VR apps).

7 9. The FTC sought to avoid this contradiction when it subsequently dropped the
8 allegation that Supernatural competes with any VR apps that Meta owns. *See generally* Am.
9 Compl.

10 10. The acquisition of a VR app developer (Within) by a VR platform owner (Meta) is a
11 “vertical” acquisition; such acquisitions are generally pro-competitive and common in many
12 industries. *See* DX1230 (Carlton Rep. ¶¶ 172-175) [REDACTED]
13 [REDACTED]
14 [REDACTED]; Carlton Test. 1359:14-1360:15 (explaining that the acquirer’s “overriding incentive” for
15 such a “vertical acquisition” is to make the acquisition target “great and to encourage people to use
16 [it]”); DX1244 at 1 ([REDACTED]).

17 11. Meta’s documents confirm that it is acquiring Within to help scale Supernatural and
18 grow Meta’s VR platform, which faces intense competition. *See* PX0022 ([REDACTED]).

19 12. If the Court grants a preliminary injunction that prevents the transaction from
20 closing, one or both parties will terminate the Merger Agreement because they cannot wait until the
21 administrative proceeding and subsequent appeals conclude (likely years from now, *see* DDX1.15-
22 16) – [REDACTED]. *See* Bosworth Test. 1024:10-1025:14
23 (explaining why Meta “will be forced to walk away”); PX0054 (Bosworth 212:15-20) ([REDACTED]
24 [REDACTED]); Koblin Test. 665:14-21; *see also* PX0050 (Zuckerberg 150:19-152:11);
25 Milk Test. 789:16-20 (describing “uncertainty about where the company is going”).

26 13. Since its founding in 2014, Within has spent [REDACTED]
27 [REDACTED]
28

1 [REDACTED]. See DX1119 ([REDACTED]);
2 DX1118 ([REDACTED]).

3 14. Within’s prospects for raising additional funds, if the acquisition is blocked, [REDACTED]

4 [REDACTED]
5 [REDACTED]. See Milk Test. 759:1-10 ([REDACTED])

6 [REDACTED]
7 [REDACTED]

8 [REDACTED]
9 [REDACTED]

10 [REDACTED]; Koblin Test. 642:4-18 ([REDACTED])
11 [REDACTED], 664:4-15 ([REDACTED])

12 [REDACTED]; PX0062 (Milk 19:8-12, 212:20-215:3)
13 ([REDACTED])

14 [REDACTED].

15 **II. Meta Faces Intense and Growing VR Platform Competition**

16 **A. VR/AR Is Highly Dynamic, Nascent, and Competitive**

17 **1. VR/AR Platform Entry Is Significant and Growing**

18 15. VR and “AR” (or augmented reality) devices are internet-connected platforms that
19 produce computer-generated images and sounds that may appear real, imaginary, or as a
20 combination of virtual and real elements. See DX1230 (Carlton Rep. ¶ 6 n.2) (describing VR, AR,
21 and “MR” or mixed reality); Carlton Test. 1360:16-1361:1; PX0054 (Bosworth 50:7-13) (similar).

22 16. VR/AR devices are “nascent” in the sense that the technology is still developing and
23 changing rapidly. See DX1224 (Wyss 44:2-45:21) ([REDACTED])
24 [REDACTED]; DX1233 (Zyda Rep. ¶¶ 33, 83-84, 96 & Fig. 1) (VR remains a niche product with
25 limited consumer adoption); Zyda Test. 1214:8-21 (“virtual reality is a nascent and fragile industry
26 at this time”); DX1230 (Carlton Rep. § III.A); Carlton Test. 1358:2-13 (“although VR technology
27 has been around for a while, it’s really changing rapidly right now, and we see a lot of firms that are
28 in VR platforms or have announced that they’re coming in”); see also DX1290 (Janszen Decl. ¶ 10)

1 (“The VR industry is still very new. VR is an emerging and dynamic technology space, with many
2 companies investing heavily in hardware and poised to develop new VR hardware and
3 equipment.”); DX1223 (Janszen 22:18-24:8, 100:2-101:4) (similar).

4 17. Consumers have yet to adopt the technology in large numbers – total VR/AR device
5 sales in the United States are a fraction of PC, smartphone, and gaming console sales – as VR’s
6 audience has so far been limited predominantly to younger males who use VR as a niche gaming
7 platform. *See* Carlton Test. 1362:2-18 (explaining that penetration of “VR devices compared to
8 other platforms is very low”); PX0050 (Zuckerberg 200:4-201:5) (“part of what we’re trying to do
9 is show that [VR] is more of a general computing device with multiple use cases that are not just
10 gaming”); Zuckerberg Test. 1292:24-1294:10 (similar); DX1258 at 11 ([REDACTED]
11 [REDACTED]); DX1245 at 2 ([REDACTED]); DX1246 at 11 ([REDACTED]
12 [REDACTED]); DX1224 (Wyss 44:2-45:21) ([REDACTED]
13 [REDACTED]); DX1230 (Carlton Rep. ¶¶ 34-35 & Tbl. 1) ([REDACTED]
14 [REDACTED]
15 [REDACTED]).

16 18. In many ways, the “biggest competition” for VR comes from not only other VR/AR
17 platforms but also these “older gen devices” – PCs, smartphones, and other general computing
18 devices that currently have more apps and uses – as to which Meta is “trying to build a competing
19 platform.” Rabkin Test. 804:8-21; *see also* Carlton Test. 1358:14-21 (“The overriding fact and the
20 important fact in this industry is that people are investing billions, literally, in this industry in the
21 hopes that VR platforms become a platform that penetrates the population and becomes very
22 important. And to do that, you have to have a lot of apps so that people stop doing whatever they
23 are doing with non-VR and be drawn into this app and hopefully buy a headset.”).

24 19. Meta subsidizes its VR headset sales to attract users from these other platforms,
25 selling its Quest devices at a loss, even after a recent price increase. *See* PX0050 (Zuckerberg
26 12:24-13:6); Bosworth Test. 1016:6-9.

27 20. A number of leading technology companies currently sell VR/AR devices in the
28 United States, including Meta, Sony, HTC, and Valve. *See* DDX11.4 (identifying additional

1 expected entrants); Carlton Test. 1363:4-24 (“[S]ince my report was written, HTC and Qualcomm
2 and Niantic ha[ve] announced that they are coming in with a VR headset.”); DX1230 (Carlton Rep.
3 ¶¶ 36-39) (identifying more than twenty VR/AR device manufacturers and platform owners);
4 DX1233 (Zyda Rep. ¶¶ 90-95) (describing new headset entry and capabilities).

5 21. This is a dynamic competitive space with constant entry and expansion by different
6 firms: for example, until recently, the leading VR device was the Sony PSVR headset (introduced
7 in 2016); then the Meta Quest 2 overtook the PSVR in technological advances (as well as unit
8 sales); [REDACTED].
9 See Carlton Test. 1363:4-17 (a “few years ago it was Sony that had the most”), 1475:11-1476:22
10 (discussing the “dynamic” VR/AR space); DX1224 (Wyss 10:14-22, 32:12-34:9) ([REDACTED]
11 [REDACTED]); Garcia Test. 1099:1-6 (noting PSVR until recently was the best-selling
12 headset); DX1233 (Zyda Rep. ¶¶ 31-32, 89-97) (discussing the history of consumer VR devices as
13 well as current and expected entry); DX1258 at 9 ([REDACTED]
14 [REDACTED]).

15 22. There is substantial new entry into this emerging VR/AR space [REDACTED]
16 [REDACTED]
17 [REDACTED]. See DX1230 (Carlton
18 Rep. ¶¶ 36-39) ([REDACTED]
19 [REDACTED]); Carlton Test. 1363:10-1364:2 (describing this new entry, concluding “that VR
20 devices are coming in, and they are coming in from big companies”); DX1233 (Zyda Rep. ¶¶ 89-95
21 & Fig. 2) ([REDACTED]
22 [REDACTED]
23 [REDACTED]); DX1257 at 4 ([REDACTED]
24 [REDACTED]); PX0074 (Casanova 43:19-44:7) ([REDACTED]
25 [REDACTED]); DX1245 at 11 ([REDACTED]
26 [REDACTED]); see also DX1303 at 23-
27 [REDACTED]

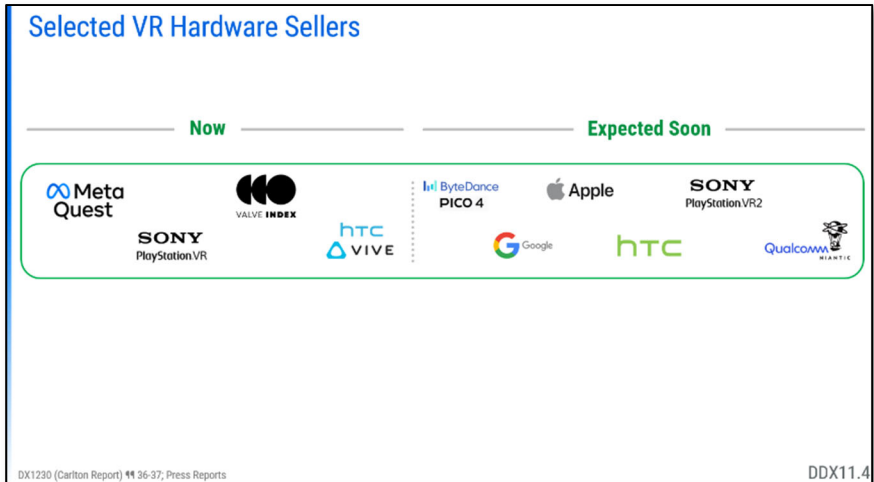
1 28 ([REDACTED])
2 [REDACTED]).

3 23. ByteDance (the parent company of TikTok) recently introduced new VR headsets in
4 Europe and Asia – the Pico 4 and Pico 4 Pro – [REDACTED]
5 [REDACTED]. See DX1264 at 1 ([REDACTED]
6 [REDACTED]); DX1268 at 2 ([REDACTED]
7 [REDACTED]); DX1221 (Choate 10:9-14) ([REDACTED]
8 [REDACTED]); Garcia Test. 1072:3-1073:4 (noting that OhShape and Les Mills Bodycombat – a
9 VR fitness app – are both available on the ByteDance Pico device), 1100:20-25 ([REDACTED]
10 [REDACTED]
11 [REDACTED]); see also Carmack Test. 566:19-25 (noting that Pico “replicated much of [Meta’s VR]
12 experience quite rapidly”); DX1233 (Zyda Rep. ¶¶ 92-93 & Tbl. 5) ([REDACTED]
13 [REDACTED]
14 [REDACTED]); DX1230 (Carlton Rep. ¶ 37) ([REDACTED]
15 [REDACTED]
16 [REDACTED]); Carlton Test. 1363:18-21 (similar).

17 24. [REDACTED]
18 [REDACTED] See DX1255 at 3, 6 ([REDACTED]
19 [REDACTED]
20 [REDACTED]); DX1257 at 4-5, 14-19 ([REDACTED]
21 [REDACTED]
22 [REDACTED]); see also DX1233 (Zyda Rep. ¶ 94) ([REDACTED]
23 [REDACTED]); DX1230 (Carlton Rep. ¶ 37) ([REDACTED]).

24 25. [REDACTED]
25 [REDACTED] See DX1245 ([REDACTED]); DX1246 ([REDACTED]);
26 DX1247 ([REDACTED]); DX1248 ([REDACTED]); DX1226 (Payne 26:5-
27 28:15, 34:15-37:13) ([REDACTED]); see also DX1230 (Carlton Rep. ¶ 37)
28 ([REDACTED]).

1 26. Even in just the last several weeks, large consumer-electronics companies – HTC
 2 and Qualcomm (with Niantic) – have announced that they will release VR/AR headsets (DDX11.4;
 3 information based on public reporting):



12 27. Meta anticipates substantial VR/AR entry and competition. *See* Bosworth Test.
 13 1022:4-1023:2 (anticipating “tremendous competition” and entry, noting these are likely to have
 14 different platforms for app distribution); DX1015 at 16 ([REDACTED]
 15 [REDACTED]); PX0207 at 9 ([REDACTED]
 16 [REDACTED]
 17 [REDACTED]); PX0050 (Zuckerberg 44:22-48:2, 178:35-20) ([REDACTED]).

18 28. So do other VR/AR manufacturers and platform owners. *See* DX1246 at 5-6, 8
 19 ([REDACTED]
 20 [REDACTED]
 21 [REDACTED]); DX1248 at 9 ([REDACTED]
 22 [REDACTED]); DX1226 (Payne 61:10-63:19) ([REDACTED]
 23 [REDACTED]); DX1262 at 2 ([REDACTED]
 24 [REDACTED]); DX1302 at 4 ([REDACTED]
 25 [REDACTED]
 26 [REDACTED]); DX1303 at 34 ([REDACTED]).

27 29. VR app developers likewise expect substantial new entry among VR/AR device
 28 manufacturers. *See* PX0062 (Milk 130:5-132:22, 145:14-24, 167:17-168:1) ([REDACTED])

1 [REDACTED]; PX0065 (Koblin 78:13-80:24, 234:8-19) ([REDACTED]); DX1291 (Garcia Decl.
 2 ¶ 11) (“Both consumers and developers alike currently have many different VR hardware platforms
 3 to choose from, including: Sony PlayStation VR (PSVR), HTC Vive Pro 2 and Cosmos, Valve
 4 Index VR, HP Reverb G2, Varjo Aero, Pico Neo 3 Pro, G2 4K, and Pico 4, among others.
 5 Additionally, other major technology companies, like Apple and HTC, are widely and credibly
 6 speculated to be releasing new and updated VR headsets in the near-term future.”); DX1220 (Garcia
 7 52:13-19) (similar); Garcia Test. 1075:10-1076:17 (noting that Odders Labs has VR apps on several
 8 different platforms, including the Pico and Sony PSVR); DX1290 (Janszen Decl. ¶ 10) (“I expect
 9 that VR will continue to attract more developers, platforms, hardware providers, and users in the
 10 coming years.”); Janszen Test. 1126:11-25 (discussing VirZOOM’s expectation of entry from
 11 Apple and the ability to “port” the VR fitness app to that new platform), 1160:4-11 (describing
 12 discussions with Apple).

13 30. Venture capital investment in VR/AR – which does not include investment by the
 14 companies discussed above – was about \$10 billion in 2021 alone, demonstrating investors’
 15 expectation that the VR/AR ecosystem will grow rapidly in the future. *See* DX1230 (Carlton Rep.
 16 ¶ 40 & Fig. 1); Carlton Test. 1364:12-1365:10 (“people wouldn’t be investing billions if they didn’t
 17 expect the market to grow”).

18 2. VR/AR Platforms Compete for Consumers by Offering Content-Rich 19 Ecosystems with Many Apps

20 31. The success of VR/AR as a new computing platform will depend on the availability
 21 of attractive and engaging apps – beyond just gaming – to motivate mass consumer adoption of
 22 these devices. *See* PX0050 (Zuckerberg 31:6-32:4, 51:21-53:20, 92:20-93:18, 200:4-201:5)
 23 (sustaining “good use cases for VR” is “going to be necessary for this to succeed”); Zuckerberg
 24 Test. 1271:25-1272:4, 1291:6-1293:9, 1294:6-10, 1326:10-1328:16 (similar); PX0055 (Verdu 9:1-
 25 10:23) (describing the importance of VR content to driving “headset sales”); PX0054 (Bosworth
 26 113:21-115:1) (explaining that VR cannot become a “general purpose platform” if it is “just for
 27 gaming or just for people getting together”); DX1258 at 11 ([REDACTED]);
 28 DX1266 at 2 ([REDACTED]); DX1302 at 17 ([REDACTED])

1 [REDACTED]; *see also* DX1233 (Zyda Rep. ¶ 34) ([REDACTED])
2 [REDACTED]);
3 Zyda Test. 1215:3-10 (describing “a chicken and egg problem” – “if you don’t have enough people
4 who have acquired the headset, then developers are not going to . . . build a virtual reality
5 experience for it,” which can cause a nascent platform to fail).

6 32. That, in turn, will require VR/AR manufacturers to attract a wide range of third-party
7 app developers to build out the VR/AR ecosystem with more than just games, e.g., productivity
8 apps, social apps, educational apps, fitness apps, and more. *See* PX0050 (Zuckerberg 98:6-99:20)
9 (discussing importance of third-party app developers to building “good content for the system”);
10 Zuckerberg Test. 1271:25-1272:20, 1273:12-1274:22, 1291:6-1294:22, 1326:10-1328:16 (similar);
11 DX1212 (Rubin 30(b)(6) 38:5-20) (“What we are trying to do is create a diversity of competitive
12 apps against themselves in the ecosystem, not to win in the ecosystem. Winning in the ecosystem
13 as a first party is bad, because it means that the ecosystem won’t get investment from others who
14 don’t think they can compete with you. That is exactly the opposite of what we are trying to do.”);
15 PX0054 (Bosworth 204:21-205:8) (“No company can build every single useful application for a
16 general purpose platform.”); DX1224 (Wyss 21:12-19) ([REDACTED])
17 [REDACTED]; DX1230 (Carlton Rep. ¶¶ 42-44, 144, 169) ([REDACTED])
18 [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]); DX1233 (Zyda Rep. ¶ 34) ([REDACTED]).

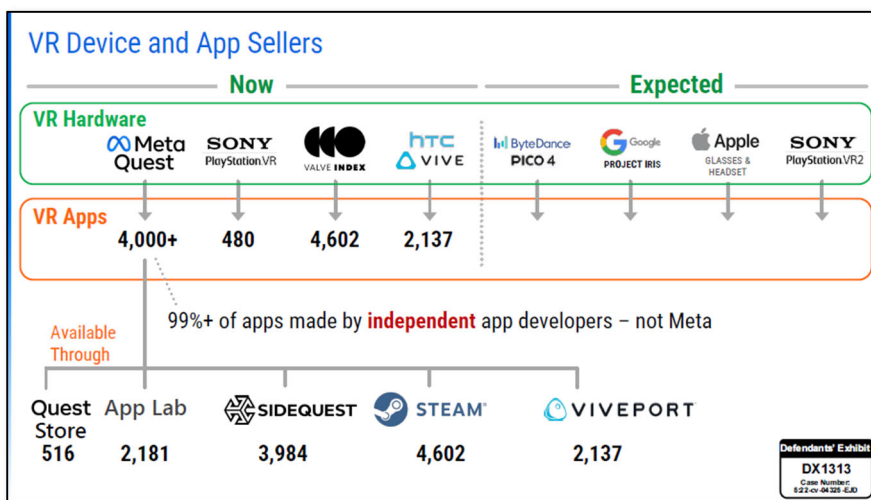
22 33. Meta recognizes that a crucial aspect of competition among VR/AR manufacturers –
23 each of which operates a VR platform from which consumers can download apps – is to build a
24 content-rich ecosystem of high-quality VR apps. *See* Pruettest. 275:10-13 (attracting third-party
25 VR app developers is “absolutely critical to the success of the product”); PX0050 (Zuckerberg 31:6-
26 32:4) (“the history of computing suggests that building a technical platform without also offering
27 the key apps” is “very hard to sustain”); Zuckerberg Test. 1272:1-4, 1291:6-1294:22 (similar);
28 PX0054 (Bosworth 171:7-172:11, 204:21-205:8, 229:2-230:18) (attracting VR app developers

1 attracts “lots of consumers,” creating “an upward spiral”); DX1070 at 1 ([REDACTED]
 2 [REDACTED]
 3 [REDACTED]
 4 [REDACTED]); *see also* DX1230 (Carlton Rep. ¶¶ 42, 46, 184) [REDACTED]
 5 [REDACTED]
 6 [REDACTED]); DX1233 (Zyda Rep. ¶¶ 78, 87, 100-101) ([REDACTED]
 7 [REDACTED]
 8 [REDACTED]).

9 34. [REDACTED]. *See* PX0074 (Casanova 73:16-74:10) ([REDACTED]
 10 [REDACTED]
 11 [REDACTED]); DX1224 (Wyss 57:19-58:8) ([REDACTED]);
 12 DX1267 ([REDACTED]).

13 **3. Competing VR/AR Device Manufacturers Offer Third-Party App**
 14 **Developers Multiple Distribution Platforms**

15 35. Competition among VR/AR device manufacturers – which turns on appealing to
 16 consumers by offering content-rich ecosystems with many things to do, *see* Pruettest. 271:25-
 17 273:14; Zyda Test. 1218:7-11 – gives third-party VR app developers (including those with fitness
 18 apps) access to multiple distribution platforms (DX1313):



1 36. For example, Meta distributes VR apps (almost all owned by third parties) on its
2 Quest headsets through the Quest Store – which has hundreds of apps available for download
3 (mostly games) – and the App Lab, an alternative distribution channel with thousands of apps
4 available. *See* Pruettest. 219:19-25, 260:16-22 (describing App Lab); *see also* DX1233 (Zyda
5 Rep. ¶ 42 & Tbl. 3) (describing Meta’s app distribution [REDACTED]);
6 [REDACTED];
7 Zyda Test. 1217:9-18 (discussing App Lab, and noting that making available a second distribution
8 platform is “very unusual” among platform owners), 1217:19-1218:6 (noting that Meta permits
9 “sideloading” of non-Meta apps onto the Quest device, which “not very many” platform owners
10 permit); PX0053 (Pruett 36:3-9, 110:14-19, 114:23-115:7) (discussing Meta’s App Lab).

11 37. Meta supports and provides distribution to VR apps in both the Quest Store and App
12 Lab, to the benefit of both developers and consumers. *See* Pruettest. 290:5-13 (“[W]e have run
13 promotions for App Lab apps outside of the store.”); *see also id.* 246:13-19 (explaining that Meta
14 updates its store management in response to what it “learn[s] about what [VR] customers enjoy”),
15 262:3-12 (“[W]e have quite a bit of data to show that the curation strategy increases the quality of
16 our product for our customers and then they enjoy that product”), 290:21:1-22 (testifying that there
17 are third-party apps in App Lab that have become “multimillion dollar successes in App Lab”).

18 38. Meta uses the Quest Store in particular to spotlight high-quality VR apps – the
19 overwhelming majority of which are third-party apps that Meta does not own – to “increase
20 customer value” for Quest users by making sure they can readily find high-quality content. Pruettest.
21 Test. 280:2-25 (testifying that Meta’s efforts to improve VR app quality “actually increase customer
22 engagement” and “trust,” leading them to “spend more money or engage with more applications”),
23 281:11-17 (noting that curation and promotion on app distribution stores are “common”); Garcia
24 Test. 1084:20-1085:1 (“I think that Meta favors the best performing apps . . . I don’t recall seeing an
25 overly promoted app that didn’t deserve that promotion or exposure.”).

26 39. Ensuring some degree of app quality on the Quest Store is critical precisely because
27 VR is nascent – *see* DDX11.3 (showing limited VR headset penetration) – and if a consumer’s first
28 experience with an app is low quality (e.g., induces motion sickness), then the consumer might

1 abandon the platform altogether. *See* Garcia Test. 1115:1-15; *see also* Pruett Test. 280:2-25
2 (explaining that store management “increase[s] customer engagement,” benefitting app developers).

3 40. Reviewing for app quality is not a barrier to third-party app distribution: Christopher
4 Pruett, Meta’s Director of Content Ecosystem, explained that Meta gives third-party VR app
5 developers support and feedback to improve app quality, such that even developers with apps that
6 do not make it onto the Quest Store “the first time” will often “come back and apply again and
7 make it through their second time.” Pruett Test. 248:22:1-7, 277:7-14 (describing support for
8 developers seeking Quest Store placement via “incubation programs, like Oculus Start”); Janszen
9 Test. 1149:5-13 (noting VirZOOM was able to reapply for funding after being denied first time);
10 *see also* Zyda Test. 1219:1-17 (noting that store management is “common for platforms” and that
11 developers can “go fix” a rejected VR app “and resubmit” for access to the platform).

12 41. Meta populates the Quest Store (and App Lab) with third-party apps competitive
13 with the few apps Meta owns. *See* Pruett Test. 278:5-279:8 (testifying that Meta distributes “a
14 bunch” of VR rhythm games competitive with its own Beat Saber app); Rabkin Test. 807:2-808:22
15 (explaining that Meta seeks to attract these third-party developers in “every way possible”); *see also*
16 Zyda Test. 1218:12-25 (explaining that it “doesn’t make any sense” that Meta would ban apps
17 “arbitrarily” from the Quest Store because it would “give Meta a bad name and developers would
18 stop building [for] the platform”), 1219:8-24 (noting that Meta allows rhythm games similar to its
19 own Beat Saber game to appear on the Quest Store for distribution to consumers); Garcia Test.
20 1084:6-19 (noting that Meta funded and distributed OhShape, a rhythm app similar to Beat Saber –
21 after Meta’s acquisition of Beat Saber).

22 42. Quest users also can download VR apps from other app stores – i.e., VR app
23 distribution platforms that Meta does not own or control – including SideQuest and Valve’s
24 SteamVR Store, which have hundreds (or thousands) of VR apps available for download on Quest
25 and other VR devices. *See* Pruett Test. 274:8-21; DX1233 (Zyda Rep. ¶¶ 41, 46-47, 105 & Tbl. 3)
26 (discussing other app distribution channels on the Quest platform); *see also* DX1303 at 22 ([REDACTED]
27 [REDACTED]).

1 43. These and other non-Meta distribution platforms – ubiquitous across VR/AR devices
 2 – therefore give consumers and thousands of VR app developers multiple ways to reach one
 3 another. *See, e.g.*, DX1306 ([REDACTED]
 4 [REDACTED]); DX1258 at 14, 27 ([REDACTED]
 5 [REDACTED]
 6 [REDACTED]).

7 **B. Meta’s Substantial Investment in Building Its VR Ecosystem**

8 **1. Meta Has Bet Tens of Billions of Dollars on Selling VR Headsets**

9 44. Meta decided around 2014 to invest in this new space, betting on VR technology as a
 10 general computing platform to join today’s PCs, laptops, smartphones, and tablets. *See* PX0050
 11 (Zuckerberg 11:1-12:16, 22:11-22, 59:8-60:3, 60:16-23); Zuckerberg Test. 1269:22-25.

12 45. Having identified the promise in this emergent technology, Meta set out to build a
 13 VR platform to serve developers and consumers directly, without intermediation by other firms
 14 such as Apple and Google. *See* Zuckerberg Test. 1345:1-25 (discussing Meta’s interest in building
 15 a general computing platform not subject to control by current platform incumbents); PX0050
 16 (Zuckerberg 35:13-37:15, 197:10-198:4, 200:4-201:5) (similar); *see also* DX1258 at 23-24 ([REDACTED]
 17 [REDACTED]).

18 46. Meta conducts its VR/AR business through its Reality Labs Division, led by Andrew
 19 Bosworth (Meta’s Chief Technology Officer), who reports directly to Mark Zuckerberg (Meta’s
 20 Chief Executive Officer). *See* Zuckerberg Test. 1279:2-4 (responsibility for the Reality Labs
 21 budget); PX0054 (Bosworth 16:5-21) (describing his role and the reporting structure).

22 47. Meta’s spending at Reality Labs exceeded \$12.4 billion in the most recent fiscal
 23 year, [REDACTED]. *See* DX1237 at 51 (Meta Platforms,
 24 Inc., December 31, 2021 Form 10-K); Zuckerberg Test. 1283:12-22 ([REDACTED]
 25 [REDACTED]); PX0050 (Zuckerberg 87:7-10,
 26 89:7-17) ([REDACTED]).

27 48. So far, Meta has sustained substantial losses on its VR/AR business – losses it has
 28 been willing to incur with the aim of making a success of this business in the future, but that will

1 require far greater consumer adoption of VR/AR devices. *See* PX0050 at 68 (Meta Platforms, Inc.,
2 December 31, 2021 Form 10-K); DX1233 (Zyda Rep. ¶¶ 29, 126) ([REDACTED]
3 [REDACTED]); *see also* DX1230 (Carlton
4 Rep. ¶ 184) (discussing Meta’s incentives).

5 **2. Meta’s Strategy Is To Support Third-Party VR App Developers**

6 49. Meta’s strategy to generate a return on its billions of dollars of spending on VR is to
7 grow the overall VR ecosystem by expanding the menu of apps that will draw consumers to VR and
8 boost device sales, which in turn will attract more third-party developers. *See* Bosworth Test.
9 1015:13-1016:1; Rabkin Test. 804:1-806:16 (“fundamentally we have a platform strategy” to “get
10 as many developers into the system so that 100 million, maybe someday more than that, people will
11 come into VR”); PX0066 (Rubin 92:18-93:2) [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]; *see also* DX1036 at 4-5 ([REDACTED]
16 [REDACTED]
17 [REDACTED]
18 [REDACTED]);

19 Zuckerberg Test. 1330:18-1331:10 (explaining that “most of the game development that is
20 happening is [by] third parties”).

21 50. Specifically, Meta encourages third-party VR app developers to build apps for the
22 Quest platform by providing technical assistance and, in many cases, funding. *See* Rabkin Test.
23 805:22-806:8 (“if you just put out a platform and you wait with no users on it, no developers will
24 talk to you,” so “fundamentally you need to entice some of the developers to come to the party, so
25 that is where our first-party investments come in”), 807:3-808:22 (Meta supports developers
26 “through every way possible”); Stojavljevic Test. 106:5-15 (describing Meta’s technical,
27 distribution, and funding assistance to third-party VR app developers); Pruett Test. 284:18-287:2
28 (describing technical, engineering, and financial support that Meta provides third parties); DX1063

1 (listing Meta’s content financing and funding); DX1060 (similar); DX1200 (Brown 30(b)(6) 11:12-
 2 14, 14:13-16, 16:23-17:1) (discussing Meta’s financial assistance, [REDACTED]
 3 [REDACTED]; DX1212 (Rubin 30(b)(6) 38:5-20, 64:6-68:10) (describing some of Meta’s
 4 financial incentives and funding programs for third-party developers); PX0063 (Rabkin 47:7-19)
 5 (“We have a wide array of programs to help new developers come to the platform or for existing
 6 developers to build new content for the platform, [REDACTED]
 7 [REDACTED]); PX0053 (Pruett 16:25-18:4, 39:20-
 8 42:5, 42:17-45:12) (describing Meta’s engineering support for third-party developers); *see also*
 9 DX1230 (Carlton Rep. ¶¶ 141-144) (discussing Meta’s support for third-party VR app developers);
 10 DX1233 (Zyda Rep. ¶¶ 103-104, 107-108) (describing the technical and financial support that Meta
 11 provides to third-party VR app developers); Zyda Test. 1216:15-22 (describing Meta’s technical
 12 support for third-party VR app developers, including access to “software development kits” or
 13 “SDKs”).

14 51. Meta supports third-party VR app developers – including when those developers
 15 build apps competitive with Meta’s own or distribute those apps on competitive VR/AR platforms –
 16 because populating a VR ecosystem with many different apps is how Meta competes to attract users
 17 to VR from non-VR alternatives (e.g., gaming consoles), which is the only way Meta will generate
 18 a return on its investments. *See* DX1212 (Rubin 30(b)(6) 67:4-68:10) (“the investments that we’ve
 19 made historically in virtual reality accrue to the entire benefit of VR, [REDACTED]
 20 [REDACTED]); Garcia Test.
 21 1072:2-7, 1084:3-1085:24 (describing Meta’s initial funding for and distribution of OhShape, which
 22 Odders Lab subsequently made available on four other platforms).

23 52. Today, third-party VR app developers – ranging from small startups to large
 24 technology companies – have created more than 99% of the 4,000+ apps available on Meta’s VR
 25 devices. *See* Pruettest. 274:25-275:9; Rabkin Test. 810:5-19 (similar).

26 53. It does not take a large team or substantial resources to make a successful VR app –
 27 VR platforms and venture capital are ready to provide technical and financial support – but it is hard
 28 to make a VR app that consumers will love and that finds “product-market fit”; that takes unusual

1 skill and creativity. *See* Bosworth Test. 999:24-1001:10; Carlton Test. 1368:5-19; PX0066 (Rubin
 2 171:14-172:11) (“I’m not sure that a billion dollars is enough. I’m not sure \$2 billion is enough. It
 3 might be that \$50,000 is enough for two people or five people or whatever to do it if they have the
 4 passion, the knowledge, the understanding, and they get it right. It’s not a money question.”);
 5 DX1230 (Carlton Rep. ¶¶ 60-61, 155-156) ([REDACTED]
 6 [REDACTED]
 7 [REDACTED]); DX1070 at 1 ([REDACTED]
 8 [REDACTED]); *see also*
 9 PX0077 (Beck 17:13-22) (testifying that [REDACTED] developed Beat Saber – the best-selling
 10 VR game ever); Stojavljevic Test. 105:25-106:2; Zyda Test. 1220:3-13 (observing that the claimed
 11 “VR dedicated fitness” apps were “built by small development firms”).

12 3. Meta’s Limited Ownership of VR Apps To Grow the Ecosystem

13 54. In a few instances, Meta has supported its VR ecosystem by acquiring third-party
 14 app developers or developing its own first-party app internally. *See* DX1230 (Carlton Rep. ¶¶ 181-
 15 182, 188, 192) ([REDACTED]); DX1212 (Rubin 30(b)(6) 8:14-
 16 12:5, 54:7-55:13) (discussing Meta’s acquisitions).

17 55. For example, in 2019, Meta acquired Beat Games (today still managed by its original
 18 founders), the developer of Beat Saber. *See* PX0077 (Beck 52:13-24).

19 56. Following the acquisition, Meta helped Beat Saber grow into one of the most
 20 successful VR apps in the world – including by continuing to make it available on rival VR
 21 platforms. *See* PX0077 (Beck 65:18-24, 69:24-72:11) (Beat Games founder discussing the
 22 acquisition, [REDACTED] without making it exclusive to the
 23 Quest platform); *see also* DX1013 at 1 ([REDACTED]
 24 [REDACTED]
 25 [REDACTED]); DX1233 (Zyda Rep.
 26 ¶¶ 30, 127, 131) (discussing Beat Saber’s improvements and growth following the Meta
 27 acquisition); DX1230 (Carlton Rep. ¶¶ 31, 181-182, 191-193, Tbl. 19 & App’x Tbl. 11) (discussing
 28 the pro-competitive benefits from the Beat Games acquisition – and showing Meta is a price cutter);

1 *see also* Stojisavljevic Test. 82:20-83:4 (testifying that Beat Saber is one of the most successful VR
2 apps, available on both Quest and PSVR); Rabkin Test. 854:6-7 (similar).

3 57. Meta has been less successful at developing first-party apps internally, i.e., from
4 scratch. *See* PX0056 (Carmack 101:15-23) ([REDACTED]
5 [REDACTED]
6 [REDACTED]); DX1223 (Janszen
7 34:1-36:9) (“[I]t’s just axiomatic in the industry that platform makers are not good at making apps
8 in general, and particularly something as specialized as a fitness app that requires cross-domain
9 expertise, both game development, and also an understanding of exercise science.”).

10 58. For example, Meta built in-house Horizon Worlds – a VR social app that allows
11 users to access a “metaverse” – but [REDACTED]
12 [REDACTED]. *See* PX0066
13 (Rubin 53:15-55:21, 166:11-172:11) ([REDACTED]
14 [REDACTED]); PX0054
15 (Bosworth 215:17-25) ([REDACTED] PX0063 (Rabkin
16 195:16-196:22) ([REDACTED]); DX1233
17 (Zyda Rep. ¶ 124) ([REDACTED]); Zyda Test. 1222:25-1223:4
18 (noting that Meta has “built a handful” of VR apps of its own and “gotten a bad reputation, Horizon
19 Worlds”); DX1230 (Carlton Rep. ¶¶ 146-147) (similar).

20 59. VR app developers therefore do not perceive Meta as a peer (or rival) in that respect,
21 especially in fitness where Meta has no experience or expertise. *See* DX1291 (Garcia Decl. ¶¶ 30-
22 32) (“I have not seen any evidence that Meta possesses any qualities, characteristics, or abilities that
23 uniquely position it to develop a virtual reality fitness application”); DX1290 (Janszen Decl. ¶¶ 32-
24 35) (comparing Meta to platform owners that are “notoriously bad at developing apps and games for
25 their platforms from internal resources”); Janszen Test. 1131:10-23; 1134:22-13; Milk Test. 780:9-
26 18 (Within did not perceive Meta as a rival or potential rival); Koblin Test. 638:1-21, 649:21-651:5.

1 **III. Within’s Supernatural App Faces Intense Competition**

2 **A. Within Is an Innovative Startup with a Promising but Fragile Fitness App**

3 60. In 2014, Chris Milk and Aaron Koblin – at the time experienced visual artists –
4 founded Within. *See* Milk Test. 669:25-670:6 (personal background); Koblin Test. 649:9-13
5 (personal background); PX0062 (Milk 13:14-16, 16:25-17:10) (similar); DX1103 at 9, 13, 27
6 (Within deck discussing Within’s founding and founders); DX1104 at 4 (similar).

7 61. Within’s small team – [REDACTED]
8 [REDACTED] – develops VR/AR technologies and apps. *See* Koblin Test. 608:8-14
9 (Within’s fundraising history); Milk Test. 779:4-6 (“We are a small startup trying to make a dent in
10 a very large fitness and wellness industry.”); DX1071 at 1 ([REDACTED]).

11 62. In April 2020, Within launched Supernatural, a VR fitness app. *See* PX0062 (Milk
12 26:8-10, 31:7-25) (discussing product development); PX0065 (Koblin 118:4-120:2) (similar).

13 63. According to Within, Supernatural aims to attract consumers interested in “digital
14 fitness” products and apps to VR – away from myriad off-VR fitness products. *See* Milk Test.
15 675:18-676:1 (“We saw virtual reality as a way that we might be able to build a fitness product that
16 was differentiated from other fitness products in the market. That would not be just home fitness,
17 that would be gyms, digital fitness, anything that you would use to get a cardio exercise with.”),
18 746:12-747:7 ([REDACTED]
19 [REDACTED]).

20 64. Within’s ordinary course business documents corroborate that broad view of
21 Supernatural’s competition. DX1077 at 8-9 ([REDACTED]
22 [REDACTED]); DX1100 at 12 ([REDACTED]
23 [REDACTED]); DX1130 at
24 1-2, 52 ([REDACTED]
25 [REDACTED]);
26 DX1134 at 1 ([REDACTED]
27 [REDACTED]); PX0667 at 32 ([REDACTED]
28 [REDACTED]).

1 65. To make Supernatural appealing to consumers with many fitness alternatives, Within
2 invested heavily in studio-quality visuals, music licensing, and trainer-led workouts – [REDACTED]
3 [REDACTED]. See PX0062 (Milk 172:4-22).

4 66. Supernatural gained a following in the limited community of VR users with
5 approximately [REDACTED]. See DX1232 (Vickey Rep. Tbl. 1); see
6 also Milk Test. 746:8-9 ([REDACTED]).

7 67. [REDACTED]
8 [REDACTED]
9 [REDACTED]. See DX1230 (Carlton Rep. ¶¶ 65-67, 70-72 & Tbl. 11) ([REDACTED])
10 [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED]).

14 68. Supernatural’s user base remains small in comparison to other home and connected
15 fitness alternatives, such as Apple Fitness+ and Peloton’s several products (including the augmented
16 reality Peloton Guide and Peloton app, both cheaper than the Peloton bike), which have millions of
17 subscribers. See DX1230 (Carlton Rep. ¶ 54 & App’x Tbl. 12); DX1232 (Vickey Rep. Tbl. 1).

18 69. Within does not even try [REDACTED]. Milk Test. 735:22-736:21
19 ([REDACTED])
20 [REDACTED]
21 [REDACTED]
22 [REDACTED]).

23 70. Within [REDACTED]. See
24 Milk Test. 732:2-733:9 ([REDACTED])
25 [REDACTED]
26 [REDACTED]
27 [REDACTED]

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1 [REDACTED]; PX0062 (Milk 19:8-12, 172:4-22, 191:18-194:14, 212:20-215:3); DX1081 at
2 1-2 ([REDACTED]).

3 71. [REDACTED]
4 [REDACTED]
5 [REDACTED]. See PX0065 (Koblin 18:4-19:2, 149:23-151:16) ([REDACTED]
6 [REDACTED]); PX0062 (Milk 19:8-12, 172:4-22, 191:18-194:14, 212:20-215:3) ([REDACTED]); DX1119
7 ([REDACTED]); DX1118 ([REDACTED]); see also
8 DX1230 (Carlton Rep. ¶¶ 90, 120) ([REDACTED]
9 [REDACTED]
10 [REDACTED]).

11 72. [REDACTED]. See Milk Test. 735:17-21; Koblin Test. 636:15-22
12 ([REDACTED]).

13 73. Within continues to release new workouts and innovate fitness features for
14 Supernatural to attract more fitness consumers to VR fitness. See Milk Test. 734:1-11 ([REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED]
18 [REDACTED]); PX0065 (Koblin 32:1-33:7, 137:2-14).

19 **B. Supernatural Faces Intense Fitness Competition**

20 **1. Supernatural Competes with Many On-VR and Off-VR Fitness Products**

21 74. Competition for connected fitness consumers is broad and vigorous, with scores of
22 alternatives both on-VR (not limited to Quest) and off-VR. See DX1232 (Vickey Rep. § IV(A)(3)
23 & App’x C) (fitness industry expert identifying more than 50 off-VR connected fitness products,
24 services, and apps as consumer substitutes for VR fitness apps – including many that are
25 “immersive”); Vickey Test. 1177:2-13, 1180:13-18 (similar); DX1230 (Carlton Rep. ¶¶ 63-74, 75-
26 80, 104-112 & App’x Tbls. 12-13) (identifying scores of competitive products, services, and apps
27 on-VR and off-VR); DX1233 (Zyda Rep. ¶¶ 48-70) (describing on-VR fitness apps the FTC omits
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1 from its market, as well as several off-VR fitness products and services available on non-VR
2 gaming platforms).

3 75. Some fitness products and services can be used both on-VR and using off-VR
4 devices, e.g., fitness consumers can stream workouts and guided-exercise courses on YouTube, both
5 off-VR on a phone and *in VR* using the YouTube app on Quest – or accessing a similar Liteboxer
6 guided-boxing workout both off-VR with a wall mount or on-VR with a headset. *See* DX1232
7 (Vickey Rep. ¶ 15) (identifying YouTube streaming as a connected fitness service); PX0055 (Verdu
8 22:18-23:7) (identifying YouTube as a fitness competitor); DX1249 ([REDACTED]
9 [REDACTED]).

10 76. Some fitness companies even make fitness apps with both on-VR and off-VR uses.
11 *See* Vickey Test. 1178:2-1179:12 (discussing Liteboxer and Les Mills – both on-VR and off-VR);
12 Carlton Test. 1419:2-1420:9 (Les Mills Bodycombat entry shows “the resources and talent to make
13 fitness apps in the non-VR space can move into the VR space if that turns out to be a desirable thing
14 because of the demand increasing for VR fitness apps”), 1386:15-1387:2 (similar).

15 77. Established fitness companies recognize the intense competition in this crowded
16 fitness space. *See* DX1257 at 25-29 ([REDACTED]
17 [REDACTED]); DX1252 at 4 ([REDACTED]
18 [REDACTED]); PX0074
19 (Casanova 33:4-19) ([REDACTED]
20 [REDACTED]); DX1283 at 1-2 ([REDACTED]
21 [REDACTED]); DX1286 at 5-
22 7 ([REDACTED]
23 [REDACTED]); DX1295 at 6 ([REDACTED]
24 [REDACTED]); DX1298 at 20
25 (Peloton Form 10-K: “We face significant competition in every aspect of our business, including
26 at-home fitness equipment and content, fitness clubs, in-studio fitness classes, and health and
27 wellness apps.”); DX1300 at 2 ([REDACTED]); *see also* Vickey Test.
28 1180:19-1181:17 (discussing off-VR options, including Apple Fitness+ and the Peloton Guide).

1 78. Although VR fitness is too nascent to worry established fitness incumbents, *see*
2 Vickey Test. 1181:18-1182:21, some fitness giants [REDACTED]
3 [REDACTED], *see*
4 DX1287 ([REDACTED])
5 [REDACTED]); DX1278 at 1 ([REDACTED])
6 [REDACTED]).

7 79. Every VR fitness developer to testify agreed that VR fitness apps compete against
8 many on-VR and off-VR connected fitness products – not just the nine “VR dedicated fitness” apps
9 the FTC identifies – and that new entry is continual. *See* Milk Test. 743:1-744:9; DX1291 (Garcia
10 Decl. ¶ 17) (listing as competitors “at-home smart fitness equipment or apps,” “fitness solutions
11 offered on gaming consoles,” and “fitness options offered on competing and emerging VR
12 systems”); Garcia Test. 1080:8-16 (describing the breadth of competition on-VR and off-VR);
13 DX1290 (Janszen Decl. ¶¶ 21-25) (“VR fitness applications offered on Meta’s Quest Store compete
14 with all the various options, including . . . in-home connected, and mobile fitness apps.”); Janszen
15 Test. 1141:24-1143:12 (VR fitness apps compete with many off-VR fitness products).

16 80. Within, for example, considers many on-VR and off-VR fitness products, services,
17 and apps to be competitors for fitness consumers – [REDACTED]
18 [REDACTED]. *See* PX0062 (Milk 37:17-39:25, 61:21-63:16, 137:14-138:1, 149:2-150:2, 180:18-183:5,
19 191:18-193:23) ([REDACTED]); PX0065 (Koblin 78:13-79:24, 149:23-151:16,
20 246:21-248:14) ([REDACTED]); DX1095 at 12-16 ([REDACTED])
21 [REDACTED]; DX1103 at 29 (Within [REDACTED])
22 [REDACTED]);
23 DX1077 at 8-9 ([REDACTED])
24 [REDACTED]; DX1130 at 1 ([REDACTED])
25 [REDACTED]; DX1134 at 1 ([REDACTED])
26 [REDACTED]; PX0667 at 31-
27 35 ([REDACTED])
28

1 [REDACTED]; DX1080 at 1
2 ([REDACTED]).

3 81. As Mr. Milk, Within’s CEO, testified: [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED] Milk Test. 742:15-25; *see also id.* 779:2-8
7 (“We have thousands of competitors.”), 636:23-637:2 (similar), 746:12-747:7.

8 82. That is consistent with Within’s contemporaneous documents, which evince a
9 consistent concern over fitness companies – not Meta or Beat Saber. *See* DX1077 at 8-9; DX1081
10 at 1-2; DX1083 at 16-22, 67-69; DX1085 at 2-4; DX1095 at 12-13; DX1102 at 1-2.

11 83. Within’s ordinary course documents also confirm that it views Supernatural as
12 competing both for users choosing between VR fitness apps ([REDACTED]
13 [REDACTED]) and for users choosing between on-VR and off-VR fitness products
14 ([REDACTED]). *See* PX0712 at 44-45
15 ([REDACTED]); PX0713 at 45-50 ([REDACTED]
16 [REDACTED]); PX0620 at 43-33 (similar); PX0667 at 34-35 (similar); *see also* Milk Test.
17 749:8-22; DX1230 (Carlton Rep. ¶¶ 76-79).

18 84. Within’s user data illustrate these multifaceted competitive dynamics:
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]. *See* DX1230 (Carlton Rep. ¶ 66).

22 85. Meta’s user data show that Supernatural attracts users to the Quest platform from
23 off-VR, which is consistent with Supernatural competing with non-VR fitness alternatives. *See*
24 DX1230 (Carlton Rep. Tbl. 10) ([REDACTED]
25 [REDACTED]);
26 Carlton Test. 1376:18-1377:11 ([REDACTED]), 1378:2-17.

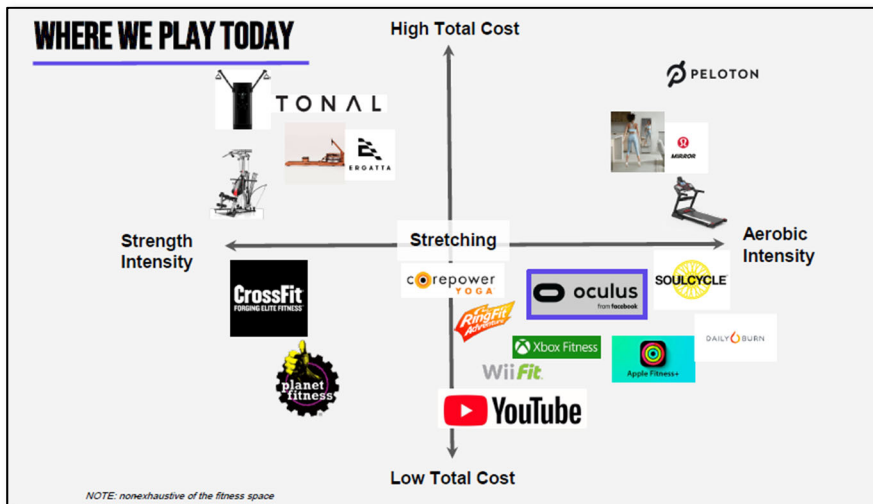
27 86. Meta’s user-level substitution data are consistent with people treating VR fitness and
28 non-VR fitness as interchangeable: many [REDACTED]

1 [REDACTED]
 2 [REDACTED] See DX1230 (Carlton Rep. ¶ 72 & Tbl.
 3 11) ([REDACTED])
 4 [REDACTED]
 5 [REDACTED]); see also Milk Test. 746:12-747:7.

6 87. Specifically, of more than [REDACTED] fitness consumers who subscribed to but then
 7 stopped using Supernatural, only [REDACTED] started using another of the claimed “VR dedicated fitness”
 8 apps. See DX1230 (Carlton Rep. ¶ 72 & Tbl. 11); DDX11.8; Carlton Test. 1379:1-1381:12.

9 88. Meta believes that VR fitness competes against a range of off-VR fitness products.
 10 See PX0050 (Zuckerberg 210:1-211:11) (“I think in terms of fitness . . . that all of these products
 11 sort of compete with each other.”); Zuckerberg Test. 1325:12-23 (on-VR and off-VR fitness “are all
 12 alternatives, they compete in that way regardless of what technical platform you’re using”); PX0054
 13 (Bosworth 138:10-139:5) (“fitness is a very competitive space,” including VR fitness apps,
 14 “Pelotons and Tonals,” and more); PX0066 (Rubin 117:11-118:7) (describing the “fitness app
 15 business” as “massive,” including competition with “things that have hardware unrelated to virtual
 16 reality, like Peloton”); see also PX0492 at 3 (Meta document [REDACTED]
 17 [REDACTED]).

18 89. For example, one of Meta’s ordinary course documents recognized this competitive
 19 landscape in which VR fitness competes with Apple Fitness+ and many others (PX0557 at 62):



1 **2. New VR Fitness Entry Is Continual with More Expected**

2 90. Meta classifies more than 100 apps on the Quest platform as “fitness” apps. *See*
 3 PX0060 (Paynter 30(b)(6) 56:22-23) ([REDACTED]);
 4 DX1232 (Vickey Rep. ¶ 29) ([REDACTED]);
 5 [REDACTED]; Vickey Test. 1187:1-12 (same); Pruett Test. 264:4-20 (explaining Meta’s position that
 6 subcategorizations of fitness apps do not reflect how consumers actually use VR apps); *see also*
 7 DX1230 (Carlton Rep. ¶¶ 56-62, 107-110, Tbl. 7 & App’x Tbls. 12-13) (discussing VR fitness apps
 8 the FTC omits from its market); DX1233 (Zyda Rep. ¶ 43) ([REDACTED]);
 9 [REDACTED];
 10 [REDACTED]).

11 91. There has been continual entry of new VR fitness apps – the FTC increased its
 12 asserted antitrust market from five to nine firms since it filed the complaint, including two new
 13 entrants in 2022. *See* DDX1.12 (citing FTC interrogatory responses); DX1230 (Carlton Rep. Tbl.
 14 7) (entry timeline); Carlton Test. 1367:7-19 (“entry is ongoing” and “continual” with at least two
 15 new entrants in 2022); *see also* Milk Test. 719:24-720:5 ([REDACTED]);
 16 [REDACTED];
 17 [REDACTED]).

18 92. For example, in 2022, a small VR developer called Odders Lab launched a new VR
 19 fitness app – Les Mills Bodycombat, in partnership with the Les Mills fitness brand – that has
 20 grown rapidly into one of the best-selling fitness apps on the Quest store [REDACTED].
 21 [REDACTED] *See* Carlton Test. 1479:3-1481:12 (explaining that this illustrates how a small VR app
 22 developer could partner with a large fitness brand to build a VR fitness app in a way that a larger
 23 platform company might not be able to innovate); DX1220 (Garcia 75:21-76:3) (testifying Les
 24 Mills Bodycombat has recently achieved profitability – [REDACTED] [REDACTED]; DX1230 (Carlton
 25 Rep. ¶¶ 59-60 & Tbl. 8) (discussing Les Mills Bodycombat launch); DX1233 (Zyda Rep. ¶ 79 &
 26 Tbl. 2) ([REDACTED]);
 27 [REDACTED];
 28 [REDACTED]); *see also* DX1287 at 1 ([REDACTED]);

1 [REDACTED]

2 [REDACTED]; cf. Milk Test. 747:20-22 ([REDACTED])

3 [REDACTED]).

4 93. In just the last several weeks, another new VR fitness app – called Focus VR –
5 launched on the Quest platform (via App Lab). See Milk Test. 744:3-13; Carlton Test. 1367:14-17
6 (discussing new entry from Focus VR and expected new VR fitness app entry from a fitness firm
7 called Black Box VR that develops VR technologies).

8 94. Every VR fitness app developer to offer testimony in this case expects more entry
9 imminently. See Milk Test. 752:19-753:6 ([REDACTED])
10 [REDACTED]), 753:9-22
11 ([REDACTED]); DX1291 (Garcia
12 Decl. ¶¶ 9-11, 17-19) (“There have been at least 6 VR fitness applications introduced in the past
13 three years, and at least 2 in the past eight months. I expect that more will be introduced as early as
14 this coming year.”); Garcia Test. 1089:3-18 (testifying that Les Mills Bodycombat expects new
15 entry throughout the VR/AR ecosystem); DX1290 (Janszen Decl. ¶¶ 10, 19-25, 37) (“the VR fitness
16 application ecosystem is currently in its infancy, but is rapidly expanding and new entrants are
17 entering the space frequently”); Janszen Test. 1138:3-14 (confirming that competition among VR
18 fitness apps is increasing); PX0062 (Milk 69:12-79:24, 146:2-14) ([REDACTED]).

19 95. [REDACTED]
20 [REDACTED] See DX1269 at 1-2 ([REDACTED])
21 [REDACTED]; DX1271 at 1 ([REDACTED])
22 [REDACTED]; DX1280 at 1 ([REDACTED])
23 [REDACTED]
24 [REDACTED]; see also DX1233 (Zyda Rep. ¶¶ 89, 94-95) ([REDACTED])
25 [REDACTED]; DX1232 (Vickey Rep. ¶¶ 25, 27)
26 ([REDACTED]).

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96. [REDACTED]
[REDACTED] at 4, 14-19 ([REDACTED]); *see also* DX1233 (Zyda Rep. ¶ 94) ([REDACTED]); DX1230 (Carlton Rep. ¶ 51) ([REDACTED]).

97. [REDACTED]
[REDACTED]
[REDACTED] at 11, 14.

98. [REDACTED]
[REDACTED] *See* [REDACTED] at 4, 17-19.

99. [REDACTED]
[REDACTED] *See* [REDACTED] at 24-29
([REDACTED]).

100. [REDACTED]
[REDACTED]. *See* [REDACTED] at 10 ([REDACTED]);
[REDACTED]);
[REDACTED] at 15, 18 ([REDACTED] at
27 ([REDACTED]
[REDACTED]); [REDACTED]
[REDACTED]
[REDACTED]); *see*
also DX1233 (Zyda Rep. ¶ 95) ([REDACTED]).

101. [REDACTED]
[REDACTED]
[REDACTED] *See* DX1266 at 17-18 ([REDACTED]
[REDACTED]
[REDACTED]); DX1267 ([REDACTED]
[REDACTED]); DX1221 (Choate 52:22-53:5, 54:7-15)
([REDACTED]); *see also* DX1291

1 (Garcia Decl. ¶ 7) (noting that its VR fitness app is available on the Pico store); Garcia Test.
 2 1082:4-13 (noting that Les Mills Bodycombat is “the leading fitness app on the Pico store”).

3 102. [REDACTED]
 4 [REDACTED]. See DX1194 (Sony identifying VR fitness apps available
 5 on the PSVR); DX1117 ([REDACTED]);
 6 PX0065 (Koblin 71:24-72:7) ([REDACTED]); PX0062 (Milk 146:2-14, 175:9-
 7 176:21) (similar); see also Koblin Test. 654:18-21 ([REDACTED]);
 8 DX1103 at 20 ([REDACTED]
 9 [REDACTED]); DX1092 at 117 ([REDACTED]
 10 [REDACTED]); PX0022 at 6 ([REDACTED]
 11 [REDACTED]).

12 103. The FTC’s expert agreed that many large consumer technology companies – Apple,
 13 Google, ByteDance, and Sony – can build VR fitness apps. See Singer Test. 419:12-16 (ByteDance
 14 and Sony), 421:7-24 (Apple), 422:7-25 (Google).

15 104. Every VR fitness developer to offer testimony anticipates substantial additional
 16 competition from new entrants with fitness backgrounds – but not from Meta. See PX0062 (Milk
 17 61:3-63:2, 63:17-66:20); PX0065 (Koblin 58:13-59:18, 62:21-63:5, 246:16-247:11); DX1103 at 28
 18 ([REDACTED]); DX1291 (Garcia Decl. ¶¶ 19,
 19 30-32) (“I have not seen any evidence that Meta possesses any qualities, characteristics, or abilities
 20 that uniquely position it to develop a virtual reality fitness application.”); DX1290 (Janszen Decl.
 21 ¶¶ 19, 32-35, 37) (“We have not made business decisions based on any concern that Meta may offer
 22 a new fitness app or a modified version of a current app that competes with VirZOOM.”).

23 105. For example, Within’s CEO wrote in March 2021 that [REDACTED]
 24 [REDACTED] DX1085 at 2, 4 (text message).

25 3. There Is No Evidence of Coordinated Behavior Among VR Fitness Apps

26 106. Every VR fitness app developer witness with personal knowledge testified, without
 27 contradiction, that competition is vigorous and there is no coordination or interdependent conduct
 28 among VR fitness apps. See Milk Test. 779:9-14 (“Q. Has Supernatural ever coordinated with

1 competitors on pricing or features or quality? A. No. Q. Has Supernatural ever followed a
 2 competitor’s lead on price increases? A. No. We have never increased our pricing.”); Koblin Test.
 3 636:2-14 ([REDACTED]
 4 [REDACTED]
 5 [REDACTED]); DX1291 (Garcia
 6 Decl. ¶¶ 34-35) (“[T]he VR fitness application ecosystem is highly competitive and dynamic, and I
 7 would not characterize any firm as dominant. I do not believe it is fair or accurate to describe it as
 8 an oligopoly.”); Garcia Test. 1081:16-1081:24 (testifying that there is no price coordination);
 9 DX1290 (Janszen Decl. ¶¶ 36-38) (“I am unaware of any interdependent or parallel behavior by
 10 anyone offering these products.”); DX1223 (Janszen 143:8-147:4) (denying having ever seen
 11 collusion); Janszen Test. 1136:5-14 (“[I]t did not occur to any of us to fix prices.”); *see also*
 12 DX1230 (Carlton Rep. ¶¶ 124-130 & App’x Tbl. 4) ([REDACTED]
 13 [REDACTED]).

14 107. The FTC’s expert did not assert that current participants in his proposed market are
 15 engaging in any coordinated behavior, instead agreeing that he had not formed an opinion that there
 16 is presently oligopolistic conduct among “VR dedicated fitness” apps. *See* Singer Test. 415:1-16;
 17 *see also* PX0087 (Singer 339:14-340:9) (“I’ve not yet demonstrated that the existing participants are
 18 engaging in coordinated behavior, I’ll grant you that.”).

19 108. The opposite of coordination, VR fitness apps offer a range of different prices and
 20 pricing models – from free, to one-time purchase, to monthly only subscriptions, to monthly or
 21 annual subscriptions; coordination is not happening and could not easily happen. *See* Singer Test.
 22 430:16-431:23; DX1232 (Vickey Rep. ¶ 47) (discussing varying pricing models among the nine so-
 23 called “VR dedicated fitness” apps); Vickey Test. 1185:3-1186:1 (same); DX1230 (Carlton Rep.
 24 ¶¶ 88, 109-112 & App’x Tbl. 4) (discussing differences in pricing models and prices, noting that
 25 they “vary substantially”); Carlton Test. 1369:6-1370:13 (describing that the space is not
 26 susceptible to coordination because “[w]hen you have a lot of change in an industry, that’s the type
 27 of circumstance in which you don’t expect coordinated behavior” or “oligopolistic independence”).
 28

1 109. Because of the broad nature of competition – many competitors, varied pricing
 2 amounts and structure, constant entry, multiple distribution channels – there is no evidence that VR
 3 fitness apps can or do coordinate as to pricing or any other conduct. *See* DX1230 (Carlton Rep.
 4 ¶¶ 124-130 & App’x Tbls. 4, 13) (discussing market and economic evidence confirming absence of
 5 coordination or parallel conduct); PX0065 (Koblin 148:16-151:19) (Within founder discussing
 6 Supernatural pricing); DX1220 (Garcia 74:13-16) (rival VR fitness app developer confirming lack
 7 of pricing coordination); *see also* Singer Test. 415:1-16 (“I have not reached an opinion as to
 8 whether [VR dedicated fitness apps] are currently coordinating in their pricing now.”).

9 **C. The FTC Expert’s Opinion on Market Definition**

10 **1. The FTC’s Expert Relied on a Hypothetical Monopolist Test – Using a**
 11 **Third-Party Survey – To Define a Relevant Antitrust Market**

12 110. Dr. Singer admitted that he has *not* defined a relevant market that contains only the
 13 nine fitness apps that the FTC says are in the relevant market – and he never specified what
 14 additional products the relevant market includes. *See* Singer Test. 428:2-18 (“I’m not sitting here
 15 telling you that I know that the number is nine [VR dedicated fitness apps].”), *id.* 429:3-6 (“Q. Dr.
 16 Singer, have you or have you not offer[ed] an opinion as to whether these nine apps comprise the
 17 relevant antitrust market? A. No, I have not.”), *id.* 429:14-17 (“But it is not my opinion – I want to
 18 make it crystal clear – that there are only nine participants and I know there to be only nine
 19 participants in the market. That is not an opinion that I have ever put forward today.”), *id.* 429:25-
 20 430:4 (declining to opine on whether VR app Gym Class is in the relevant market or not).

21 111. Dr. Singer also admitted that there are off-VR fitness products that offer “similar
 22 features” to the nine claimed “VR dedicated fitness” apps. PX0016 (Singer Rebuttal Rep. ¶ 4); *see*
 23 *also* FTC Prelim. Inj. Reply (Dkt. 262) at 12 (“Plaintiff concedes – and has never disputed – that all
 24 fitness products compete with each other to some degree.”).

25 112. Dr. Singer nonetheless arrived at his market definition by performing a “hypothetical
 26 monopolist test” in which he claimed to estimate the actual loss of Supernatural customers if prices
 27 in the “VR dedicated fitness app” market rose by a small but significant amount (approximately
 28

1 5%). See PX0016 (Singer Rebuttal Rep. ¶ 3) (“I defined the contours of the relevant product market
2 by applying a hypothetical monopolist test”); see also Singer Test. 439:3-7.

3 113. Dr. Singer’s calculation of that actual loss depends entirely on a 150-person survey
4 which Dr. Singer said he designed, but which he claimed was implemented by a third-party survey
5 firm called Qualtrics. See Singer Test. 416:5-418:11; 540:16-18 (“I rely on the survey analysis to
6 get the actual loss.”); PX0016 (Singer Rebuttal Rep. ¶¶ 3, 34); see also Carlton Test. 1424:3-16.

7 114. Dr. Singer “never offered [an] opinion” about the contours of the relevant market if
8 the “hypothetical monopolist test failed.” Singer Test. 416:5-23; see also PX0087 (Singer Dep.
9 74:1-7) (same).

10 115. Instead, Dr. Singer wrote that he “defined the contours of the relevant product
11 market by applying a hypothetical monopolist test,” and “[n]one of that analysis relied on common
12 features of VR dedicated fitness apps as identified by Meta and Within.” PX0016 (Singer Rebuttal
13 Rep. ¶ 3) (“To the extent I discussed common features in my Initial Report, it was only to
14 corroborate my economic analysis.”).

15 116. Dr. Singer expressly drew a “contrast” between his hypothetical monopolist test and
16 “an analysis based on feature commonality,” stating: “I have not conducted my market exercise by
17 grouping common features,” and “I do not employ a commonality of features analysis.” PX0016
18 (Singer Rebuttal Rep. ¶¶ 30-31); see also *id.* ¶ 4 (“Drs. Carlton, Vickey, and Zyda raise and attack a
19 *straw-man argument* related to my alleged use of common features to define the relevant product
20 market or to identify market participants. *I do no such thing.*”) (emphases added).

21 2. Dr. Singer’s Hypothetical Monopolist Test Is Entitled to No Weight

22 117. The survey on which Dr. Singer’s hypothetical monopolist test relies is fatally
23 unreliable for several independent reasons. See Dubé Test. 875:13-14 (“[T]his is probably the worst
24 survey I have ever seen submitted by an expert.”), 939:9-14; see also generally Ex. DX1231 (Dubé
25 Rep.); see also Ex. DX1230 (Carlton Rep. ¶¶ 89-93).

26 118. First, the vast majority of the 150 survey respondents – well over 100 by any
27 measure – gave such implausible and demonstrably untrue answers that there is no reason to believe
28 these were actual Supernatural subscribers, see Ex. DX1231 (Dubé Rep. ¶¶ 54-60), which Dr.

1 Singer acknowledges is a necessary predicate to the survey’s utility, *see* Singer Test. 432:17-23
2 (same); *see also* Dubé Test. 874:25-875:3, *id.* 877:5-10 (“[F]irst and foremost, the respondents who
3 you are going to ask to fill in your survey, they have to be who they say they are.”).

4 119. For example, 90 respondents said they use 10 or more fitness products “regularly,”
5 36 said they use 19 or more fitness products “regularly,” and 21 say they use 27 different fitness
6 products regularly. *See* Dubé Test. 895:7-897:17; DDX10.4; DX1230 (Carlton Rep. ¶ 93); *see also*
7 Singer Test. 507:11-15 (“I would tend to agree that something is seemingly irrational with these 21
8 respondents who checked all of the survey responses.”), *id.* 510:19-511:1 (“I can concede that some
9 answers are implausible, or could be the result of misinterpreting the question”), 513:5-11 (“I do
10 think that 19 regularly used fitness apps is seemingly high and implausible, I’ll grant you that.”).

11 120. Separately, 36 respondents said they use 2 different expensive wall-mounted fitness
12 products “regularly,” 37 said they use 3 different connected-fitness bikes “regularly,” 43 said they
13 use 2 different connected rowing machines “regularly,” 25 said they use 9 different fitness apps on
14 VR “regularly,” and 87 – more than half – said they “regularly” use a fitness product discontinued
15 in 2017. *See* Dubé Test. 899:12-25; DDX10.4; *see also* Singer Test. 504:19-25.

16 121. More than 100 of the respondents – more than two-third of the survey sample – said
17 they regularly use implausible combinations of VR apps contrary to actual usage data, e.g., *half* of
18 the respondents said they regularly use Supernatural and RealFit when, as of August 2022, only 1
19 person on *earth* regularly used both Supernatural and RealFit on Quest. *See* Carlton Test. 1429:10-
20 1430:21; DDX09.21-24; DDX11.20-21; DX1230 (Carlton Rep. ¶ 93) ([REDACTED]

21 [REDACTED]
22 [REDACTED]); *see also* DX1067 (user data); DX1314 (Dr. Singer’s backup data).

23 122. And 106 of the 150 responded both that they use Supernatural regularly (in response
24 to Questions 4 and 7) and that they considered purchasing or no longer use Supernatural (in
25 response to Questions 6 and 9). *See* Dubé Test. 900:10-901:9 (“[T]hese responses seem totally
26 implausible.”); DDX09.24.

27 123. These implausible answers plagued Dr. Singer’s only “screening” questions – i.e.,
28 survey questions meant to detect and exclude non-Supernatural users, *see* Dubé Test. 915:2-13 –

1 that did not reveal the survey was about Supernatural, *id.* 923:8-23, 916:2-918:11, 918:15-919:22,
2 919:11-21:24 (noting that Dr. Singer’s other “screening” questions are “transparent to the
3 respondent [as to] who is the sponsor to the survey, what is the purpose of the survey” because they
4 ask about Supernatural without posing a question only a true Supernatural subscriber could answer),
5 923:4-7 (“Instead why not just ask somebody a question that only a Supernatural subscriber would
6 know?”); *see also* Singer Test. 486:18-487:5.

7 124. Dr. Singer claims to have performed a “sensitivity” test that excludes the 21
8 respondents who implausibly said they regularly use 27 different fitness products “regularly.” *See*
9 PX0016 (Singer Rebuttal Rep. ¶ 102).

10 125. But Dr. Singer never provided any supporting calculations, and, in all cases, there is
11 no mathematical or scientific basis for simply excluding 21 respondents (or any other number) and
12 asserting the survey is nevertheless reliable – Dr. Singer himself claimed that he *needed* 150
13 respondents to support his conclusions (not 129 or any other number). *See* Dubé Test. 935:6-
14 936:12; Singer Test. 453:24-454:4 (“We had done the math to figure out that 150 was the number
15 we needed to be able to say and make an extrapolation to the population with a certain level of
16 confidence and precision”); *see also* PX0087 (Singer 123:18-124:2) (“we have solved for the
17 number of Supernatural users that we need to be able to say something about a representative
18 sample,” and “we said we want to get 150 Supernatural users”); *id.* (Singer 274:21-275:3) (“150
19 was the answer from the math.”).

20 126. The problems plaguing the survey are not limited to just 21 respondents in any event,
21 *see* DDX10.4 – nearly *every* respondent gave an implausible answer to *at least* one question, often
22 more than one. *See* Dubé Test. 888:5-889:5 (“these suspicious answers are occurring at such a high
23 frequency . . . this becomes completely implausible”; “over 80 percent of the respondents have not
24 one but, but at least one suspicious result,” which “is extremely concerning” because “this is not
25 about a handful of people who gave suspicious answers on one question” but rather a “pervasive”
26 issue “throughout the survey”).

27 127. *Second*, it is mathematically implausible that Dr. Singer actually found 150
28 Supernatural subscribers – even ignoring the foregoing implausible answers. DDX09.19.

1 128. Dr. Singer wrote that his survey vendor (Qualtrics) “confirmed that the survey was
2 distributed to approximately 10,000 potential respondents,” at least 150 of whom claimed to be
3 Supernatural subscribers. PX0016 (Singer Rebuttal Rep. ¶ 68).

4 129. That response rate – at least 1.5% of the survey recipients are supposedly
5 Supernatural subscribers – is mathematically implausible, as ██████████ of the U.S. population
6 subscribes to Supernatural. *See* Dubé Test. 886:7-887:2 (“This is close to impossible.”); Ex.
7 DX1231 (Dubé Rep. ¶¶ 22-23); *see also* Dubé Test. Test. 909:24-911:21 (describing “worrisome”
8 mismatches between Supernatural’s user population and respondent traits, e.g., gender and age).

9 130. Dr. Singer’s response is that a survey panel provider “*may* have distributed” the
10 survey to a panel likely to include a disproportionate share of Supernatural subscribers, such as
11 “tech-savvy” persons, PX0016 (Singer Rebuttal Rep. ¶ 68) – but he offered no proof that occurred,
12 only speculation, *see* Singer Test. 468:1-6 (“It could have happened.”).

13 131. Professor Dubé explained that his review of the declarations provided by Qualtrics
14 and the two subcontractors that accounted for nearly all of the 150 respondents did not support Dr.
15 Singer’s claim that any specialized panels or filters were used, but rather show that the survey was
16 instead sent to a general consumer audience. *See* Dubé Test. 906:11-908:7.

17 132. *Third*, Dr. Singer contorted the results of the one question in his survey that he calls
18 the “ultimate test” (Question 19) – i.e., whether Supernatural subscribers would leave the app in
19 response to a price increase among all “VR dedicated fitness” apps. Singer Test. 445:15-446:5.

20 133. To start, Dr. Singer treated every respondent who said he or she would “probably”
21 stay on Supernatural (30 of 150) as someone who would “definitely” stay on Supernatural (113 of
22 150) – despite telling those same respondents that they had indicated they “would” or “might” leave
23 Supernatural and giving them a chance to clarify otherwise, he *ignored* that almost all of them did
24 not clarify that they would stay with Supernatural (an option he gave them) but instead responded
25 that they would go to another fitness product. Dubé Test. 930:23-933:5-25; *see also* PX0015
26 (Singer Rep. Tbl. 1 & App’x 3 pp.123-130).

27 134. This is contrary to generally accepted survey practice. *See* Dubé Test. 932:20-25.
28

1 135. Had Dr. Singer treated even a fraction of these individuals as persons who would
2 leave Supernatural for another product – as almost all of them they said they would – then the
3 hypothetical monopolist test would have failed (he needed 139 to stay, only 113 said they would
4 “definitely” stay). *See Dubé Test.* 930:3-930:22, 934:1-935:5 (“He would have gotten exactly the
5 opposite result. . . . [W]ith his survey sample, he would have estimated an actual loss that would
6 have been bigger than the critical loss.”).

7 136. Dr. Singer also ignored basic best practices for survey design when he declined to
8 randomize the answers to the “ultimate test” question – i.e., mixing the order in which answers are
9 presented to survey respondents – despite doing so for other substantive questions in the survey
10 (including the one immediately prior). *See DDX10.7; Dubé Test.* 928:8-929:15.

11 137. The extremely long and confusing phrasing of Question 19 further increased the
12 likelihood of respondents selecting the first answer (“definitely stay”) that Dr. Singer needed for his
13 test to pass. *See Dubé Test.* 928:8-22.

14 138. By *always* making the first available option that the supposed Supernatural user
15 would “definitely stay” on Supernatural despite the price increase, the survey was biased to generate
16 an outcome that would pass the hypothetical monopolist test. *See Dubé Test.* 880:16-881:17.

17 139. *Fourth*, Dr. Singer never conducted a survey capable of supporting his market
18 definition because his “ultimate test” – i.e., the question asking whether a monopolist of “VR
19 dedicated fitness” apps would have pricing power over consumers, *see Singer Test.* 445:15-18 –
20 included a non-VR product: Liteboxer *off-VR* (he included both on-VR and off-VR options). *See*
21 *Carlton Test.* 1428:15-24.

22 140. Accordingly, Dr. Singer has measured whether a monopolist that owns all “VR
23 dedicated fitness” apps *and* Liteboxer’s off-VR product could profitably increase prices by
24 approximately 5% – an inquiry irrelevant to the *VR-only* market he seeks to define. *See Carlton*
25 *Test.* 1428:25-1429:9.

26 141. *Fifth*, and compounding the foregoing problems, Dr. Singer did *not* implement the
27 survey himself, performing effectively no quality control of the data. *See Singer Test.* 464:1-4
28 (explaining he deferred to Qualtrics “in conducting the survey”); *Dubé Test.* 881:18-882:13, 937:3-

1 938:22 (noting that Dr. Singer “claimed that he doesn’t even know what he was supposed to do with
2 data to ensure that he had good respondents and that they gave good answers”).

3 142. Instead, Dr. Singer relied on Qualtrics, unaware that Qualtrics did not use its own
4 panels of survey respondents, but instead subcontracts these services to third parties to fulfil
5 customer requests. *See* Singer Test. 466:8-10.

6 143. Yet Dr. Singer and his consulting firm, as the ones “using the Qualtrics platform,”
7 were “responsible for reviewing data quality.” Singer Test. 475:4-13.

8 144. *Sixth*, the survey yields nonsensical results – e.g., that Supernatural is a monopolist
9 that could and should profitably raise prices, yet it has never done so. *See* Ex. DX1231 (Dubé Rep.
10 ¶¶ 48-53); Carlton Test. 1426:11-1427:13.

11 145. *Seventh*, Dr. Singer’s survey was directed to the wrong set of respondents because he
12 limited his survey to existing users who indicated that they intended to continue subscribing to
13 Supernatural, which is not the relevant set of consumers – since Supernatural must attract users
14 from off-VR. Carlton Test. 1425:14-1426:10.

15 **3. VR Characteristics Do Not Show a Lack of Competition Between VR**
16 **and Non-VR Fitness Products**

17 146. The FTC and its economist do not dispute that on-VR and off-VR fitness products
18 have similar features and that consumers use these products for similar purposes. *See* PX0016
19 (Singer Rebuttal Rep. ¶¶ 3-4); *see also* FTC Prelim. Inj. Reply (Dkt. 262) at 12.

20 147. Instead, Dr. Singer’s survey found that supposed Supernatural subscribers who
21 would or might leave Supernatural in response to a hypothetical price increase would shift to both
22 on-VR and off-VR fitness products – with a plurality shifting to *only* off-VR fitness alternatives –
23 suggesting that those off-VR products are as close substitutes (or even closer) for Supernatural as
24 VR apps. *See* Carlton Test. 1425:1-13; DDX09.7 (showing that only 13% of these respondents
25 would shift *only* to another “VR dedicated fitness” app, while 38% would shift *only* to an off-VR
26 fitness product, and 35% would shift to a combination of both, with the remainder choosing to stay
27 with Supernatural or not shift to any other fitness product); *see also* DDX09.6.

28

1 148. Dr. Singer instead claims that a Meta advocacy document – prepared by its attorneys
2 as part of an investigational presentation to the FTC – identifies the nine “VR dedicated fitness”
3 apps. *See Singer Test.* 531:5-24 (discussing PX0001).

4 149. This document – which Meta did not prepare in the ordinary course of business –
5 expressly clarifies that the VR fitness apps listed in an “Overview” appendix are “Selected
6 Competitors” (and the list includes many off-VR competitors that Dr. Singer omits from his market
7 definition), not an exhaustive list. *See PX0001 at 23; see also Vickey Test.* 1188:1-7 (similar).

8 150. Indeed, [REDACTED]
9 [REDACTED]. *See PX0001 at 11.*

10 151. By contrast, the only evidence of actual user substitution patterns shows that
11 Supernatural attracts consumers to VR from off-VR and that users who stop using Supernatural
12 leave VR altogether, consistent with their substituting non-VR fitness options. *See DX1230*
13 (Carlton Rep. ¶¶ 63-74, 104-112 & App’x Tbls. 12-13).

14 152. The only expert testimony regarding the fitness industry – from Defendants’ expert
15 Dr. Theodore Vickey – confirms that VR fitness offers consumers just one way among dozens of
16 comparable alternatives to exercise and improve fitness levels. *See DX1232 (Vickey Rep.*
17 *§ IV(A)(3) & App’x C); Vickey Test.* 1176:22-19, 1180:13-18.

18 153. And the only expert opinion on the VR industry – from Defendants’ expert Dr.
19 Michael Zyda – confirms the reliability of app studies and classifications reflecting that there are
20 more than just nine VR fitness apps available to consumers. *See DX1233 (Zyda Rep. ¶ 43).*

21 154. [REDACTED]
22 [REDACTED]
23 [REDACTED] *See DX1228 (Sanders Dep. 14:6-15:7) ([REDACTED])*;
24 [REDACTED]; *DX1222 (Healey Dep. 10:20-13:21)*
25 *([REDACTED]); PX0074 (Casanova Dep. 16:9-18:12) ([REDACTED]);*
26 *DX1251 ([REDACTED]); DX1227 (Klim Dep. 13:8-16, 13:20-14:6, 14:17-15:12, 18:9-11) ([REDACTED])*;
27 [REDACTED]; *see also DDX7.13.*

1 155. Against this evidence, and despite his express disavowal of any features-based
 2 analysis, Dr. Singer references immersion, pricing, and subscriptions as “markers” that could
 3 distinguish VR from non-VR fitness – ignoring that not all VR is immersive or subscription based,
 4 while some off-VR fitness products are immersive, less expensive, and subscription based. *See*
 5 DX1232 (Vickey Rep. § IV(B)); DX1230 (Carlton Rep. §IV.D-E); DX1233 (Zyda Rep. ¶¶ 71-75).

6 4. The “VR Dedicated Fitness” Market Is Not Highly Concentrated

7 156. Dr. Singer opines that the “VR dedicated fitness” app market is concentrated based
 8 on [REDACTED], *see* PX0015 (Singer Rep. ¶ 75 & Tbl. 2B), but
 9 that presumes the accuracy of his market definition.

10 157. That market definition ignores the intense competition between fitness products,
 11 services, and apps, of which VR is a small part, *see supra* ¶¶ 74-89 – [REDACTED]
 12 [REDACTED]. *See* DDX11.19 ([REDACTED]
 13 [REDACTED]); *see also* DX1230 (Carlton Rep. ¶ 134, Tbl. 18) (similar); Carlton
 14 Test. 1421:1-16 (accounting for non-VR fitness alternatives results in a concentration “share that is
 15 so low that . . . it remove[s] any concerns about anticompetitive effects”).

16 158. But even as to so-called “VR dedicated fitness” apps, Defendants’ expert economist,
 17 Dr. Dennis Carlton, showed that [REDACTED] is a poor measure of competitive conditions
 18 going forward because market shares are changing rapidly and current shares are not useful to
 19 predict what will happen in the future. *See* Carlton Test. 1368:7-1369:5, 1382:2-10 ([REDACTED]
 20 [REDACTED]); DX1230 (Carlton Rep. ¶¶ 115-123)
 21 ([REDACTED]).

22 159. Dr. Carlton also explained that [REDACTED] is an inappropriate measure of market
 23 share because [REDACTED]
 24 [REDACTED] *See*
 25 DX1230 (Carlton Rep. ¶¶ 131-133); *see also* PX0001 at 11 ([REDACTED]
 26 [REDACTED]); *see also* U.S. Dep’t of Justice & FTC, *Horizontal Merger Guidelines* § 5.2 (2010).

27 160. Had Dr. Singer used time spent as his measure of share – which would account for
 28 free apps like VRWorkout (included among the nine) and Gym Class ([REDACTED])

1 [REDACTED] omitted from the nine) – Dr. Carlton showed that
 2 Supernatural’s share would be [REDACTED]. *See* Carlton Test. 1383:9-1386:134
 3 (explaining this shows [REDACTED]); DDX11.10.

4 161. [REDACTED]
 5 [REDACTED] *See* PX0062 (Milk 24:2-24, 194:11-14) ([REDACTED]
 6 [REDACTED]); PX0065 (Koblin 18:10-19:7) (similar); DX1290
 7 (Janszen Decl. ¶ 38) (“In this early stage, our pricing strategy is solely designed to increase our user
 8 base. We measure our progress by the number of subscribers to our product and our ability to both
 9 retain existing users and grow that number while maintaining fixed costs.”).

10 162. [REDACTED]
 11 [REDACTED]
 12 [REDACTED] *See* PX0016 ([REDACTED]).

13 **IV. Meta Is Not a Potential Supernatural Competitor**

14 **A. Meta Never Planned To Build Its Own VR Fitness App**

15 **1. There Was Never Any Plan To Build from Scratch**

16 163. The Meta executives with authority to approve from-scratch development of a
 17 competing VR fitness app – Messrs. Zuckerberg and Bosworth – testified without contradiction that
 18 they were never presented a proposal for the development of a VR fitness app, never approved a
 19 budget for such a proposal, and are aware of no concrete steps that Meta ever took toward such a
 20 proposal. *See* PX0050 (Zuckerberg 164:2-7, 242:14-243:11) (“I’m not aware of anything that’s
 21 gone to any kind of significant consideration.”); Zuckerberg Tr. 1311:21-1312:14 (no “actual
 22 concept”), 1332:20-1334:2; 1334:7-23 (similar); PX0054 (Bosworth 223:18-224:5) (“We were
 23 definitely not on a path to building [a VR fitness app] before the acquisition talks began.”);
 24 Stojavljevic Test. 120:21-24 (explaining Meta’s lack of capabilities in fitness); *see also* PX0064
 25 (Rabkin 30(b)(6) 28:18-29:1, 31:15-32:6, 38:8-39:24) (testifying that Meta never pursued a
 26 partnership with a fitness company to build a VR fitness app from scratch).

27 164. For example, Mr. Bosworth, who controls the Reality Labs budget, testified that he
 28 would have to approve spending on any such proposal to build a new VR fitness app from scratch.

1 See Bosworth Test. 986:6-22; Zuckerberg Test. 1279:2-4 (confirming he “personally” approved the
2 budget); *see also* DX1309 at 1 (Meta document [REDACTED]).
3 [REDACTED]).

4 165. But no one even asked Mr. Bosworth to consider any such approval (let alone
5 authorize a budget) – there is no contrary evidence. *See* Bosworth Test. 991:3-21; PX0054
6 (Bosworth 211:1-16, 217:2-221:6) (“We’ve never [investigated] the investment of [building a VR
7 fitness app], because we would never do it.”).

8 166. And Mr. Bosworth testified that he would not have approved spending to build a new
9 VR fitness app, had he been asked (he was not). *See* PX0054 (Bosworth 226:1-8, 227:24-228:24).

10 167. Meta employees at lower levels of Reality Labs considered many options for
11 growing the Quest ecosystem beyond gaming by encouraging the development of apps for non-
12 gaming VR “use cases,” including options for fitness. *See* DX1035 at 1-2 ([REDACTED]
13 [REDACTED]
14 [REDACTED]).

15 168. None of these ideas ever materialized into a proposal or any concrete planning
16 toward building a fitness app from scratch. *See* PX0050 (Zuckerberg 143:7-17, 144:12-19, 163:24-
17 164:7, 242:14-243:1) (explaining that there was never follow-up or a formal proposal for Meta to
18 build its own VR fitness app, modify Beat Saber, or partner with a fitness company); PX0054
19 (Bosworth 223:21-22) (“We were definitely not on a path to building [a VR dedicated fitness app]
20 before the acquisition talks began.”); PX0064 (Rabkin 30(b)(6) 28:18-29:1, 31:15-32:6, 38:8-39:24)
21 (explaining that Meta never had an actual plan or proposal to partner with an established fitness
22 company to build a VR fitness app).

23 169. Instead, all of the Meta employees involved in this brainstorming testified that these
24 ideas never proceeded beyond the discussion stage, never received approval from any senior
25 executive, and were all discarded as impractical for multiple reasons – there is, again, no contrary
26 evidence. *See* Rabkin Test. 815:21-22 (“We don’t have people at the company who are fitness
27 experts. The company does not build fitness products.”), 816:7-15, 831:3-11 (similar); PX0055
28 (Verdu 229:3-231:7) (explaining why Meta would not develop its own VR fitness app); PX0057

1 (Dass 100:4-103:5) (“we lacked the capabilities,” including “fitness instructors,” “the ability to run
 2 live classes” – “all things that need to come together”); PX0064 (Rabkin 194:4-195:15) (confirming
 3 “wholeheartedly” that Meta lacks capabilities to build a VR fitness app); PX0063 (Rabkin 30(b)(6)
 4 28:18-29:1, 31:15-32:6, 38:8-39:24) (the concept of partnering with a fitness company never
 5 materialized into a proposal); PX0052 (Stojsavljevic 147:25-148:12) (explaining that Meta lacks the
 6 right VR engineers and fitness personnel to build on its own); PX0053 (Pruett 284:6-18) (“I don’t
 7 think we have any of the skills or domain knowledge required to make anything successful,”
 8 including because “we don’t have any expertise”); *see also* PX0066 (Rubin 166:11-172:11) (listing
 9 reasons it would not make sense for Meta to build a fitness app).

10 170. Meta’s limited experience developing a handful of VR games and social apps did not
 11 make it a realistic VR fitness developer. *See* Stojsavljevic Test. 110:18-111:9 (“We are not fitness
 12 app developers. And so to get into a new space, even though a lot of the tools and technology are
 13 similar, it’s a bit uncomfortable.”).

14 171. Mr. Bosworth explained that, despite Meta’s resources, “content is really tricky” –
 15 “all of the resources in the world don’t buy you success, and we have lots of examples of that where
 16 large organizations, including [Meta], try to pursue a vision only to find that actually the market has
 17 found success elsewhere, small startups or other companies invest their resources more
 18 successfully.” Bosworth Test. 992:2-11.

19 172. Mr. Bosworth gave examples of several Meta first-party endeavors from scratch –
 20 Spaces, Venues, and Horizon – that have not yet succeeded. *See* Bosworth Test. 992:12-993:17.

21 173. Accordingly, in a series of contemporaneous documents created between March and
 22 May 2021, Meta employees recorded the decision not to create a first-party VR fitness app from
 23 scratch and listed reasons for that decision, [REDACTED]

24 [REDACTED]
 25 [REDACTED]. *See* DX1016 at 1 ([REDACTED])
 26 [REDACTED]
 27 [REDACTED]); DX1012 at 1 (similar).
 28

1 174. For example, in March 2021, Meta’s Director of VR Content explained that Meta
2 would need to acquire, rather than build, a VR fitness app because: [REDACTED]

3 [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED] PX0179 at 2; *see also* DX1016 at 1 (same).

7 175. In a VR fitness strategy memo from early 2021, Meta wrote: [REDACTED]

8 [REDACTED]
9 [REDACTED]
10 [REDACTED] DX1016 at 7.

11 176. Meta also concluded in a written decision document, [REDACTED]

12 [REDACTED]
13 [REDACTED] DX1020 at 3-5.

14 177. One Meta employee assessed [REDACTED]

15 [REDACTED]. *See* PX0144 at 1 (Meta message thread from March
16 2021, [REDACTED])

17 [REDACTED]); *see*
18 *also* Stojavljevic Test. 118:19-119:2 (“Because even if you hire individuals for the team, you still
19 have to put all of the structures into place to come to work together, you have to build camaraderie
20 with those teams, and that could take a long time. It’s generally one of the biggest risks with
21 building a team from scratch.”).

22 178. Meta could not redeploy VR engineers without *any* fitness experience and expect
23 them to become VR fitness engineers to populate this hypothetical new team because the “skill set
24 is different.” Stojavljevic Test. 185:17-23 (“It would be the equivalent of having your podiatrist do
25 open heart surgery on you. Like, they’re both doctors, but it’s probably not a good idea.”).

26 179. But hiring a team from scratch presents its own risks, particularly “in a new space
27 [fitness] where you don’t have any expertise in because you don’t have the criteria to evaluate it,”
28 meaning “there’s a [real] a risk that [Meta] would hire the wrong people.” Stojavljevic Test.

1 186:1-9; *see also id.* 187:1-19 (explaining that Meta acquired Armature – a VR app development
2 studio without any fitness experience – for unrelated reasons, not to develop fitness content); Zyda
3 Test. 1220:14-23 (discussing importance of team that has worked together for some time).

4 180. And hiring a new team would be just the start; actually using that team to build a VR
5 fitness app from scratch – without any fitness-specific experience or background or production
6 capabilities – could take *years*. *See* PX0066 (Rubin 169:5-14) (“starting from scratch is a multi,
7 multi-year endeavor,” “we wouldn’t know for two or three years”); DX1212 (Rubin 30(b)(6) 31:13-
8 33:1, 39:3-8) (similar); PX0055 (Verdu 189:15-190:14) (estimating that building a VR fitness app
9 from scratch would take “more than a couple of years”); *see also* Carmack Test. 579:18-580:11
10 (describing that it can take years – even for well-resourced developers – to develop software, as
11 “software development is notorious for going over predicted time”).

12 181. As one Meta employee summarized, “[i]t would take 8 to 12 months to hire the
13 people. That’s when you start building the product. And you would be looking a[t] multiple years,
14 two to three years to build on top of that, so potentially four years from start to having something in
15 market” – and that “would just be too long.” Stojsavljevic Test. 141:2-142:12.

16 **2. Meta Decided *Not* To Modify Beat Saber into a VR Fitness App –**
17 **Independent of the Within Transaction**

18 182. Meta likewise never planned to modify Beat Saber into a fitness app. *See* PX0050
19 (Zuckerberg 143:7-17, 144:12-147:3, 148:4-149:3, 242:14-243:11) (testifying that there was no
20 formal proposal for his review and that, “even if” there were such a proposal or the Beat Saber team
21 had “started working on it,” Meta “wouldn’t have ended up working on this” [REDACTED]
22 [REDACTED]); Zuckerberg Test. 1311:21-1312:14, 1332:20-1334:2, 1334:7-23
23 (explaining that had anyone wanted to “chang[e] the fundamental direction of [Meta’s] most
24 popular game,” they would have run the “actual concept” by him before moving forward); PX0054
25 (Bosworth 139:18-142:9) (“I didn’t fund it. . . . [N]o one asked me to fund it. . . . And, if they had, I
26 wouldn’t have done it.”).

27 183. Beginning around the time of Meta’s acquisition of Beat Games (the studio that
28 develops Beat Saber) in 2019, there was consideration of modifying Beat Saber into a VR fitness

1 app by adding fitness features to the game. *See* PX0055 (Verdu 21:20-22:17, 110:10-111:8, 178:7-
2 180:18, 198:18-200:22) (describing “the perpetual white whale quest to get Beat Saber to build, or
3 Beat Games to build a fitness version of Beat Saber, which was like pushing on a string”).

4 184. But these early exploratory ideas of how Beat Saber could become a VR fitness app
5 – often in documents from 2019, *before* Meta closed the Beat Games acquisition in late November
6 2019 – never materialized into anything more than ordinary corporate brainstorming. *See* PX0249
7 at 1 (Aug. 2019); PX0342 at 2 (Sept. 2019); PX0162 at 3 (Oct. 2019).

8 185. The furthest that idea got was when, on April 19, 2020 – in the midst of the COVID-
9 19 pandemic – Beat Games released FitBeat, [REDACTED]
10 [REDACTED], *see* PX0077 (Beck 104:3-105:18), but that
11 had no fitness features, guided coaching, trainer input, exercise design, or health tracking.

12 186. FitBeat was merely a “test” that Beat Games declined to further develop or convert
13 into an actual fitness feature, in part because Beat Games did not like the concept on review and
14 consumer reaction was not sufficiently positive. *See* PX0077 (Beck 105:19-21, 106:7-15) ([REDACTED]
15 [REDACTED]
16 [REDACTED]); *see also id.* (Beck 141:3-8) ([REDACTED]
17 [REDACTED]).

18 187. Then on February 16, 2021, a Meta employee named Rade Stojsavljevic (Director of
19 First-Party Studios) took a Peloton class, which gave him an idea that Beat Saber might be able to
20 partner with Peloton to make a VR fitness app. *See* Stojsavljevic Test. 128:14-24.

21 188. That same day he sent several messages to colleagues about the idea. *See* PX0189
22 at 1; *see also* Stojsavljevic Test. 130:10-14 (“That was coming off that ride. . . . [L]ike a light bulb
23 went off in my head thinking that would just be really fun.”).

24 189. Three days later, Mr. Stojsavljevic raised the idea with his boss – Michael Verdu
25 (formerly VP of Reality Labs Content), who reported to Mark Rabkin (VP of Reality Labs), who
26 reports to Mr. Bosworth, who reports to Mr. Zuckerberg. *See* Stojsavljevic Test. 134:12-24;
27 PX0524 at 1; *see also* PX0055 (Verdu 198:18-199:14); Rabkin Test. 818:4-15 (explaining the
28 reporting structure).

1 190. Approximately two weeks later, on March 3, 2021, Mr. Stojavljevic suggested in a
2 deck (“Operation Twinkie”) that partnering Beat Saber with Peloton could help Meta to address the
3 fact that it had no fitness capabilities to build a VR fitness app on its own. *See* PX0527 at 5; *see*
4 *also* Stojavljevic Test. 129:2-5 (regarding his Peloton trainer from February 16, “I felt strongly
5 enough, I put an image of her doing that in that Operation Twinkie presentation”).

6 191. Mr. Stojavljevic sent a few other internal chats about the idea prior to March 8,
7 2021 – but nothing more came of it (e.g., no outreach to Peloton). *See* PX0144 (Mar. 8, 2021).

8 192. Instead, a contemporaneous Meta document regarding [REDACTED],
9 dated March 9, 2021, dismissed the idea: [REDACTED]

10 [REDACTED]
11 [REDACTED]
12 [REDACTED] PX0492 at 7.

13 193. Meta’s March 2021 [REDACTED]
14 PX0492 at 7, reflected a number of practical problems with the concept.

15 194. To start, [REDACTED]
16 [REDACTED]. *See* PX0077 (Beck 76:14-25); PX0055 (Verdu 229:10-231-7).

17 195. Beat Games [REDACTED]
18 [REDACTED] – as the founder, former CEO, and current music director of
19 Beat Saber (Jaroslav Beck) testified. *See* PX0077 (Beck 106:7-107:14, 116:10-22, 140:22-141:8)
20 (explaining [REDACTED]).

21 196. Mr. Stojavljevic testified that these were practical reasons not to pursue the idea.
22 *See* Stojavljevic Test. 132:1-13 (“There’s a lot of risk doing something like that. You could
23 potentially destroy the thing that was ultimately successful because now there is this extra thing
24 bolting onto it that the customers don’t like. And gamers in particular, they get really, really
25 offended that something that they are invested in and they live is expanding into something else and
26 in particular if they feel that that expansion is coming at the cost of their product.”).

27 197. Indeed, Beat Games repeatedly abandoned fitness concepts at the brainstorming
28 stage ([REDACTED]), e.g., [REDACTED] *see*

1 PX0077 (Beck 114:19-116:22), [REDACTED],
 2 *see id.* (Beck 123:5-124:21), [REDACTED], *see id.* (Beck
 3 125:13-22). *See also* PX0052 (Stojsavljevic 189:1-22).

4 198. Mr. Verdu testified that resistance from Beat Games helped to kill the idea because
 5 Meta could not – and would not – force the Beat Games creative team to change Beat Saber into a
 6 fitness app. *See* PX0055 (Verdu 179:19-180:18, 198:18-200:22, 229:3-231:7); *see also id.* (Verdu
 7 200:16-22) (“When we acquired them, we said that they would creatively own their product
 8 roadmap, that just because they were working for us didn’t mean they weren’t in charge of their
 9 baby, and they were.”).

10 199. Meta grants the VR app developer studios it acquires significant autonomy, creative
 11 control, and independence. *See* Carmack Test. 583:13-23 (“The studios that [Meta] ha[s] acquired
 12 have been largely left to themselves to develop the way that they’ve been building the applications
 13 before the acquisition, and I think that’s been very successful. So it would be doubly hazardous for
 14 [Meta] to airdrop in a lot of developers onto that project.”); PX0066 (Rubin 137:1-138:6, 169:17-
 15 170:18, 173:5-175:21) (describing the creative control Meta affords VR studios it acquires);
 16 PX0077 (Beck 75:18-23) ([REDACTED]
 17 [REDACTED]).

18 200. As Mr. Stojsavljevic testified: “Our operational philosophy with these studios is
 19 they’re creative teams, and to tell a creative team to build something they don’t want to build is
 20 almost always a recipe for disaster. . . . If we had a studio that said, hey, Meta wants to do this and
 21 they said absolutely not, that’s just the end of it.” Stojsavljevic Test. 188:19-189:4.

22 201. And Mr. Beck’s view was that modifying Beat Saber into a VR fitness app [REDACTED]
 23 [REDACTED]
 24 [REDACTED] PX0077 (Beck
 25 106:20-107:2); *see also id.* (Beck 139:12-140:21) ([REDACTED]
 26 [REDACTED]).

27 202. Mr. Beck dismissed the idea that Beat Saber might partner with Peloton as a
 28 nonsensical variant of the fitness idea [REDACTED]

1 [REDACTED]
 2 [REDACTED] PX0077 (Beck 130:3-11); *see also* PX0055 (Verdu 201:14-23) (“I don’t
 3 think we ever got to the point of practically understanding what the partnership would like, like is it
 4 a Peloton-branded headset? Is it Peloton-branded content inside of our headset? Like we didn’t
 5 even get to the point where we were exploring at that level of detail.”).

6 203. The idea never made it to Beat Games as a formal proposal. *See* Stojsavljevic Test.
 7 154:2-6 (“I didn’t even talk to the Beat Games team themselves to get their information about what
 8 technically they would need to do that.”); *id.* 188:16-18 (testifying that he never discussed the idea
 9 with anyone from Beat Saber); Bosworth Test. 994:25-995:2 (similar).

10 204. There was another obvious problem with the idea: to pursue a “Beat Saber +
 11 Peloton” concept, Meta would need *Peloton’s* agreement ([REDACTED]
 12 [REDACTED]
 13 [REDACTED]). *See* PX0527 at 5; Stojsavljevic Test. 143:13-18.

14 205. But Meta never even raised the idea with Peloton, and there is no evidence that
 15 Peloton would have been interested had it been asked. *See* Stojsavljevic Test. 160:1-9, 165:7-11
 16 (explaining the idea was insufficiently concrete to pitch); *see also* PX0064 (Rabkin 30(b)(6) 26:16-
 17 29:1); PX0052 (Stojsavljevic 83:10-12) (“No. We never discussed that with Peloton.”); Rabkin
 18 Test. 820:15-21 (regarding Peloton, “I am quite sure that they never got on board”); Bosworth Test.
 19 994:22-24 (testifying that he is unaware of any outreach to Peloton); *cf.* DX1228 (Sanders 47:18-
 20 48:2, 50:13-21) ([REDACTED]).

21 206. Accordingly, while lower-level Meta employees sporadically batted around the idea
 22 of modifying Beat Saber into a fitness app for years (between 2019 and 2021), Meta never took a
 23 single necessary step toward implementing such a modification; there was never a plan, budget, or
 24 attempt to hire a single VR fitness engineer or fitness professional, or any outreach to Peloton. *See*
 25 Stojsavljevic Test. 164:23-167:5; PX0063 (Rabkin 173:16-174:11) (“[I]t appears that no real work
 26 was ever done in this direction.”); PX0052 (Stojsavljevic 88:1-4) (“[W]e didn’t do any planning that
 27 I recall.”); Rabkin Test. 817:14-15 (“The idea never went anywhere.”), *id.* 834:18-22 (confirming
 28 the “idea was a thought exercise” “that only lasted a few weeks” that he “never approved”).

1 207. Meta therefore never had a plan for modifying Beat Saber. *See* DX1230 (Carlton
2 Rep. ¶¶ 136-139) ([REDACTED]
3 [REDACTED]
4 [REDACTED]); DX1233 (Zyda Rep. ¶¶ 110-118) (similar);
5 Zuckerberg Test. 1333:15-1334:2 (explaining that most ideas are abandoned); Rabkin Test. 828:1-9,
6 833:15-22 (similar).

7 208. Mr. Verdu testified that it would be a “pretty heavy lift,” from a practical standpoint,
8 to “reengineer” a “fitness version of Beat Saber” – no Meta fitness expertise, resources, branding, or
9 background (among other missing pieces) – which would be “compounded” by trying to overcome
10 those limitations by folding a non-existent fitness organization *into* the leading VR *game* studio
11 (located overseas) that itself had no interest or expertise in fitness. PX0055 (Verdu 229:10-231:7);
12 *see also id.* (Verdu 110:15-111:8) (describing the idea as “hopelessly naïve”); *id.* (Verdu 199:17-
13 200:6) (“It didn’t actually seem workable. It seemed like kind of an unnatural combination of
14 resources that ran the risk of distracting the Beat team and making them unhappy and generating a
15 product that was subpar.”).

16 209. Mr. Verdu therefore never presented a plan for approval or implementation to
17 Messrs. Rabkin, Bosworth, or Zuckerberg – instead, it remained just an idea that, as of March 2021,
18 languished without advancing through the review process. *See* PX0055 (Verdu 234:9-235:20); *see*
19 *also* Bosworth Test. 1003:11-1004:20 (noting that Mr. Verdu would not have had authority to
20 implement this plan without going through the mandatory review process, which never happened);
21 Rabkin Test. 823:18-25; *cf.* PX0117; PX0055 (Verdu 240:20-242:6).

22 210. Every step in Meta’s process for taking an initial pitch idea through to approval –
23 e.g., a “detailed plan where we would write a game design document,” “or a production plan or any
24 of those things” – was missing. Stojavljevic Test. 166:2-14; *see also id.* 166:25-167:5 (“[A]s we
25 started just talking about it, we sort of had this cascading complexity”); Carmack Test. 564:2-
26 15 (explaining that modifying Beat Saber in this way “would not survive design review at Meta
27 where designers would have a lot of input into how it would be structured”); Rabkin Test. 824:4-8
28 (testifying that there was no “specific proposal” to modify Beat Saber).

1 211. There were never required “cross-functional” discussions, e.g., between Mr.
2 Stojavljevic and marketing, analytics, operations; or a “product plan,” e.g., “staffing, budget,
3 dollars, markets size”; or a partnership plan, i.e., working with Peloton and Meta’s partnership
4 team; or a “decision review”; or a “green-light process”; or approval – none of it. Stojavljevic
5 Test. 192:2-195:13; DDX04; *see also* Rabkin Test. 833:1-14 (discussing the cross-functional
6 discussions), 822:5-823:23 (describing some of the mandatory approval process); Stojavljevic
7 Test. 196:22-197:5 (similar); DX1311 (discussing green-light review process generally).

8 212. Nor was there review through Meta’s “approval authority matrix.” *See* DX1309 at 3
9 (describing the matrix); *see also* Stojavljevic Test. 201:3-22 (explaining that no part of the
10 approval authority matrix – budgeting, allocating headcount, preparing a formal document with
11 detailed information about the idea – took place); DX1310 (additional review requirement).

12 213. There is also no record evidence of a “game design document” – the classical “plan”
13 for developing an app or game – or indication that Meta ever began developing such a planning
14 document for this concept. *See* Stojavljevic Test. 166:207; Zyda Test. 1221:10-1222:9.

15 214. The idea would not have survived these mandatory reviews, as Mr. Rabkin – Mr.
16 Verdu’s boss – testified that, “as the leader of VR,” he “was not . . . considering building [Meta’s]
17 own fitness experience,” and that “nothing ever happened” with respect to the concept of modifying
18 Beat Saber. PX0063 (Rabkin 171:8-172:5, 173:6-174:11); *see* Rabkin Test. 819:10-820:25
19 (testifying that he “just didn’t see that [idea] being good for [Peloton] or [Meta],” and it would have
20 been “a dangerous pivot and distraction” for Beat Saber), 823:24-25, 852:9-853:14 (testifying that
21 Mr. Verdu could not approve this idea on his own), 831:25-9 (testifying that the idea “died on the
22 vine.”); *see also* Stojavljevic Test. 190:6-14 (“[T]his would have need to have been approved in a
23 formal review with Mark Rabkin and Andrew Bosworth.”); Zuckerberg Test. 1312:3-14, 1334:13-
24 23 (testifying that Mr. Verdu “would have at least run the idea by me”); Bosworth Test. 1003:23-
25 1005:5 (explaining that he would have reviewed before Mr. Verdu could proceed).

26 215. And Mr. Bosworth – who also would have needed to approve any proposal to
27 collaborate with Peloton – testified “I would never trade my No. 1 game [Beat Saber] against
28 theoretical gains in [REDACTED] PX0054 (Bosworth 142:2-9, 220:22-221:6).

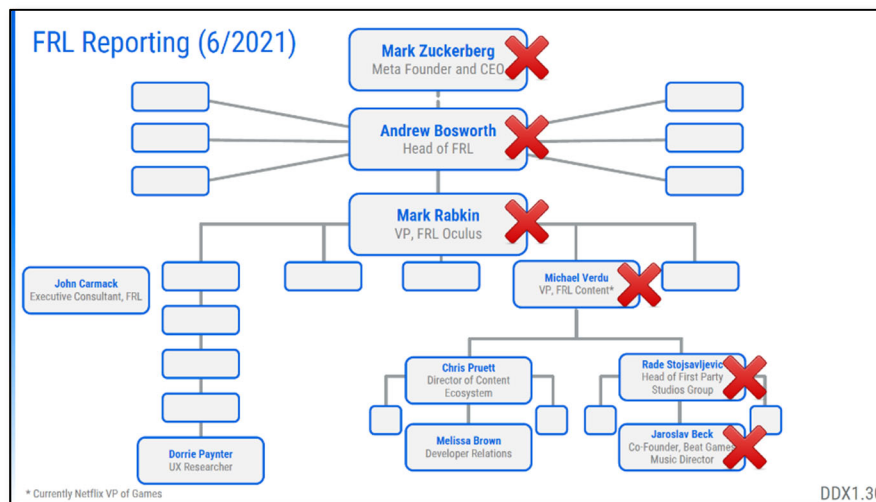
1 216. Echoing Mr. Beck’s own concerns, Mr. Bosworth explained that modifying Meta’s
 2 “best-selling title” from a game into a fitness app “would be insanity,” “destroy value,” “not make
 3 sense,” and “be bad for both the games and the fitness side of things.” PX0054 (Bosworth 139:17-
 4 3); *see*; Bosworth Test. 995:3-996:10 (similar); *see also* Zyda Test. 1223:14-1224:24 (similar).

5 217. But the idea died before it ever got to Mr. Bosworth as “no one” ever elevated it to
 6 him as a proposal or asked him for any funding. PX0054 (Bosworth 142:18-25); *see also* Bosworth
 7 Test. 993:18-994:21 (noting he heard about the idea in a single email and then “never heard about it
 8 again,” which is “not very uncommon” at Reality Labs).

9 218. According to Mr. Bosworth, “it honestly wasn’t something we ever took seriously,”
 10 “[s]o it wasn’t . . . something to review.” PX0054 (Bosworth 142:2-144:16).

11 219. Similarly, the idea never materialized into a proposal that went to Mr. Zuckerberg –
 12 who testified that modifying Meta’s most successful VR game would warrant at least giving him a
 13 “heads up” if it were a serious consideration, which it was not. PX0050 (Zuckerberg 144:2-7);
 14 Zuckerberg Test. 1311:21-1312:14, 1332:20-1334:2, 1334:7-23; *see also* Rabkin Test. 822:7-24 (“I
 15 think [Bosworth] and [Zuckerberg] would really want to weigh in and make that call. Again, this is
 16 the number one app in our whole VR ecosystem that we spent so many years to build. Any change
 17 to it . . . would require a ton of approval and a ton of leadership.”).

18 220. Every witness who would be involved in the decision whether to pursue this idea
 19 testified that there was no plan or any steps taken toward implementing a plan (*see* DDX1.30):



1 221. The documentary record corroborates the foregoing testimony: the mandatory
2 [REDACTED] for any Reality Labs project – including and especially modifying the top VR game into
3 an entirely different kind of app – *does not exist*. See Bosworth Test. 987:18-988:18 (describing the
4 review process), 990:24-991:2 (“No idea could be considered serious if it wasn’t part of our Review
5 process.”); DX1312 ([REDACTED]); *see also* PX0522 at 2 ([REDACTED]
6 [REDACTED]
7 [REDACTED]); Bosworth Test. 988:19-
8 989:5 (confirming that PX0522 is about the Reality Labs review process).

9 3. **Meta Never Considered “Cloning” Beat Saber To Make a Fitness App**

10 222. Meta never discussed an iteration on the idea of modifying Beat Saber that would
11 have entailed “cloning” Beat Saber’s code and using that as a base to build a new VR fitness app
12 with similar or different branding. See Bosworth Test. 999:12-20.

13 223. Even had the idea been floated, Reality Labs would have rejected it as the worst of
14 both worlds (i.e., build from scratch or modify Beat Saber). See Bosworth Test. 999:22-1001:10
15 (“[H]ere again we have so many examples, not just in virtual reality, but across all content, types of
16 content that was very similar to some other content, but nonetheless did not succeed, in part because
17 the market has already demonstrated that there is some affinity for a specific title.”); Carmack Test.
18 581:7-582:24 (“legitimate companies don’t just clone somebody else’s software”; rejecting the idea
19 of “do[ing] a grubby clone of someone else’s virtual reality software”).

20 224. Without leveraging the Beat Games team – which did not want to work on a fitness
21 modification – Meta would effectively be building from scratch all over again and encountering all
22 the problems that endeavor presents, just around a Beat Saber clone or shell. See Rabkin Test.
23 821:1-822:4 (testifying that cloning and proceeding with a new team does not “increase[] your
24 chances of making it ahead significantly at all, . . . it’s all of the problems that I described earlier
25 why it’s hard to do a new app in a category that your company is not good at making”).

26 225. The time required to surmount those problems could put Meta too far behind other
27 applications. See Bosworth Test. 1002:15-1003:2 (“I don’t think we could do it technically. We
28 didn’t have the skill sets in fitness required or the content creation required. I don’t think we could

1 do it successfully. I don't think if we built it that the product would succeed. And if we managed to
2 overcome both of those hurdles, I don't think we could do it in time. I think while we were trying
3 to build it, years will have passed. Supernatural, FitXR, Les Mills Bodycombat, a huge number of
4 applications will have had all of that time to continue to grow their market and their fit and learning
5 what the market is.”).

6 226. Defendants' expert in VR technology and software development, Dr. Michael Zyda,
7 explained that the cloning concept could impede rather than expedite app development across VR
8 because “[i]f someone came in and said, you must use this code, what would happen is that the
9 engineers would go and rewrite the code and probably throw most of the code out” – because they
10 did not write it, but inherited it – and development “would take longer.” Zyda Test. 1222:10-21;
11 *see also* Bosworth Test. 1057:2-10 (“Even if we surpass that hurdle, does the thing you create have
12 a soul? Does the thing you create have the same resonance? You can't just copy the bits.”).

13 227. The documentary record contains no mention of the hybrid concept – effectively,
14 build from scratch by cloning Beat Saber to modify it – with the closest being an internal Meta
15 document regarding VR fitness development from March 2021 rejecting a similar idea: [REDACTED]

16 [REDACTED]

17 [REDACTED] PX0492 at 7.

18 228. There were no planning documents, e.g., a Review, green-light process, or approval
19 authority matrix – all mandatory within Reality Labs for a project like this – because this was not
20 even an idea at Reality Labs. *See supra* ¶¶ 210-213, 221.

21 229. And a Beat Saber fitness “clone” still would have required a fitness partner – Meta
22 has no fitness resources and so would need to cobble together several teams – but there was no
23 outreach to (or interest from) Peloton. *See supra* ¶¶ 204-205.

24 230. In addition to presenting the foregoing problems with building from scratch, there
25 was a practical reason the “cloning” idea would never be given any consideration: as Mr. Rabkin
26 testified, this hypothesized approach – taking Beat Saber's “app and . . . mechanic and . . . thing
27 [Beat Games] invented and . . . have another team now build a fitness thing” – could jeopardize
28 Meta's relationship with the Beat Games. Rabkin Test. 863:6-12.

1 231. The cloning concept would also risk of broader developer backlash – not just from
2 Beat Games (the studio with the game being cloned), but from third-party VR app developers (the
3 studios that Meta might use as models for the Beat Saber clone). *See Milk Test. 729:13-23* ([REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]).

9 232. Mr. Bosworth agreed, explaining that building clones could upset the entire
10 ecosystem because developers might fear that Meta would clone other apps once they become
11 successful – removing the any incentive third-party developers have to build those apps and thereby
12 starving the Quest platform of third-party apps. *See Bosworth Test. 1002:5-14.*

13 **4. Meta Will Not Now Build Its Own VR Fitness App or Modify Beat Saber**

14 233. Mr. Bosworth testified that the foregoing considerations that would have killed any
15 formal proposal for Meta to build its own app or modify Beat Saber would, today – [REDACTED]
16 [REDACTED] – foreclose any possibility of Meta building its own VR fitness app if the Court
17 blocks the transaction. *See PX0054* (Bosworth 211:1-16, 217:2-221:6, 226:1-8, 227:24-229:1); *see*
18 *also Rabkin Test. 824:7-8* (Rabkin would not approve proposal today).

19 234. Mr. Zuckerberg similarly testified that he will not allow Meta to develop its own VR
20 fitness app [REDACTED], and that he would have by now suspended any such program
21 even in a hypothetical world where other Meta executives authorized one in 2021 without his
22 review or approval (they did not). *See PX0050* (Zuckerberg 150:6-14, 238:12-240:17, 144:12-
23 145:9) ([REDACTED]
24 [REDACTED]
25 [REDACTED]); *Zuckerberg Test. 1334:24-1336:3.*

1 **5. The FTC Expert’s Opinion That Meta Would Develop Its Own VR**
2 **Fitness App Is Speculation That Ignores Record Evidence**

3 235. The FTC’s economist opined that Meta would have built its own VR fitness app
4 because it had and has the “resources, capability, and incentives” to do so. Singer Test. 318:9-20,
5 331:20-332:14.

6 236. But as detailed above, every fact witness with actual knowledge of the decision
7 making inside Meta testified, without contradiction, that Meta conclusively decided not to develop
8 its own VR fitness app. *See supra* ¶¶ 164-172 (building from scratch), 195-203 & 208-209, 214-
9 220 (modifying Beat Saber).

10 237. Dr. Singer’s conjecture about Meta’s incentives to enter a segment where [REDACTED]
11 [REDACTED], *see supra* ¶¶ 71-72, is based on speculation that Fitness
12 could be the “linchpin to owning VR.” Singer Test. 332:8-12.

13 238. But Meta executives testified that fitness is not a particularly high priority use case
14 and is behind core uses cases like social, gaming, and productivity. *See* Zuckerberg Test. 1304:6-
15 1305:2, 1328:17-19.

16 239. Dr. Singer dismisses, without explanation, the undisputed testimony that Meta had
17 no plan to build and never took any concrete steps toward building a VR fitness app of its own –
18 whether by building from scratch, modifying Beat Saber, or cloning Beat Saber. *See supra* ¶ 236;
19 *see also supra* ¶ 222 (there was never a “cloning” idea let alone proposal let alone plan).

20 240. Dr. Singer also disregards contemporaneous documents shutting down all ideas –
21 whether building from scratch or modifying Beat Saber (no one proposed cloning Beat Saber) – by
22 *March 2021*, months before Meta and Within began discussing an acquisition. *See supra* ¶¶ 173-
23 176 (building from scratch), 192-193 (modifying Beat Saber).

24 241. Dr. Singer cites a handful of documents in a single paragraph of his expert report to
25 claim that Meta had plans to develop a VR fitness app of its own. *See* PX0015 (Singer Rep. ¶ 112).

26 242. The first two documents Dr. Singer cites are simply the internal messages that Mr.
27 Stojavljevic sent after taking a Peloton class on February 16, 2021 – not plans to build a VR fitness
28 app. *See* PX0256 (Feb. 16, 2021); PX0523 (same).

1 243. Next, Dr. Singer cites a March 4, 2021 [REDACTED]
2 [REDACTED]
3 [REDACTED] – again,
4 not plans for the development of any app. PX0118 at 1-2; *see also* Rabkin Test. 828:10-23 (noting
5 that this document is not a formal proposal because it has “no mention of dollars, there’s no
6 mention of resources, there’s no mention of timelines”), 848:16-20 (“These are not approval emails.
7 These are not formal decisions. These are not funding agreements.”); Bosworth Test. 998:2-999:11
8 (noting that PX0118 concerns several ideas that never developed past brainstorming).

9 244. Dr. Singer cites another internal chat from Mr. Stojsavljevic, this one on March 8,
10 2021, *see* PX0144 – one day before the March 9, 2021 document explaining why Meta would not
11 build a fitness app from scratch or modify Beat Saber. *See* PX0492 at 7; *see also supra* ¶ 192.

12 245. Dr. Singer also cites a March 11, 2021 email [REDACTED]
13 [REDACTED]
14 [REDACTED] PX0179 at 2 – but it is undisputed that never happened because Mr. Stojsavljevic
15 abandoned his own idea. *See supra* ¶¶ 196, 203.

16 246. Dr. Singer cites a presentation from an external, non-Meta contractor [REDACTED]
17 [REDACTED], *see* PX0121 – but
18 Mr. Stojsavljevic testified that he outsourced this to an external contractor precisely because he
19 “never had the time to really run down and put the full proposal together.” Stojsavljevic Test.
20 164:12-165:17 (“So I owed Rabkin a proposal. I didn’t do that because I was busy.”).

21 247. Finally, Dr. Singer cites a Meta document contemporaneously expressing the view,
22 as of March 2021, [REDACTED]
23 [REDACTED]
24 [REDACTED] PX0251 at 2.

25 248. These are all the documents that Dr. Singer cites in the referenced part of his report,
26 *see supra* ¶ 241, and none supports his speculation as to what Meta might have done.

1 249. Finally, an email from Mr. Verdu providing [REDACTED]
 2 [REDACTED] PX0117, is
 3 consistent with testimony that the Beat Saber idea had been languishing as just an idea for months.

4 **B. Meta as a Perceived VR Fitness Competitor**

5 **1. VR Fitness Apps Do Not Perceive Meta as a Unique Competitive Threat**

6 250. No witness involved in developing VR fitness apps testified that a concern Meta
 7 might build its own VR fitness app affected any competitive decision. *See* Koblin Test. 653:7-15
 8 (“I honestly was not the least bit concerned about Beat Saber becoming a fitness product. It seemed
 9 extremely improbable to me.”); Garcia Test. 1085:14-24 (similar); PX0062 (Milk 191:18-194:10)
 10 ([REDACTED]);
 11 PX0065 (Koblin 148:16-151:23, 169:5-11) (similar); DX1290 (Janszen Decl. ¶¶ 32-35) (dismissing
 12 the idea of Meta as a potential entrant); Janszen Test. 1131:20-1132:23, 1135:1-19 (same).

13 251. Instead, Within’s contemporaneous documents show it did not perceive Meta or Beat
 14 Saber to be a threat, e.g., Mr. Milk wrote [REDACTED]
 15 [REDACTED] DX1083 at 16; *see also* Milk Test. 697:25-698:10.

16 252. Mr. Milk also wrote [REDACTED]
 17 [REDACTED]
 18 [REDACTED] DX1083 at 10.

19 253. Consistent with these contemporaneous documents, both of Within’s founders
 20 testified that they did not think it would have made sense for Meta to modify Beat Saber into a
 21 fitness app. *See* PX0062 (Milk 32:10-14) ([REDACTED]
 22 [REDACTED]); PX0065 (Koblin 64:14-65:13, 169:3-170:4) (similar).

23 254. The other VR app developers also testified that they did not and do not consider
 24 Meta to be a likely entrant – let alone a uniquely likely entrant – but instead monitor entry from a
 25 broad array of actual and potential competitors with fitness experience specifically. *See* Garcia
 26 Test. 1085:14-1086:24 (explaining the reasons why the possibility of Meta building its own VR
 27 fitness app “never actually crossed my mind”); Janszen Test. 1147:11-15 (testifying that the
 28 possibility of Meta entering never influenced VirZOOM’s pricing strategies).

1 255. Within’s founders also testified that the company’s perception was that Meta did not
2 have the particularized skills to build a VR fitness app. *See Milk Test. 780:16-781:18* (“Meta just
3 wouldn’t be the kind of company that would be able or have the interest or appetite for creating the
4 continuous flow of daily media and content that we produced. . . . So we didn’t think that [Meta
5 entering VR fitness on its own] was likely from that standpoint.”), *728:9-25, 782:1-21; Koblin Test.*
6 *649:21-650:19* (“[I]t just seemed extremely unlikely that they would hire coaches and build a green
7 screen studio and dive deep into the psychology of what makes fitness[,] fitness.”).

8 256. Accordingly, Within’s ordinary course documentation [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED] PX0615 at 7.

13 257. Similarly, a Within document from April 2020 – more than a year before Meta and
14 Within began discussing an acquisition – [REDACTED]
15 [REDACTED]
16 [REDACTED] PX0712 at 48 (emphasis added).

17 258. And in October 2020, Within employees emailed about [REDACTED]
18 [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]. PX0665 at 1 (emphasis added); *Koblin Test. 640:7-22* ([REDACTED]
22 [REDACTED]); *see also Singer Test. 410:6-11.*

23 259. Within in fact concluded, following discussions with Beat Games and Meta, that
24 Meta would not modify Beat Saber into a VR fitness app. *See Milk Test. 782:1-21* (“We even
25 spoke to them and definitely understood that this was not a team that was going to have any interest
26 in turning their product into a fitness product. They really wanted to concentrate on making it the
27 best game that it could possibly be.”); *Koblin Test. 650:24-651:5* (“[W]e met the Beat Saber team.
28 . . . I could see that the direction that they were going was deeper and deeper into their flavor of

1 competitive gaming, which was really very opposite in some ways to what we were trying to
2 build.”); *see also* Koblin Test. 697:24-698:10.

3 260. Other VR fitness app developers likewise testified that they did not (and do not)
4 believe that Meta was (or is) uniquely likely to offer a VR fitness app because, among other
5 reasons, it lacked (and still lacks) fitness experience and VR app development expertise. *See*
6 DX1291 (Garcia Decl. ¶¶ 31-33) (developer of in-market VR fitness app “do[es] not believe Meta
7 was or is likely to [enter], and we have never had particular concern about Meta,” but instead its
8 “competitive concerns” include “possible entry by other fitness companies, like Peloton or Equinox,
9 and VR developers more broadly”).

10 261. Even at least one non-VR fitness competitor – itself a potential entrant into VR
11 fitness – internally doubted Meta’s acumen and ability as to VR fitness. *See* [REDACTED] at 1-2
12 ([REDACTED]
13 [REDACTED]).

14 262. Meta has no special advantage that makes it a uniquely likely potential VR fitness
15 app competitor – many other companies, including some with actual fitness experience and
16 production competencies, have financial resources and [REDACTED].
17 *See* DX1233 (Zyda Rep. ¶¶ 123-124) ([REDACTED]
18 [REDACTED]); DX1230 (Carlton Rep. ¶¶ 152-159) ([REDACTED]
19 [REDACTED]
20 [REDACTED]); DX1220 (Garcia 70:2-12) (similar); Garcia Test.
21 1087:14-1088:1 (“I don’t think that having resources, economical resources is enough to ensure a
22 successful app, and we have seen many large companies launching products that have failed upon
23 the launch of them.”).

24 263. The FTC’s expert, Dr. Singer, agreed that many other companies, including Apple,
25 ByteDance, Google, and Sony could develop VR fitness offerings. *See* Singer Test. 419:7-422:25.

26 264. Nor are the resources that Meta possesses (capital and a VR platform) necessary for
27 entry, as every VR fitness app that exists began as a small startup without a network of users or a
28 VR platform of its own. *See* Singer Test. 423:1-5; DX1230 (Carlton Rep. ¶¶ 56-62 & Tbl. 7)

1 ([REDACTED]); DX1233 (Zyda Rep. ¶ 81) ([REDACTED]
 2 [REDACTED]); *see also* DX1291
 3 (Garcia Decl. ¶ 31) (describing Odders Lab as “small” studio); Stojsavljevic Test. 126:18-127:2
 4 (noting that there are “hundreds” of studios with VR developers); 184:11-16 (noting that Meta has
 5 acquired 8 of approximately “300 to 500” different VR app developer studios).

6 265. Dr. Singer acknowledged that small third-party VR app developers made the nine
 7 VR fitness apps that make up the FTC’s market. *See* Singer Test. 423:1-5.

8 266. As the developer of new entrant Les Mills Bodycombat testified, “Odders Lab has
 9 never believed, or even considered, that Meta would develop a VR fitness application on its own,
 10 nor did it feel competitive pressure from the potential that it would.” DX1291 (Garcia Decl. ¶ 32).

11 **2. The FTC’s Expert’s Opinion That Potential Meta Entry Uniquely**
 12 **Spurred Innovation Is Entitled to No Weight**

13 267. Dr. Singer opined that the transaction eliminated competitive benefits from Within’s
 14 perception that Meta would independently enter. *See* Singer Test. 326:8-327:22.

15 268. Dr. Singer’s opinion that Within perceived Meta or Beat Saber as a meaningful
 16 potential competitor and made decisions based on Meta or Beat Saber specifically (as opposed to
 17 competition in general) again turns only on his non-expert and one-sided interpretation of
 18 documents and testimony. *See* PX0015 (Singer Rep. ¶¶ 161-173).

19 269. As before, the documents on which Dr. Singer relied do not support his opinions –
 20 e.g., the pertinent part of Dr. Singer’s report initially cites a series of Within documents discussing
 21 Beat Saber in June and September 2019, *before* Meta acquired Beat Games, and *before*
 22 Supernatural had even launched. *See* PX0607 (June 2019); PX0730 (Sept. 2019); *see also* Milk
 23 Test. 701:16-18 ([REDACTED]

24 [REDACTED]
 25 [REDACTED]).

26 270. Indeed, Dr. Singer cites a series of pre-Supernatural documents from 2019, in which
 27 [REDACTED]
 28 [REDACTED] *See* PX0669 (Oct. 2019); *see also* PX0627 ([REDACTED]

1 [REDACTED]
2 [REDACTED]); PX0655 ([REDACTED])
3 [REDACTED]); PX0659 ([REDACTED]).

4 271. Dr. Singer next cites documents from late 2019, following the announcement of the
5 Beat Games acquisition – still before Supernatural had launched – in which [REDACTED]
6 [REDACTED]
7 [REDACTED] PX0721 (Dec. 2019); PX0613 (Dec. 2019); *see also* Koblin
8 Test. 651:18-653:15 (regarding PX0721: “I meant that I honestly was not the least bit concerned
9 about Beat Saber becoming a fitness product. It seemed extremely improbable to me.”).

10 272. As discussed above, Dr. Singer also cites documents [REDACTED]
11 [REDACTED]
12 [REDACTED]. *See* PX0712 at 48; PX0615 at 7; *see also*
13 PX0674 at 82 ([REDACTED])
14 [REDACTED]).

15 273. In another document on which Dr. Singer relies, [REDACTED]
16 [REDACTED]. *See* PX0665 at 2.

17 274. In other documents that Dr. Singer identifies, [REDACTED]
18 [REDACTED]
19 [REDACTED] *See* PX0608; *see also*
20 PX0651 ([REDACTED])
21 [REDACTED]); *see also* PX0778 ([REDACTED])
22 [REDACTED]
23 [REDACTED]).

24 275. Dr. Singer also cites a December 2020 email from Within, *see* PX0621, which Dr.
25 Singer acknowledges has “no mention of Beat Saber explicitly” and is about “just general future
26 competition,” PX0015 (Singer Rep. ¶ 167 n.312). *See also* Milk Test. 710:18-711:6 ([REDACTED])
27 [REDACTED]
28 [REDACTED]).

1 276. Dr. Singer also cites Within documents *minimizing* the threat from FitBeat – the
 2 single two-minute soundtrack that Beat Games launched and later abandoned as an experiment on
 3 Beat Saber. *See* PX0747 ([REDACTED]
 4 [REDACTED]).

5 277. Ultimately, Dr. Singer could not identify any feature that Within launched or price
 6 decision that it specifically implemented because it feared competition from Meta. *See* Singer Test.
 7 409:9-410:21; Milk Test. 745:14-16 (“Q. Have you added any features or offerings to Supernatural
 8 because of potential competition from Meta? A. No.”); Koblin Test. 638:1-21 (same).

9 278. By contrast, Within’s founders testified that the company did not worry about Meta
 10 modifying Beat Saber into a VR fitness app. *See* Milk Test. 697:25-698:10 [REDACTED]
 11 [REDACTED]
 12 [REDACTED]
 13 [REDACTED]; Koblin Test. 616:16-617:25 (similar).

14 279. Indeed, Mr. Milk testified that [REDACTED]
 15 [REDACTED]
 16 [REDACTED] – further supporting Within’s
 17 perception that Meta was not a threat. Milk Test. 682:4-17.

18 **V. Meta’s Reasons for the Deal and Post-Acquisition Incentives**

19 **A. Meta Decided To Acquire Within To Promote VR Adoption and Growth**

20 280. Even though Meta executives never gave active consideration to building a first-
 21 party VR fitness app, employees at Reality Labs were interested in fitness as a promising VR use
 22 case [REDACTED]. *See* DX1021
 23 at 1 ([REDACTED]
 24 [REDACTED]
 25 [REDACTED]); PX0207 at 12, 14 ([REDACTED]
 26 [REDACTED]); *see also* PX0050 (Zuckerberg 153:7-154:2) ([REDACTED]
 27 [REDACTED]); Zuckerberg Test.
 28 1291:10-25; 1304:6-1305:2; 1326:5-1327:24 (explaining fitness is not a “top three” priority).

1 281. VR fitness appeals to a different demographic (more female and older) than VR
2 video games, and attracting this new audience to VR could grow the overall ecosystem by attracting
3 new third-party developers – including for VR use cases beyond fitness – that can attract even more
4 users. *See Milk Test.* 684:16-19; PX0066 (Rubin 132:7-14) (VR fitness appeals to “on average an
5 older person, on average more women” than “our gaming population”); PX0054 (Bosworth 168:20-
6 169:6, 187:13-21) (“It’s an entirely new category of customer that can help you grow the appeal,
7 again, on the path toward general computing.”); PX0050 (Zuckerberg 168:2-169:44, 235:17-236:1)
8 (discussing how VR fitness can expand the VR audience); *see also* DX1100 at 22 ([REDACTED]
9 [REDACTED]); DX1230 (Carlton
10 Rep. ¶ 66) ([REDACTED]); Carlton Test. 1372:6-19 (noting that VR fitness apps “seem to attract” a
11 “different demographic” than “VR games” that tend to appeal to “a more male, younger audience”).

12 282. Appealing to a broader audience is important to make the VR platform sustainable
13 and commercially successful. *See Stojisavljevic Test.* 112:18-113:4 (“[I]f your demographics are
14 out of whack with the actual population, it tends to cause issues with broad adoption and you want
15 to try to correct that by getting customers the type of content that would diversify your audience.”).

16 283. But that does not mean VR fitness “is going to be the killer app” – no evidence
17 suggests “enough people” will want to exercise on VR relative to other fitness options off-VR –
18 even though fitness might be another reason for people to buy VR headsets. Carlton Test. 1372:20-
19 1373:5; *see also* Rabkin Test. 801:22-803:20 (non-fitness use cases are over 95% of VR time
20 spent); Zuckerberg Test. 1291:10-25, 1304:6-22, 1326:5-1327:24 (fitness is not a priority use case).

21 284. Meta determined it would need to promote the VR fitness use case by investing in an
22 existing first-party fitness studio, writing that its [REDACTED]

23 [REDACTED]
24 [REDACTED] PX0127 at 4.

25 285. In the summer of 2021, Meta became interested in a potential acquisition of Within
26 for several reasons – to start, Meta could support the VR fitness use case by acquiring and scaling a
27 promising VR fitness app, and Supernatural had been able to get some traction with early adopters.
28

1 See PX0055 (Verdu 236:12-237:1, 246:18-247:17) (explaining Supernatural’s traction and Meta’s
2 “interest in the category”).

3 286. Meta had experience with VR app acquisitions – e.g., it acquired Beat Games when
4 it had approximately 10 employees, scaling Beat Saber into one of the best-selling VR apps of all
5 time, continuing to make it available on non-Meta VR platforms (the Sony PSVR), and making it
6 available to Quest 2 purchasers for free for a time. See PX0066 (Rubin 141:21-142:18) ([REDACTED]
7 [REDACTED]); DX1230 (Carlton Rep. ¶¶ 181-182,
8 191-193, Tbl. 19 & App’x Tbl. 11) (discussing Meta’s post-acquisition growth of Beat Saber);
9 DX1233 (Zyda Rep. ¶¶ 30, 127, 130-131) (discussing Beat Saber’s growth and innovations
10 following the Meta acquisition, [REDACTED]
11 [REDACTED]
12 [REDACTED]).

13 287. Meta had also successfully used other VR developer acquisitions – including Beat
14 Games – as laboratories for testing VR hardware and software improvements that it then freely
15 shares with competitive VR app developers to attract them to the Quest platform so that they might
16 build out the ecosystem with additional apps. See DX1212 (Rubin 30(b)(6) 8:14-12:5, 53:12-55:13)
17 ([REDACTED]
18 [REDACTED]
19 [REDACTED]
20 [REDACTED]); DX1039 at 4 ([REDACTED]
21 [REDACTED]
22 [REDACTED]); see also DX1036 at 6 ([REDACTED]
23 [REDACTED]
24 [REDACTED]); Zyda
25 Test. 1227:23-1228:12 (explaining that Meta has done this previously with acquisitions).

26 288. As an example of this technology-sharing process, Meta acquired a studio called
27 Twisted Pixel that “pioneered” important VR technology – hand orientation while in VR – that
28 Meta then shared with other (third-party) VR app developers so they could build apps for VR faster.

1 Stojavljevic Test. 115:9-19 (“Instead of taking them [app developers] two years to learn it [hand
2 orientation in VR], maybe it takes them three months [when Meta shares the technology].”); *see*
3 *also* Rabkin Test. 808:6-809:5 (similar); PX0054 (Bosworth 183:16-24, 185:19-186:6, 203:21-
4 205:8) ([REDACTED]
5 [REDACTED]).

6 289. As Mark Rabkin, Meta’s VP of VR in Reality Labs, explained, Meta gives third-
7 party VR app developers significant technical support – “all free” – because “[w]e want as many
8 developers to be developing for our platform as possible.” Rabkin Test. 809:1-9 (testifying that this
9 strategy works to grow the VR ecosystem, but “slowly and painstakingly and at great expense”).

10 290. [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED] *See*
14 Milk Test. 732:2-4 ([REDACTED]
15 [REDACTED]); PX0062 (Milk 129:21-130:4, 131:5-133:17) ([REDACTED]
16 [REDACTED]); *see also* Bosworth Test. 1008:21-25 (noting Meta’s concern that Apple would have acquired
17 Within and made Supernatural “exclusive” to future Apple devices); PX0050 (Zuckerberg 154:3-
18 21) ([REDACTED]); PX0074 (Casanova 93:6-
19 15) ([REDACTED]).

20 291. [REDACTED], Meta wanted to use its technical and financial resources to grow and
21 scale Supernatural, to the benefit of the VR ecosystem broadly. *See* PX0384 at 1 ([REDACTED]
22 [REDACTED]
23 [REDACTED]
24 [REDACTED]
25 [REDACTED]); *see also* DX1212 (Rubin 30(b)(6) 27:25-28:20, 34:24-36:3) ([REDACTED]
26 [REDACTED]
27 [REDACTED]
28 [REDACTED]).

1 292. After negotiations, Within and Meta executed the Merger Agreement on October 22,
2 2021. *See* DX1072 (Merger Agreement).

3 293. The acquisition has remained in limbo for more than a year, which has already
4 created hardships for Within and its employees, [REDACTED]
5 [REDACTED]. *See* Milk Test. 788:19-789:25; Koblin Test. 640:23-642:16; PX0062 (Milk
6 212:20-213:19).

7 294. [REDACTED]
8 [REDACTED]. *See* PX0062 (Milk 19:8-12, 172:4-22, 194:11-14, 212:20-215:3).

9 **B. Meta’s Pro-Competitive Incentives To Grow Supernatural and VR Broadly**

10 295. Meta is acquiring Within to scale Supernatural and grow the overall VR ecosystem –
11 including by sharing innovations with other app developers, *see supra* ¶¶ 287-288 – so that Meta
12 can keep up with intense, dynamic, and fast-moving VR/AR competition. *See* PX0050 (Zuckerberg
13 30:10-31:1, 35:13-24, 150:16-152:11, 152:22-156:13, 159:8-13, 226:19-227:18) ([REDACTED]
14 [REDACTED]); Zuckerberg Test. 1328:20-1329:18,
15 1340:19-1342:5 (similar); DX1212 (Rubin 30(b)(6) 53:12-56:7) ([REDACTED]
16 [REDACTED]
17 [REDACTED]); PX0054 (Bosworth 148:9-149:5, 211:1-216:4)
18 (explaining reasons for the acquisition); DX1230 (Carlton Rep. ¶¶ 34-62, 171-193) (explaining
19 growth and competition in this space, as well as the acquisition’s likely pro-competitive effects).

20 296. As Mr. Bosworth testified, “we saw an opportunity where we could really help,”
21 including by allowing Within to “amortize across a large base of use cases, a good example being
22 music rights” – particularly “international music rights, which can be quite expensive” – and “that
23 would be something that allow[s] Supernatural, upon joining our company, to be able to reach a
24 broader audience, a global audience that today is not available to them.” Bosworth Test. 1008:5-20.

25 297. Meta can use the Within team to help improve the platform for fitness to the benefit
26 of all VR fitness app developers with whom Meta will share technology improvements (and who
27 will benefit from hardware optimizations for fitness). *See* Zuckerberg Test. 1338:12-1342:5
28 (explaining that a “tighter feedback loop between the developer and platform can inform platform

1 features”); Bosworth Test. 1009:1-1010:10 (discussing how Meta can make its “hardware . . . better
 2 suited for that [fitness] use case”); Rabkin Test. 859:12-861:21 (“[M]aybe we would want, in
 3 fitness, to develop brand new hardware. . . . There are a lot of things that we can do with an
 4 acquired first party investment that are strategic in a platform that is hard for us to do externally.”);
 5 DX1290 (Janszen Decl. ¶ 30) (“I expect Meta will be able to use Within as a studio to . . . optimize
 6 the Quest hardware for fitness use.”); *see also* DX1212 (Rubin 30(b)(6) 8:14-12:5, 53:12-55:13).

7 298. It would be directly contrary to Meta’s strategy – and indeed damaging to it – for
 8 Meta to raise the price of Supernatural (or make it less innovative) and thereby make it less
 9 attractive to consumers. *See* DX1230 (Carlton Rep. ¶¶ 171-193 & App’x Tbl. 11); Carlton Test.
 10 1370:14-1371:11 (“[Meta] want[s] people to have the headset and use it for a lot of things, and the
 11 only way to do that is if you have a great app.”); *see also* *See* Milk Test. 786:22-788:17 (testifying
 12 that Within’s expectation is the acquisition will allow it to scale); Koblin Test. 654:2-25 (similar).

13 299. A price increase, particularly one above competitive levels (or a quality degradation),
 14 would make the app less attractive to consumers, who would then be less likely to buy a Quest
 15 headset to enjoy the app, which would depress Quest sales, driving away app developers, which
 16 would drive away customers even further – a destructive cycle or feedback loop damaging to
 17 Meta’s multi-billion-dollar VR investments. *See* DX1230 (Carlton Rep. ¶¶ 30, 172-175, 180-182)
 18 (explaining Meta’s economic incentives); DX1233 (Zyda Rep. ¶¶ 100-108) ([REDACTED]
 19 [REDACTED]
 20 [REDACTED]).

21 300. The non-party VR app developers who testified uniformly stated that the acquisition
 22 is beneficial to competition, because it is a vote of confidence in this nascent space, evidence of an
 23 exit ramp that will encourage outside investment and spur more app development and innovation,
 24 and an overall stimulus to growth of the VR/AR ecosystem. *See* DX1291 (Garcia Decl. ¶¶ 20-26)
 25 (“[T]he acquisition of Within could be a vote of confidence in VR generally, and in fitness
 26 applications in particular.”); Garcia Test. 1090:5-16 (similar); DX1290 (Janszen Decl. ¶¶ 29-31) (“It
 27 will encourage others to develop VR products, including fitness products, because it is important to
 28 entrepreneurs to see that companies are investing in and are willing to acquire and grow apps in this

1 PX0063 (Rabkin 42:24-43:8, 44:3-45:14) ([REDACTED]
2 [REDACTED]); DX1220 (Garcia 63:20-64:14, 66:21-67:11).

3 304. Without the acquisition, Within anticipates [REDACTED]

4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]. *See Milk Test.* 755:25-758:13.

8 305. [REDACTED]

9 [REDACTED]. *Koblin Test.*
10 663:24-665:8.

11 **C. The FTC Expert’s Predictions of Harm Are Not Credible**

12 306. Dr. Singer offered a calculation designed to show that app categories become, on
13 average, more deconcentrated when Meta produces its own app in that category “de novo,” rather
14 than acquiring an app in that category – a calculation that Dr. Singer claimed supported the
15 conclusion that Meta’s “de novo” entry is better for competition than Meta’s entry through an
16 acquisition. *See Singer Test.* 344:9-345:21; PX0015 (Singer Rep. Tbl. 5).

17 307. Dr. Carlton explained that this calculation was incorrect as a matter of economic
18 theory and also done incorrectly. *See Carlton Test.* 1409:8-1414:10; DDX11.15.

19 308. *First*, Dr. Singer did nothing to show that the relative changes in concentration he
20 observed were connected to any anticompetitive effects: since an increase in concentration could
21 reflect the fact that an acquired app was improved and attracted more users as a result, there is no
22 basis to assert that an increase in concentration reflects any negative effects on consumers. *See*
23 *Carlton Test.* 1409:15-1410:2; DDX11.16.

24 309. Dr. Carlton examined what happened to prices of the apps that Meta acquired – and
25 he found no evidence that Meta had ever increased the price of an acquired app; that finding is
26 consistent with Meta’s incentive to attract users to purchase additional Quest headset by making
27 available attractive VR content that is high quality and competitively priced. *See Carlton Test.*
28 1410:10-24; DX1230 (Carlton Rep. Tbl. 14).

1 310. *Second*, Dr. Singer did not show – or even claim – that the categories he was
2 examining were relevant antitrust markets; Dr. Carlton explained that this made his calculation of
3 “concentration” meaningless. Carlton Test. 1411:3-13.

4 311. *Third*, Dr. Carlton showed that Dr. Singer calculated his measure of concentration –
5 HHI – incorrectly, because he looked at market shares of apps within a particular category without
6 accounting for common ownership of those apps, as the *Horizontal Merger Guidelines* require. *See*
7 Carlton Test. 1411:17-1412:14 (explaining that if one followed Dr. Singer’s approach, a horizontal
8 merger of firms producing competing products would produce no increase in concentration).

9 312. Dr. Carlton redid Dr. Singer’s HHI calculation, accounting for common ownership
10 of multiple apps within a particular category; the corrected calculation reversed Dr. Singer’s result,
11 showing that in categories which Meta entered through acquisition, HHIs went down (the category
12 became less concentrated) by an average of 314; in categories which Meta entered through de novo
13 entry, HHIs went *up* by an average of 14. *See* Carlton Test. 1413:2-4; DDX11.17; DX1230
14 (Carlton Rep. App’x Tbls. 9-10).

15 313. Dr. Carlton also showed that Dr. Singer’s calculation ignored other factors and
16 produced nonsense results – for example, it showed that the same acquisition both increased
17 concentration (in one category) and substantially decreased concentration (in another category) –
18 underscoring that the calculation is completely uninformative of competitive effects of entry by
19 acquisition vs. de novo entry. *See* Carlton Test. 1413:13-1414:10.

20 314. Dr. Singer also claimed that Meta would have an incentive after the transaction
21 closes to raise the price of Supernatural because Meta will recapture some of the revenue it loses
22 from subscribers leaving Supernatural through use of other VR fitness apps. *See* Singer Test.
23 345:22-347:17.

24 315. Meta has never raised the price of a single VR app after an acquisition. *See*
25 DDX11.14; DX1230 (Carlton Rep. Tbl. 14); Carlton Test. 1410:3-24 (“it is just not true that Meta
26 raises the price” – instead, “the prices never change”), *id.* 1415:23-1416:8 (similar).

27 316. Dr. Carlton explained there is a good reason for that – Meta’s overriding economic
28 incentive is to increase the output of Supernatural and other VR apps in order to attract new users to

1 buy and use Meta’s VR headset. *See* Carlton Test. 1373:13-1375:10 (explaining why raising the
2 price of Supernatural would be nonsensical), *id.* 1410:20-24, 1415:1-22 (similar); DX1230 (Carlton
3 Rep. ¶¶ 30, 172-175, 180-182).

4 317. Price increases would drive at least *some* consumers away from the acquired app,
5 which would increase the risk those users stop using their Quest headsets altogether – as is the case
6 for ██████████ who stop using Supernatural – harming Meta’s billions of dollars in
7 investment. *See* Bosworth Test. 1014:23-1015:12 (explaining that Meta has “no plan to raise the
8 price to consumers” because what Meta “really want[s], in this entire space in virtual reality, we
9 want as many people to gain access to virtual reality as possible”).

10 318. Dr. Singer also claimed that if Meta acquires Supernatural, it will raise barriers to
11 entry by denying platform access to competing VR apps. *See* PX0015 (Singer Rep. ¶¶ 93-105).

12 319. Dr. Carlton explained that Dr. Singer’s prediction was contrary to Meta’s overriding
13 economic incentive to attract users to the Quest platform as well as evidence of Meta’s past
14 conduct: it has provided substantial technical and financial assistance to third party apps, including
15 apps that compete with Meta’s first party apps (even including those that compete against Beat
16 Saber – Meta’s most successful VR app to date). Carlton Test. 1416:10-1417:24.

17 320. Mr. Bosworth elaborated that such irrational behavior (restricting platform access)
18 “would be a disaster” because “acquiring a studio, whether it’s Beat Games or Within, will
19 absolutely cause independent developers to pay very close attention to what follows, and if they see
20 that we’re not treating those studios fairly relative to third party developers, then we will have done
21 tremendous damage to our vision of having this platform ecosystem where developers feel that they
22 can build a business and consumers feel that they can find a great selection of software.” Bosworth
23 Test. 1020:6-1021:24 (noting developers have access to other VR/AR platforms for distribution).

24 321. Rather than restrict access, Meta has instead spent “a lot of money on subsidizing
25 developers” and “even though Meta may have competing products.” Carlton Test. 1417:6-16.

26 322. Dr. Singer also claimed that Meta has an incentive to keep Supernatural exclusive to
27 Quest (Within has decided to limit Supernatural to Quest for now) and subsequently disadvantage
28 other VR fitness apps. *See* Singer Test. 350:9-351:12.

1 323. Setting aside that this harm relates to competition between VR/AR device
2 manufacturers – not the “VR dedicated fitness” app market Dr. Singer tries to define – it too ignores
3 Meta’s economic incentives. *See Rabkin Test.* 814:6-815:4 (“one app does not a vertical or use
4 case make,” and “our platform strategy” is “getting as many people as possible” on VR via “as
5 many hit apps as possible” in “every category”); DX1230 (Carlton Rep. ¶¶ 42-44, 144, 183-185)
6 ([REDACTED]
7 [REDACTED]
8 [REDACTED]); *Stojsavljevic Test.* 104:1-5 (“But where it’s been
9 available on other devices, we keep it there. It would really upset the customers if we took it off
10 that device, and it’s just generally not good for the brand or for the market.”).

11 324. Rather than foreclose its acquired VR apps from appearing on other VR/AR
12 platforms, Meta has continued to make its most popular app (Beat Saber) available on the rival
13 Sony PSVR. *See Stojsavljevic Test.* 102:11-22; *Zyda Test.* 1226:5-1227:14 (Meta made
14 multiplayer mode available for Beat Saber on the Sony PSVR; Dr. Singer presented no evidence
15 that Meta was responsible for the removal of that functionality from the PSVR platform); *see also*
16 *Bosworth Test.* 1019:20-25 (noting Meta’s “intention to make [Horizon Worlds] cross platform”).

17 325. [REDACTED]
18 [REDACTED] *See Bosworth Test.* 1018:7-23; *Rabkin Test.* 853:2-
19 854:7; PX0077 (Beck 71:15-22).

20 326. Mr. Bosworth testified that Meta will keep Beat Saber available on other VR/AR
21 platforms, which he called a “good example” for Meta’s “plan” after acquiring Supernatural. *See*
22 *Bosworth Test.* 1018:7-23 ([REDACTED]
23 [REDACTED]
24 [REDACTED]).

25 327. Indeed, part of Meta’s contemporaneous rationale for acquiring Within was that
26 [REDACTED]
27 [REDACTED] PX0022; *see also Milk Test.* 788:7-17 (explaining that the acquisition could *help* bring
28 Supernatural to non-Meta VR/AR platforms because porting across multiple devices requires more

1 resources that Meta can provide); Koblin Test. 654:10-655:6 (stating that expansion of Supernatural
2 to other platforms after acquisition closes has “definitely been what was communicated to us”).

3 328. In all cases, Dr. Singer does not opine that Supernatural is a “must have input” that a
4 VR/AR platform needs to succeed; he merely speculates that it could reach that level. *See Singer*
5 *Test.* 350:16-22 (Supernatural “*could* be the next must have input”) (emphasis added).

6 329. Dr. Carlton explained that the evidence does not support either an assertion that VR
7 fitness is critical to the success of a VR platform or that a competing platform would be unable to
8 develop – or attract the development of – a rival VR fitness app if that use case is popular. *See*
9 *Carlton Test.* 1431:15-1433:2.

10 330. Dr. Singer opines that fitness is an important use case for VR/AR to succeed, but he
11 also acknowledges that [REDACTED]
12 [REDACTED] – either already feature or could build VR fitness apps. *See supra* ¶ 103.

13 331. Dr. Carlton explained why the loss of one potential entrant (Meta) does not make a
14 difference to competition in a market where “there’s a lot of entry, and there’s no reason to think it
15 won’t continue.” *Carlton Test.* 1406:23-1408:16 (explaining why both VR/AR platform entry and
16 VR fitness app entry means there is no “competitive concern” from removing just one potential
17 entrant because “if there are a lot of potential entrants, it doesn’t matter if you get rid of Meta”).

PROPOSED POST-HEARING CONCLUSIONS OF LAW

I. Legal Standards

A. Preliminary Injunction

21 332. Section 13(b) of the Federal Trade Commission Act allows the FTC to obtain a
22 “preliminary injunction” where a person “is violating, or is about to violate, any provision of law
23 enforced by the Federal Trade Commission” – including Section 7 of the Clayton Act, 15 U.S.C.
24 § 18 – and where the FTC makes “a proper showing that, weighing the equities and considering
25 the Commission’s likelihood of ultimate success, such action would be in the public interest.”
26 15 U.S.C. § 53(b); *see also FTC v. Warner Commc’ns Inc.*, 742 F.2d 1156, 1159-60, 1162 (9th Cir.
27 1984) (per curiam) (FTC must raise “serious, substantial, difficult and doubtful” questions “going to
28 the merits”).

1 **1. Likelihood of Success on the Merits**

2 333. Section 13(b) requires considering the FTC’s “likelihood of ultimate success” before
3 preliminarily enjoining a transaction. 15 U.S.C. § 53(b). The FTC must prove “some chance of
4 probable success on the merits.” *FTC v. World Wide Factors, Ltd.*, 882 F.2d 344, 347 (9th Cir.
5 1989); *see also FTC v. Affordable Media*, 179 F.3d 1228, 1233 (9th Cir. 1999).

6 334. In assessing the FTC’s likelihood of success, courts are “charged with exercising
7 their ‘independent judgment’ and evaluating the FTC’s case and evidence on the merits.” *FTC v.*
8 *Meta Platforms Inc.*, 2022 WL 16637996, at *5 (N.D. Cal. Nov. 2, 2022); *see also FTC v. Lab.*
9 *Corp. of Am.*, 2011 WL 3100372, at *15 (C.D. Cal. Mar. 11, 2011) (*Warner* “serious question”
10 standard does not eliminate “FTC’s need to demonstrate a likelihood of success on the merits”).

11 335. The Court has explained that it will “predict likelihood of success on the merits at the
12 FTC’s administrative proceedings.” *Meta*, 2022 WL 16637996, at *4.

13 **2. Equitable Balancing**

14 336. Section 13(b) also requires the FTC to show that a balancing of the equities favors
15 preliminary injunctive relief. *See Lab. Corp.*, 2011 WL 3100372, at *15, *21 (“[T]he FTC must
16 present evidence and make an actual showing [that] the equities favor enjoining the transaction.”).
17 Equitable balancing under Section 13(b) includes consideration of both “public equities” and the
18 “private interests” of the parties. *Id.* at *21-22.

19 **B. Section 7 of the Clayton Act**

20 337. Section 7 prohibits an acquisition where its effects “may be substantially to lessen
21 competition, or to tend to create a monopoly.” 15 U.S.C. § 18.

22 338. To make that showing, the FTC must prove the putative acquisition would likely
23 harm consumers in a relevant antitrust market. *See United States v. Baker Hughes Inc.*, 908 F.2d
24 981, 900 n.12 (D.C. Cir. 1990) (Section 7 requires “a judgment whether the challenged acquisition
25 is likely to hurt consumers”); *see also United States v. AT&T, Inc.*, 916 F.3d 1029, 1032 (D.C. Cir.
26 2019) (similar); *FTC v. Occidental Petroleum Corp.*, 1986 WL 952, at *15 (D.D.C. Apr. 29, 1986).

27 339. Proving harm to consumers entails showing the “combined entities” would likely
28 “exercise market power by raising prices and restricting the availability of a product.” *FTC v.*

1 *Foster*, 2007 WL 1793441, at *51 (D.N.M. May 29, 2007); *see Malaney v. UAL Corp.*, 2010 WL
2 3790296, at *5 (N.D. Cal. Sept. 27, 2010), *aff'd*, 434 F. App'x 620 (9th Cir. 2011); *see also Rebel*
3 *Oil Co. v. Atl. Richfield Co.*, 51 F.3d 1421, 1433 (9th Cir. 1995) (“[R]eduction of competition does
4 not invoke the Sherman Act until it harms consumer welfare.”).

5 340. Harm to competition that harms consumers is a necessary element of any Section 7
6 claim invoking “potential competition” as a theory of liability. *See United States v. Marine*
7 *Bancorporation, Inc.*, 418 U.S. 602, 625 (1974); *see also Missouri Portland Cement Co. v. Cargill,*
8 *Inc.*, 498 F.2d 851, 860 (2d Cir. 1974) (Friendly, J.).

9 341. For a Section 7 claim, “antitrust theory and speculation cannot trump facts, and even
10 Section 13(b) cases must be resolved on the basis of the record evidence relating to the market and
11 its probable future.” *FTC v. Arch Coal, Inc.*, 329 F. Supp. 2d 109, 116-17 (D.D.C. 2004); *see also*
12 *Adaptive Power Sols., LLC v. Hughes Missile Sys. Co.*, 141 F.3d 947, 952 (9th Cir. 1998)
13 (“Antitrust claims must make economic sense.”).

14 342. “[A] failure of proof in any respect will mean the transaction should not be
15 enjoined.” *Arch Coal*, 329 F. Supp. 2d at 116.

16 **C. Loss of “Potential Competition” as a Basis for Section 7 Liability**

17 343. There is doubt over the extent to which an alleged loss of potential competition can
18 support a Section 7 claim. The FTC has not litigated a “perceived potential competition” claim in
19 nearly 40 years, and the Supreme Court has twice expressly declined to endorse “actual potential
20 competition” claims. *See Marine Bancorporation*, 418 U.S. at 639 (regarding the validity of actual
21 potential competition, “we do not reach it”); *see also United States v. Falstaff Brewing Corp.*, 410
22 U.S. 526, 537 (1973) (“leav[ing] for another day the question” of the theory’s validity).

23 344. Under the prevailing substantive standard set by the Supreme Court in *Marine*
24 *Bancorporation* – which tightly limited the potential competition theory of Section 7 liability – the
25 FTC has lost each of the three potential competition cases it has brought seeking a preliminary
26 injunction under Section 13(b). *See FTC v. Tenneco, Inc.*, 433 F. Supp. 105 (D.D.C. 1977) (denying
27 Section 13(b) injunction); *FTC v. Atl. Richfield Co.*, 549 F.2d 289 (4th Cir. 1977) (same); *FTC v.*
28 *Steris Corp.*, 133 F. Supp. 3d 962 (N.D. Ohio 2015) (same).

1 345. The potential competition theory of Section 7 liability “comes into play *only*” in
2 relevant antitrust markets “where there are dominant participants in the target market engaging in
3 interdependent or parallel behavior and with the capacity effectively to determine price and total
4 output of goods or services,” but that “fashion their behavior to take into account the presence of a
5 potential entrant.” *Marine Bancorporation*, 418 U.S. at 619, 630-31 (emphasis added); *see also*
6 *Lektro-Vend Corp. v. Vendo Corp.*, 500 F. Supp. 332, 362 (N.D. Ill. 1980) (collecting cases), *aff’d*,
7 660 F.2d 255 (7th Cir. 1981).

8 346. A potential competition claim thus requires both oligopoly structure (few firms
9 protected by high barriers to entry) *plus* coordinated behavior. *See Tenneco, Inc. v. FTC*, 689 F.2d
10 346, 352-53 (2d Cir. 1982) (evaluating additional factors in the presence of high concentration
11 ratios); *Republic of Texas Corp. v. Bd. of Governors of Fed. Rsrv. Sys.*, 649 F.2d 1026, 1044 (5th
12 Cir. Unit A June 1981) (oligopoly is “necessary” to the doctrine); *United States v. Siemens Corp.*,
13 621 F.2d 499, 505 n.6 (2d Cir. 1980) (same).

14 347. *Marine Bancorporation* is the controlling law for such claims – that precedent is not
15 limited to a particular industry or regulatory context. *See Tenneco*, 433 F. Supp. at 105-06 (auto
16 equipment); *Atl. Richfield*, 549 F.2d at 291 (petroleum); *Republic of Texas*, 649 F.2d at 1028
17 (banking); *Siemens*, 621 F.2d at 501 (healthcare products); *cf. Marine Bancorporation*, 418 U.S. at
18 625-27 (articulating the standards for potential competition generally and then considering
19 “application of the doctrine to commercial banking”).

20 **1. Actual Potential Competition**

21 348. “Actual potential competition” claims cannot proceed without at least clear proof
22 that, absent the acquisition, the acquirer would enter on its own in the near term. Otherwise,
23 whether a firm would have taken some alternative course (build) in the absence of its chosen path
24 (buy) is too speculative to support a showing of likely harm to competition under Section 7. *See*
25 *Marine Bancorporation*, 418 U.S. at 622-23 (declining to accept the theory; noting that Section 7
26 “deals in probabilities, not ephemeral possibilities”).

27 349. “The novelty of the [actual potential competition] doctrine and the absence of
28 definitive authority sanctioning it and defining its parameters could well serve as a basis for denial

1 of a preliminary injunction under § 13(b), since it is difficult, if not impossible, to determine [the]
2 FTC’s chances of ultimate success when the law is so uncertain and the parameters of the doctrine
3 obscure.” *Atl. Richfield*, 549 F.2d at 294; *see also Lektro-Vend*, 500 F. Supp. at 362 (“The
4 difficulty of meeting these criteria has resulted in almost uniform rejection of potential competition
5 theories.”).

6 350. No decision of the Supreme Court, the Ninth Circuit, or this District has sustained an
7 actual potential competition claim – and other courts have doubted its existence altogether. *See*
8 *Siemens*, 621 F.2d at 504 (“[o]ne possible reason for the Supreme Court’s reluctance to embrace the
9 doctrine is that it rests on speculation”); *BOC Int’l Ltd. v. FTC*, 557 F.2d 24, 25 (2d Cir. 1977) (“the
10 issue of the doctrine’s basic validity” is unresolved); *United States v. Aetna Inc.*, 240 F. Supp. 3d 1,
11 75 (D.D.C. 2017) (similar).

12 351. In light of the Supreme Court’s guidance, the FTC itself has limited the doctrine to
13 cases in which there is “clear proof” that the acquirer would actually enter the target market on its
14 own but for the acquisition. *In re B.A.T. Indus., Ltd.*, 1984 WL 565384, at *10 (FTC Dec. 17, 1984)
15 (“Our review of the legal and economic bases for the actual potential competition doctrine has
16 persuaded us that clear proof that independent entry would have occurred but for the merger or
17 acquisition should be required to establish that a firm is an actual potential competitor.”); *see also*
18 *Siemens*, 621 F.2d at 506-07 (affirming order denying preliminary injunction where there was no
19 “clear proof that entry would occur”); *Atl. Richfield*, 549 F.2d at 294 (similar).

20 352. The “clear proof” standard flows directly from the Supreme Court’s warning that
21 “[u]nequivocal proof that an acquiring firm actually would have entered de novo but for a merger is
22 rarely available” – causing the Court to doubt whether there could *ever* be such a claim. *Marine*
23 *Bancorporation*, 418 U.S. at 624; *see also DeHoog v. Anheuser-Busch InBev SA/NV*, 899 F.3d 758,
24 764-65 (9th Cir. 2018) (rejecting potential competition claim as “classic speculative conclusion”).
25 The Supreme Court’s warning that non-speculative proof is “rarely available” did not lower the bar
26 for proving an actual potential competition claim; it did the opposite – “implying that the standard is
27 one of ‘unequivocal proof.’” *Atl. Richfield*, 549 F.2d at 294; *see id.* at 295 (noting that *Falstaff* did
28

1 not disturb the district court’s finding – based “almost solely” on crediting “management’s post-
2 acquisition statements that [it] would not enter de novo” – that Falstaff was not a potential entrant).

3 353. The FTC proposes a lower standard than the *B.A.T. Industries* “clear proof” test that
4 will apply in the administrative proceeding – arguing it need show only a mere “reasonable
5 probability” of actual entry – but that standard is contrary to the weight of authority. *See Atl.*
6 *Richfield*, 549 F.2d at 294-95; *B.A.T. Indus.*, 1984 WL 565384, at *9 n.34; *see also Siemens*, 621
7 F.2d at 506-07 (rejecting potential competition claim, even under “reasonable probability” standard,
8 and stating that “preferably” there would be “clear proof that entry would occur” for such claims
9 “since the loss threatened by the acquisition is not of existing, but only of potential, competition”).

10 354. Nor does the FTC’s lower standard draw support from unrelated Section 7 cases that
11 have nothing to do with potential competition, i.e., traditional Section 7 cases in which the
12 government must show a “reasonable probability” that an acquisition will produce *anticompetitive*
13 *effects*. *See Warner*, 742 F.2d at 1160 (*not* a potential competition case; requiring “reasonable
14 probability of anticompetitive effect”). To borrow here that separate standard for that separate
15 element of a traditional Section 7 claim would improperly collapse the interaction between potential
16 competition and Section 7. *See supra* ¶¶ 339-340.

17 355. The Eighth Circuit’s decision in *Yamaha Motor Co. v. FTC*, 657 F.2d 971 (8th Cir.
18 1981), did not lower the bar for actual potential competition claims. In that case about a joint
19 venture, the competitor already produced the competitive product – the only question related to its
20 *agreement* that it would not sell in the U.S. geographic market, as it *already had* twice before. *See*
21 *id.* at 980 & n.12. *Yamaha* is therefore an inapposite case about actual competition between
22 existing rivals – not whether a potential entrant would build a business from scratch. *See Fraser v.*
23 *Major League Soccer, L.L.C.*, 97 F. Supp. 2d 130, 141 (D. Mass. 2000) (stating about *Yamaha*:
24 “[t]he businesses already existed; it was the competition between them that was only ‘potential’”).

25 356. In any event, this dispute is not material to the Court’s decision here, as the evidence
26 is insufficient to satisfy even the FTC’s proposed standard.

27

28

1 **2. Perceived Potential Competition**

2 357. The “perceived potential competition” theory is also tenuous – the Supreme Court
 3 has limited it to cases in which “the acquiring firm’s premerger presence on the fringe of the target
 4 market *in fact* tempered oligopolistic behavior on the part of existing participants in that market.”
 5 *Marine Bancorporation*, 418 U.S. at 624-25 (emphasis added). That requires showing market
 6 participants were coordinating or colluding on price – or could have engaged in equivalent
 7 oligopoly conduct – and stopped or avoided such conduct specifically because of fear that the
 8 acquirer specifically might enter to take advantage of supracompetitive prices (rather than other
 9 potential competitors that can discipline such conduct even without the acquirer waiting in the
 10 wings). *See Tenneco*, 689 F.2d at 355; *see also Ginsburg v. InBev NV/SA*, 649 F. Supp. 2d 943, 947
 11 (E.D. Mo. 2009), *aff’d*, 623 F.3d 1229 (8th Cir. 2010). “A claim of ‘perceived’ potential entry will
 12 not be upheld in the absence of evidence that present competitors have altered or tempered their
 13 conduct as a result of the acquiring firm’s presence.” *Tenneco*, 689 F.2d at 358.

14 **II. The FTC Is Not Likely To Succeed on Its Section 7 Potential Competition Claim**

15 **A. “VR Dedicated Fitness” Apps Are Neither a Relevant Antitrust Market nor**
 16 **Oligopolistic – Failing Both *Marine Bancorporation* Predicates**

17 358. For both of its potential competition theories – actual and perceived – the FTC must
 18 prove, first, that the nine-app “VR dedicated fitness” market is a properly defined relevant antitrust
 19 market. *See supra* ¶¶ 338, 345.

20 359. In addition, again for both theories, the FTC must prove that the properly defined
 21 relevant antitrust market is an “oligopoly” – as to both behavior (i.e., in-market participants engage
 22 in parallel or coordinated anticompetitive conduct) and structure (e.g., substantial entry barriers
 23 protect the oligopoly’s anticompetitive behavior). *See supra* ¶¶ 345-346.

24 360. The FTC has not made either predicate showing in this case.

25 **1. Nine So-Called “VR Dedicated Fitness” Apps Do Not Comprise a**
 26 **Relevant Antitrust Market**

27 361. The FTC has not carried its burden of establishing a “relevant product market” – “a
 28 necessary predicate to deciding whether a merger contravenes the Clayton Act.” *Marine*

1 *Bancorporation*, 418 U.S. at 618 (internal quotation marks omitted); *see also Lab. Corp.*, 2011 WL
 2 3100372, at *17 (FTC’s burden). A valid antitrust market must include all “[e]conomic
 3 substitutes,” i.e., products and services that “have a ‘reasonable interchangeability of use’ or
 4 sufficient ‘cross-elasticity of demand’ with the relevant product.” *Hicks v. PGA Tour, Inc.*, 897
 5 F.3d 1109, 1120 (9th Cir. 2018) (citation omitted); *see id.* at 1120-21 (relevant antitrust market must
 6 include “the group or groups of sellers or producers who have actual or potential ability to deprive
 7 each other of significant levels of business”). In all cases, the relevant antitrust market must reflect
 8 “economic reality,” *Epic Games, Inc. v. Apple Inc.*, 559 F. Supp. 3d 898, 1015 (N.D. Cal. 2021) –
 9 which the FTC’s nine-app “VR dedicated fitness” market does not.

10 362. The FTC’s market definition fails because it did not establish that it was proper to
 11 exclude from the relevant market fitness products, services, and apps – on-VR (e.g., Gym Class)
 12 and off-VR (e.g., Apple Fitness+) – that are “reasonabl[y] interchangeab[le]” by consumers “based
 13 upon price, use and qualities.” *United States v. Oracle Corp.*, 331 F. Supp. 2d 1098, 1131 (N.D.
 14 Cal. 2004). Scores of products, services, and apps are available to consumers who want to exercise,
 15 *see supra* ¶¶ 74-76, a point the FTC concedes, *see supra* ¶ 146. That includes dozens of “connected
 16 fitness” products off-VR, e.g., Apple Fitness+, the Peloton Guide, and the Peloton mobile app,
 17 among many more. *See supra* ¶¶ 74, 89, 152. To the extent Meta’s internal VR app categorization
 18 bears on this inquiry – as the FTC suggests – it is undisputed that there are more than 100 additional
 19 VR apps on just the Quest platform alone that Meta classifies as “fitness.” *See supra* ¶ 90.

20 363. Actual user substitution data – which Meta can track because it owns the VR
 21 platform – confirm that Supernatural competes with a range of fitness products, not just eight other
 22 “VR dedicated fitness” apps. *See supra* ¶¶ 84-87, 151. Defendants’ expert analysis of that data
 23 showed that, of ██████████ Supernatural users who stopped using the app, ██████████
 24 ██████ started using another supposed “VR dedicated fitness” app. *See supra* ¶ 87. That means ██████
 25 ██████ of former Supernatural subscribers either gave up on fitness altogether or, more plausibly,
 26 switched to different VR apps or off-VR products that the FTC omits from its market definition.
 27 That would be consistent with the FTC expert’s own survey, which – if credited at all – found that
 28 consumers would switch from Supernatural to off-VR fitness products. *See supra* ¶ 147.

1 364. Industry participants confirm that so-called “VR dedicated fitness” apps compete
2 with these many other on-VR and off-VR products, belying the FTC’s market definition. *See*
3 *Rothery Storage & Van Co. v. Atlas Van Lines, Inc.*, 792 F.2d 210, 219 (D.C. Cir. 1986) (crediting
4 the view of industry participants). Every “VR dedicated fitness” app developer to testify agreed
5 that it competes with many fitness products and services outside the FTC’s market definition. *See*
6 *supra* ¶¶ 79-83. [REDACTED]

7 [REDACTED]
8 [REDACTED]. *See supra* ¶¶ 77-78, 154.

9 365. By contrast, the FTC’s nine-app market draws support from no fact witness
10 testimony or ordinary course business documents. *See supra* ¶ 148. The FTC instead bases its
11 market definition on an advocacy letter prepared for this litigation that identifies “Selected
12 Competitors,” ignoring that the same letter elsewhere identifies other VR fitness apps, including
13 [REDACTED], and lists many off-VR competitors to Supernatural. *See supra* ¶¶ 149-150. Even the
14 FTC’s own expert refused to opine that there is a “VR dedicated fitness” market with just the nine
15 apps the FTC identifies (or even that [REDACTED] should not be in the market). *See supra* ¶ 110.

16 366. Against that industry backdrop, the FTC has tried to meet its burden to establish a
17 relevant antitrust market through two alternative paths: First, the FTC relies on Dr. Singer’s
18 hypothetical monopolist test. Second, the FTC tries to define a market based on common features
19 shared among “VR dedicated fitness” apps and supposedly no other products. Neither succeeds.

20 **a. The Hypothetical Monopolist Test Is Irreparably Flawed –**
21 **Leaving the FTC Without Proof of Its Market Definition**

22 367. The FTC’s asserted market of “VR dedicated fitness” apps depends on the testimony
23 of its economic expert, Dr. Singer, but Dr. Singer provided no reliable testimony in support of the
24 FTC’s proposed market. *See supra* ¶ 117. To begin, Dr. Singer denied that he had offered any
25 opinion that the relevant market is limited to the nine apps identified by the FTC – and he refused to
26 say which apps were in or out of his proposed market. *See supra* ¶¶ 110-111. For this reason alone,
27 the FTC is left without any expert testimony to support its market definition.

1 368. Furthermore, Dr. Singer has repeatedly stated – many times in his written rebuttal
2 report, and clearly in testimony – that he does not have an opinion regarding market definition
3 sufficient to establish a relevant antitrust market independent of his quantitative analysis. *See supra*
4 ¶¶ 114-116. Accordingly, his opinion that “VR dedicated fitness” apps are a relevant market
5 depends on a “hypothetical monopolist test,” which in turn relies on the results of a 150-person
6 survey that Dr. Singer designed but did not himself perform. *See supra* ¶¶ 112-113.

7 369. For the many reasons discussed above, *see supra* ¶¶ 118-145, the Court declines to
8 credit Dr. Singer’s survey, hypothetical monopolist test, or the market definition opinion for which
9 the survey is the linchpin. *See Epic Games*, 559 F. Supp. 3d at 963. It is evident that the survey is
10 plagued by more than mere flaws. The Court finds no basis to conclude that Dr. Singer conducted a
11 survey of Supernatural subscribers, *see supra* ¶ 118 – as opposed to persons who simply wanted to
12 get paid for completing a poorly designed survey that generated hundreds of implausible or
13 demonstrably false responses, *see supra* ¶¶ 119-131. Dr. Singer performed no quality control for
14 the survey, nor did he implement it (nor did Qualtrics, the firm he said he relied on). *See supra*
15 ¶¶ 141-143. In any event, Dr. Singer manipulated the survey results, *see supra* ¶¶ 132-138, which
16 did not target the relevant set of users and potential users or even test the relevant market he
17 proposes (as opposed to one that includes a mix of both on-VR *and* off-VR products), *see supra*
18 ¶¶ 139-140 (wrong test), 145 (wrong population).

19 370. Without Dr. Singer’s survey, there is no hypothetical monopolist test, and, without
20 that quantitative analysis, there is no market definition – Dr. Singer has said that he does not have
21 an opinion independent of his test. *See supra* ¶¶ 114-116. That alone ends the FTC’s case – the
22 FTC cannot define the relevant antitrust market through lawyer argument without an economic
23 expert. *See Teradata Corp. v. SAP SE*, 570 F. Supp. 3d 810, 852 (N.D. Cal. 2021) (“when, as here,
24 an expert opinion is not supported by sufficient facts to validate it in the eyes of the law, or when
25 indisputable record facts contradict or otherwise render the opinion unreasonable, it cannot support
26 a jury’s verdict and therefore summary judgment is appropriate” on “the issue of market
27 definition”); *Hynix Semiconductor Inc. v. Rambus Inc.*, 2008 WL 73689, at *10 n.13 (N.D. Cal. Jan.
28 5, 2008) (“Establishing market definition in this case likely requires expert testimony.”); *see also*

1 *AFMS LLC v. United Parcel Serv. Co.*, 105 F. Supp. 3d 1061, 1076-77 (C.D. Cal. 2015) (“Without
 2 any expert testimony to opine on the scope of the relevant market, it is difficult to see how Plaintiff
 3 could meet its evidentiary burden.”), *aff’d*, 696 F. App’x 293 (9th Cir. 2017); *see also United States*
 4 *v. Booz Allen Hamilton, Inc.*, 2022 WL 9976035, at *13 (D. Md. Oct. 17, 2022) (rejecting flawed
 5 test); *FTC v. RAG-Stiftung*, 436 F. Supp. 3d 278, 308-09 (D.D.C. 2020) (similar).

6 **b. The Evidence Does Not Support “Practical Indicia” of the Nine-**
 7 **App “VR Dedicated Fitness” Market**

8 371. Even if the FTC could proceed without Dr. Singer’s opinion as to market definition
 9 (it cannot), the Court also concludes that the FTC has failed to define a market by reference to
 10 “practical indicia” independent of any reliable quantitative analysis. *Brown Shoe Co. v. United*
 11 *States*, 370 U.S. 294, 325 (1962). As noted, Dr. Singer did not offer any opinion that such practical
 12 indicia would be sufficient without more to define the market – he instead disavowed that position,
 13 repeatedly. *See supra* ¶¶ 114-116. For the reasons above, the Court finds that the FTC’s attempt to
 14 define its market based on “practical indicia” – and without the support of any economic expert
 15 opinion – contradicts the overwhelming weight of industry evidence, *see supra* ¶¶ 74-83, 88-89,
 16 152-154, which shows that Supernatural and other VR fitness products compete with non-VR
 17 fitness products – sometimes more directly than they do with each other, *see supra* ¶¶ 84-87, 147.

18 372. *First*, the evidence does not show that VR fitness – simply because it takes
 19 advantage of VR technology or has a single characteristic (“immersiveness”) – does not compete
 20 with other fitness products. “[M]erely asserting that a commodity is in some way unique is
 21 insufficient to plead” – let alone prove – “a relevant market.” *Concord Assocs., L.P. v. Entm’t*
 22 *Props. Tr.*, 817 F.3d 46, 54 (2d Cir. 2016); *see also IT&T Corp. v. Gen. Tel. & Elecs. Corp.*, 518
 23 F.2d 913, 932 (9th Cir. 1975) (market definition turns on what is “economically significant”); *hiQ*
 24 *Labs, Inc. v. LinkedIn Corp.*, 485 F. Supp. 3d 1137, 1149 (N.D. Cal. 2020) (differentiated features
 25 do not put products in separate markets); *Oracle*, 331 F. Supp. 2d at 1159 (similar). The FTC
 26 makes no showing that “immersion” or other VR features are uniquely appealing to consumers –
 27 such that they would not switch to another fitness product without those features – or even that
 28 other on-VR and off-VR products the FTC omits are not comparably “immersive.” *See supra*

1 ¶¶ 74, 154. Merely identifying a differentiated feature – VR is separate because it is VR – is a
2 tautology, not evidence of a separate market. *See In re Super Premium Ice Cream Distrib. Antitrust*
3 *Litig.*, 691 F. Supp. 1262, 1268 (N.D. Cal. 1988) (rejecting market defined by reference to “physical
4 or price differences” because “various adjectives” do not “establish separate markets”), *aff’d sub*
5 *nom. Haagen-Dazs Co. v. Double Rainbow Gourmet Ice Creams, Inc.*, 895 F.2d 1417 (9th Cir.
6 1990).

7 373. *Second*, “VR dedicated fitness” apps are not distinguished from all other fitness
8 products by different prices and pricing models. To start, “the relevant market is not governed by
9 the presence of a price differential between competing products,” *Twin City Sportservice, Inc. v.*
10 *Charles O. Finley & Co.*, 512 F.2d 1264, 1274 (9th Cir. 1975), and products are not in separate
11 markets “simply because consumers pay for those products in different ways,” *Lab. Corp.*, 2011
12 WL 3100372, at *18. *See also Oracle*, 331 F. Supp. 2d at 1121 (“[P]roducts competing against one
13 another in a differentiated product market may have widely different prices.”). But even if the
14 FTC’s position had legal backing, the claimed “VR dedicated fitness app” market omits many
15 products – on-VR and off-VR – that are comparably priced to or even cheaper than the in-market
16 apps. *See supra* ¶¶ 74, 155. And many of the FTC’s in-market apps are not even themselves
17 subscription products but instead employ a range of different pricing models. *See supra* ¶¶ 108,
18 155; *see also W. Parcel Express v. United Parcel Serv. of Am., Inc.*, 65 F. Supp. 2d 1052, 1059-60
19 (N.D. Cal. 1998) (rejecting plaintiff’s “attempt to define the market on the basis of price or product
20 variances” because “the record [in the case] show[ed] both a spectrum of consumer choices, and
21 active competition for those choices”), *aff’d*, 190 F.3d 974 (9th Cir. 1999).

22 374. *Third*, there is no evidence that “VR dedicated fitness” apps appeal to “distinct
23 customers.” *Brown Shoe*, 370 U.S. at 325; *see also Oracle*, 331 F. Supp. 2d at 1131 (“the issue is
24 not what solutions the customers would *like* or *prefer* for” the need they are satisfying, but rather
25 “what they *could* do in the event of an anticompetitive price increase by [the hypothesized] post-
26 merger”). The evidence shows only that VR fitness apps appeal to a different demographic – more
27 women and older consumers – than VR *video games*. *See supra* ¶ 281. That says nothing about
28 whether “VR dedicated fitness” apps appeal to a demographic of fitness consumers unwilling to

1 substitute to off-VR fitness products or that users, once they purchase a VR headset, will not
 2 experiment with other VR fitness apps that are not within the FTC’s set of nine. *See supra* ¶¶ 74,
 3 83-87.

4 375. The only evidence of actual user behavior confirms that consumers substitute
 5 Supernatural for many fitness products. To start, [REDACTED]
 6 [REDACTED]
 7 [REDACTED]. *See supra* ¶¶ 84-85. Tellingly,
 8 [REDACTED]
 9 [REDACTED]. *See supra* ¶ 86. By contrast, only a fraction of
 10 users who stop using Supernatural – [REDACTED] – switch to another on-VR fitness product, even if
 11 they keep using the Quest headset for other apps. *See supra* ¶ 87. Such evidence, particularly when
 12 combined with the testimony of app developers, *see supra* ¶¶ 79-83, shows that the FTC’s claim
 13 that the relevant competition is among “VR dedicated fitness” apps ignores the competition that
 14 actually influences the conduct of market participants – Meta and app developers alike.

15 **2. The FTC Does Not Show That the “VR Dedicated Fitness App” Market**
 16 **Is Oligopolistic – as *Marine Bancorporation* Requires**

17 376. Because potential competition “comes into play only where there are dominant
 18 participants in the target market engaging in interdependent or parallel behavior and with the
 19 capacity effectively to determine price and total output of goods or services” – i.e., oligopoly
 20 behavior and structure – the FTC must demonstrate that it is likely to establish that the claimed
 21 market fits that exacting description. *Marine Bancorporation*, 418 U.S. at 630. The FTC has not
 22 seriously attempted to do so, offering no evidence of an oligopoly, instead urging a different
 23 interpretation of *Marine Bancorporation*. However, the Court reads *Marine Bancorporation* to
 24 mean what it says, which forecloses both of the FTC’s potential competition theories.

25 377. *First*, the FTC presented no evidence of oligopolistic *behavior* such that “there are
 26 dominant participants in the target market engaging in interdependent or parallel behavior,” *Marine*
 27 *Bancorporation*, 418 U.S. at 630, e.g., coordinating as to parallel pricing, output restraints, or
 28 anything similar, *see Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 227

1 (1993) (defining oligopoly behavior); *Missouri Portland*, 498 F.2d at 860 (Friendly, J.) (describing
2 oligopoly in rejecting potential competition claim). The FTC did not offer proof as to this element
3 of its claim *and* failed to contest evidence directly contrary to it: every “VR dedicated fitness” app
4 developer to testify has confirmed that there is no coordinated behavior, but instead intense
5 competition, constant consumer turnover, and limited profitability. *See supra* ¶ 106. The FTC’s
6 expert expressly declined to offer any opinion that there is oligopolistic coordination among current
7 market participants. *See supra* ¶ 107; *see also supra* ¶¶ 90-105 (discussing actual and expected new
8 VR fitness entry). And Defendants’ expert testified that there is no such oligopolistic conduct. *See*
9 *supra* ¶ 109. The purportedly in-market apps have distinct pricing models and prices, the opposite
10 of coordination. *See supra* ¶ 108. It is uncontested that the nine so-called “VR dedicated fitness”
11 apps are not engaged in parallel behavior – not as to price, output, quality, or any other conduct.
12 *See supra* ¶¶ 106-109. That alone ends the FTC’s claim.

13 378. *Second*, there is no evidence that the *structure* of the claimed market is such that the
14 nine selected apps have “the capacity effectively to determine price and total output of goods or
15 services.” *Marine Bancorporation*, 418 U.S. at 630. For firms to have such power, “entry barriers
16 must be significant.” *Rebel Oil*, 51 F.3d at 1439; *see B.A.T. Indus.*, 1984 WL 565384, at *8
17 (rejecting potential competition); *see also United States v. Syufy Enters.*, 903 F.2d 659, 671 n.21
18 (9th Cir. 1990) (“the lack of entry barriers prevents the government from prevailing on its Clayton
19 Act claim”). “Entry barriers are additional long-run costs that were not incurred by incumbent
20 firms but must be incurred by new entrants, or factors in the market that deter entry while
21 permitting incumbent firms to earn monopoly returns.” *Rebel Oil*, 51 F.3d at 1439.

22 379. Those factors are absent here and the proof belies the existence of “barriers” in the
23 sense that implicates antitrust – that is, barriers beyond those that go with starting any new
24 enterprise. New entry in the FTC’s purported market is constant, with more expected, *see supra*
25 ¶¶ 91-102, 104; even the FTC’s economist concedes many firms could enter, *see supra* ¶ 103. The
26 FTC increased the number of in-market firms from five to nine since filing its complaint – most of
27 which entered after Supernatural, *see supra* ¶ 91 – which alone proves there are no significant entry
28 barriers. Two of the apps the FTC identifies as being in the market entered this year – and both are

1 associated with off-VR fitness products, establishing that such non-VR products are a likely source
2 of entry. *See supra* ¶ 92. And every in-market firm began as a small startup, with few VR
3 engineers and without substantial cash or a network of users. *See supra* ¶¶ 264-265. That ends the
4 claim. *See United States v. Hughes Tools Co.*, 415 F. Supp. 637, 643-44 (C.D. Cal. 1976).

5 380. As to Meta’s control of the Quest platform, the evidence shows that Meta’s
6 economic incentive and actual strategy for growing its VR ecosystem is to facilitate the entry of as
7 many third-party apps as possible. *See supra* ¶¶ 49-51. That is how Meta competes against other
8 platforms – VR/AR and non-VR – to generate a return on its billions of VR/AR investment. *See*
9 *supra* ¶¶ 32-33. Moreover, even if Meta were to restrict access to its store, there are many
10 alternative platforms for VR app distribution that Meta does not control – both at the hardware level
11 and the app store level, including some stores (like SteamVR) that work on Quest devices. *See*
12 *supra* ¶¶ 20-26 (many VR headsets), 35-36, 43 (many distribution platforms). In light of looming
13 competition from other VR platforms – including ██████████ –
14 Meta would be shooting itself in the foot if it restricted access to its platform. *See supra* ¶¶ 33-34.

15 381. The FTC does not offer evidence that that Meta “curates” the Quest Store to inhibit
16 the entry of apps competitive with its own. Nor could it – Meta finances, supports, and promotes
17 apps that compete with some of Meta’s most popular VR titles. *See supra* ¶¶ 41, 51. Meta instead
18 reviews the apps it spotlights in the Quest Store for quality to ensure a positive user experience (and
19 avoid new users encountering low-quality VR apps that might deter them from using the platform,
20 harming all apps). *See supra* ¶¶ 37-40. But even for lower-quality apps, Meta provides distribution
21 via the App Lab to thousands of third-party titles. *See supra* ¶¶ 36-37. Meta also allows consumers
22 to download apps from other distribution platforms via sideloading. *See supra* ¶ 42.

23 382. As a matter of law, the FTC cannot carry its burden as to this element of its potential
24 competition claim by showing only that the claimed “VR dedicated fitness app” market is
25 concentrated (by some measures) at a particular snapshot in time. *See Marine Bancorporation*, 418
26 U.S. at 632 n.34 (requiring evidence of “actual market behavior, and especially the presence . . . of
27 significant parallel conduct”); *United States v. Black & Decker Mfg. Co.*, 430 F. Supp. 729, 744 (D.
28 Md. 1976) (“The defendants may . . . introduce evidence that the concentration ratios . . . do not

1 accurately reflect the competitive nature of the market.”). Those concentration ratios depend on the
2 FTC’s proposed market definition, which this Court has rejected for the reasons explained above.
3 Moreover, “introducing evidence of concentration ratios” at most “established a prima facie case
4 that the [target] market was a *candidate* for the potential-competition doctrine.” *Marine*
5 *Bancorporation*, 418 U.S. at 631 (emphasis added); *see also Tenneco*, 689 F.2d at 352-53 (same).
6 Concentration is only one indicator of a structure that makes interdependent conduct possible, but
7 “concentration ratios . . . can be unreliable indicators of actual market behavior” that must yield to
8 evidence of actual “economic characteristics” when it is available (as is the case here). *Marine*
9 *Bancorporation*, 418 U.S. at 631.

10 383. Where market shares are changing rapidly and entry is frequent – as is true here, *see*
11 *supra* ¶¶ 91-93 – a snapshot of current revenues says little about the future competitive conditions
12 of a market. *See Marine Bancorporation*, 418 U.S. at 631 (“[T]here would be no need for concern
13 about the prospects of long-term deconcentration of a market which is in fact genuinely
14 competitive.”). And even where there is both significant concentration and protective barriers (not
15 so here), the Supreme Court in *Marine Bancorporation* acknowledged a potential competition
16 concern only after noting that there was also “no significant evidence of the absence of parallel
17 behavior,” *id.* at 631-32 – while, here, everyone (including the FTC’s economist) found no parallel
18 behavior. *See also Republic of Texas*, 649 F.2d at 1045-46 (similar).

19 384. Pre-*Marine Bancorporation* cases do not call into question the Supreme Court’s
20 subsequent and clear direction. *See Marine Bancorporation*, 418 U.S. at 623 (explaining that
21 *United States v. El Paso Natural Gas Co.*, 376 U.S. 651 (1964), cited by the FTC, “was in reality
22 . . . an actual-competition rather than a potential competition case”). And earlier cases (including
23 those on which the FTC relies) are precursors to the *Marine Bancorporation* rule, e.g., *United States*
24 *v. Penn-Olin Chem. Co.*, 378 U.S. 158 (1964), explained that potential competition applies where
25 there is an entrant “waiting anxiously to enter an *oligopolistic market*.” *Id.* at 174 (emphasis
26 added); *see also United States v. Phillips Petroleum Co.*, 367 F. Supp. 1226, 1254 (C.D. Cal. 1973)
27 (accepting a potential competition claim after finding in-market participants are protected by
28 “extremely high barriers to entry,” i.e., oligopoly structure), *aff’d mem.*, 418 U.S. 906 (1974).

1 385. In any event, the FTC’s evidence of concentration ratios – [REDACTED]
 2 [REDACTED] – does not prove even present
 3 concentration. *See United States v. Gen. Dynamics Corp.*, 415 U.S. 486, 501 (1974) (“Evidence of
 4 past production does not, as a matter of logic, necessarily give a proper picture of a company’s
 5 future ability to compete.”). The FTC asserts [REDACTED]
 6 [REDACTED]. *See supra* ¶ 156. But Supernatural [REDACTED]
 7 [REDACTED], while brand new entrants – e.g., Les Mills
 8 Bodycombat (new as of 2022) – are growing. *See supra* ¶¶ 67, 71-72. Supernatural’s [REDACTED]
 9 [REDACTED] is thus insufficient to show market concentration: every in-market firm to offer
 10 testimony on this point, [REDACTED] is not an accurate measure of
 11 competitive significance. *See supra* ¶¶ 69, 161. Dr. Carlton’s analysis similarly explains why
 12 [REDACTED] are not meaningfully probative of competitive conditions even in the near future,
 13 given the rate of dynamic change and new entry in both VR fitness and VR more broadly. *See*
 14 *supra* ¶¶ 158-160.

15 386. This evidence forecloses the FTC’s exclusive reliance [REDACTED]. *See*
 16 *Brown Shoe*, 370 U.S. at 341 n.69 (“[S]ince [the firms] sold shoes primarily in the low and medium
 17 price ranges, and in the light of the conceded spread in shoe prices, we agree that sales measured by
 18 pairage [units] provide a more accurate picture of the [the firms’] shares of the market than do sales
 19 measured in dollars.”); *see also* U.S. Dep’t of Justice & FTC, *Horizontal Merger Guidelines* § 5.2,
 20 at 16-17 (2010) (cautioning against reliance on “historical evidence” – including revenue – to show
 21 concentration where there are “recent or ongoing changes in market conditions” that “may indicate
 22 that the current market share of a particular firm either understates or overstates the firm’s future
 23 competitive significance,” including the advance of “a new technology”).

24 **B. The “Actual Potential Competition” Theory Fails for Additional Reasons**

25 **1. The FTC Has Not Established That Meta Would Have Entered or**
 26 **Would Enter But For the Transaction**

27 387. The FTC has no “clear proof” (nor any proof at all) that Meta would have entered or
 28 will enter the claimed market without the acquisition. *B.A.T. Indus.*, 1984 WL 565384, at *10; *see*

1 *supra* ¶¶ 351-352 (collecting cases). As noted above, the “clear proof” standard is the one that will
2 apply in the FTC administrative proceeding – see *In re Altria Grp., Inc.*, 2022 WL 622476, at *66-
3 67 & n.34 (FTC Feb. 23, 2022) (Chappell, ALJ) (applying *B.A.T. Industries* as Commission
4 precedent) – and this Court’s inquiry is to “predict likelihood of success on the merits at the FTC’s
5 administrative proceedings.” *Meta*, 2022 WL 16637996, at *4. As the FTC’s ALJ recently held
6 (citing *B.A.T. Industries*), for actual potential competition claims “the FTC must establish that the
7 alleged potential entrant *would have entered* the market independently . . . but for the challenged
8 merger,” which “requires *proof*, not only that the alleged actual potential entrant possesses the
9 capabilities, economic incentives, and interest to feasibly enter the relevant market, but also that
10 entry would have occurred within the near future.” *Altria*, 2022 WL 622476, at *214 (emphases
11 added) (applying a “reasonable probability” standard to the *timing* element, not the entry element,
12 and noting that “a ‘reasonable probability’ that the alleged potential entrant would have ‘eventually
13 entered’ . . . is insufficient because such an ‘eventual entry’ test is wholly speculative”).

14 388. But whether the standard is “clear proof” or “reasonable probability,” the FTC’s
15 evidence fails to satisfy it.

16 389. The evidence is unequivocal that Meta executives with authority to approve first-
17 party app development – and authorize budgets even to start that work – never did so, never saw a
18 proposal for doing so, and would not have approved such a proposal had one existed. See *supra*
19 ¶¶ 164-166, 169-171, 195, 198, 208-220, 233-234. Lower-level Meta witnesses discussed ideas for
20 possible fitness apps or modifications but never came forward with a plan to develop one – as
21 confirmed by sworn testimony and contemporaneous documents as to all of the various alternatives
22 the FTC has suggested, from building from scratch to modifying Beat Saber, and even cloning Beat
23 Saber (a litigation invention and not an idea that Meta ever considered). See *supra* ¶¶ 163-181
24 (building from scratch), 182-221 (modifying Beat Saber), 222-232 (the “cloning” hypothesis). The
25 ideas went nowhere because Meta has no fitness expertise, see *supra* ¶¶ 169-170, 173, 208, limited
26 history of successfully building VR apps from scratch, see *supra* ¶¶ 169-174, higher priorities, see
27 *supra* ¶¶ 175-176, 233-234, 238, 280, 283, and no interest modifying Beat Saber against the wishes
28 of Beat Games and its development team, see *supra* ¶¶ 193-202.

1 390. The Court declines to credit Dr. Singer’s alternate interpretation of the evidence or his
2 ultimate opinion that Meta would develop its own fitness app. *See supra* ¶¶ 235-241. Dr. Singer is
3 an economist, not a factfinder, and his interpretation of documents and testimony is not entitled to any
4 weight. *See Wilson v. Muckala*, 303 F.3d 1207, 1218 (10th Cir. 2002) (“The credibility of witness
5 testimony is a matter left to the [factfinder] and generally is not an appropriate subject for expert
6 testimony.”); *United States v. Adams*, 271 F.3d 1236, 1246 (10th Cir. 2001) (similar). Further, the
7 Court disagrees with Dr. Singer’s interpretation of the documents he cites in support of his opinion –
8 none amounts to a plan or proposal to develop any kind of VR fitness app. *See supra* ¶¶ 242-249.

9 391. Those findings preclude the FTC’s actual potential competition claim – under any
10 standard. *See Siemens*, 621 F.2d at 507-08 (“reliance upon a few memoranda of lower echelon”
11 employees “as indicative of an intent to enter the market de novo is misplaced,” particularly where
12 “their views do not appear to have been brought to the attention of the decision-making
13 management”); *Atl. Richfield*, 549 F.2d at 296 (“continuing studies as to the best means of entry . . .
14 fail[] to show a significant commitment at the decisional level”). The FTC must show at least what
15 the ALJ will require in the administrative proceeding: “concrete” planning such as a presentation
16 through ordinary course business channels (here each of the Review, game-design document, green-
17 light process, and approval authority matrix) as well as approval from decision-level management.
18 *B.A.T. Indus.*, 1984 WL 565384, at *6; *see also Atl. Richfield*, 549 F.2d at 296-97 (requiring “a
19 significant commitment at the decisional level”). There is no evidence that ever happened, would
20 have happened absent the deal, or will happen in the future. *See supra* ¶¶ 210-221, 233-234.

21 392. Further, the FTC’s claim fails for the additional and independent reason that no
22 evidence shows that Meta’s entry would or could be “imminent.” *Marine Bancorporation*, 418
23 U.S. at 623 n.22; *see also B.A.T. Indus.*, 1984 WL 565384, at *10 (absent imminent entry, “[t]he
24 likelihood of injury to future competition may . . . not be particularly great even if independent
25 entry but for the merger or acquisition is a virtual certainty”). Removing by acquisition the mere
26 “ephemeral possibility” of actual entry at some “wholly speculative” date uncertain has no effect on
27 competition. *BOC Int’l*, 557 F.2d at 28-29 (requiring at least entry in the “near future,” rejecting
28 FTC claim without that showing); *see also Siemens*, 621 F.2d at 507 (similar). And the undisputed

1 record is that it would take Meta, [REDACTED]

2 [REDACTED]

3 [REDACTED]

4 *See supra* ¶¶ 177-181. If there is a “VR dedicated fitness” app market at all, it loses nothing by
5 forgoing hypothetical, speculative, and delayed entry from Meta. Were there doubt, the FTC’s
6 expert has conceded that many other firms could enter, too. *See supra* ¶ 103.

7 393. The failure of the FTC’s evidence is especially clear in light of *Steris*, the FTC’s
8 most recent effort to block an acquisition under Section 13(b) based on a claim of actual potential
9 competition. There, the district court accepted the FTC’s proposed standard – and found its
10 showing to be inadequate. *See Steris*, 133 F. Supp. 3d at 966 (citing FTC brief: “The FTC asserts
11 that the acquisition of an actual potential competitor violates Section 7 if (1) the relevant market is
12 highly concentrated, (2) **the competitor ‘probably’ would have entered the market**, (3) its entry
13 would have had pro-competitive effects, and (4) **there are few other firms that can enter**
14 **effectively.**”) (emphases added).

15 394. The *Steris* court held that the minimum necessary to show even a “reasonable
16 probability” of entry would be evidence that, “if the merger does not go through,” the potential
17 entrant “is likely to revive its plans and build . . . in the near future.” 133 F. Supp. 3d at 977. But
18 there is no such evidence here; the uncontradicted testimony of Meta executives – supported by
19 contemporaneous business documents prepared in the ordinary course – is that the company never
20 had plans to build its own VR fitness app and will not make, let alone adopt and authorize funding
21 for, those plans for the first time if the Court enjoins this transaction. *See supra* ¶¶ 389-391.

22 395. The contrast between the facts in this case and *Steris* is instructive. There, the
23 acquired company was already providing its services in Europe – i.e., it was already making the
24 competitive product at issue so there was no question of building from scratch – and there was a
25 plan to enter the U.S. geographic market that the *board of directors approved*. *See Steris*, 133 F.
26 Supp. 3d at 972-73. Following board approval, “core team members” attended a “kickoff” to
27 launch the U.S. endeavor. *Id.* at 973. The target had begun securing options contracts from U.S.
28 customers that it would serve upon entry into that geographic market. *Id.* The target even had

1 signed a “lease extension” for the buildout of a U.S. facility. *Id.* at 974. Despite that evidence – far
2 greater than what the FTC presents here – the district court found that it was not even
3 “reasonabl[y]” “probabl[e]” that there would be de novo entry but for the acquisition. *Id.* at 978.

4 396. The FTC places significant weight on *Penn-Olin* – to no avail. There, the government
5 presented evidence “beyond question” that the two potential entrants had “the inclination, resources
6 and know-how to enter th[e] market” and “evidenced a long-sustained and strong interest in entering
7 the market area” – yet even those “strong circumstances” gave the Supreme Court no reason “to
8 disturb the [district] court’s finding that there was not a reasonable probability that both [potential
9 entrants] would have built a plant.” *Penn-Olin*, 378 U.S. at 174-75; *see id.* at 176-77.

10 397. In fact, the post-remand history of *Penn-Olin* – in which the Supreme Court
11 subsequently affirmed another rejection of the potential competition claim at issue – confirms the
12 legal and factual infirmity of the FTC’s position here. On remand, the district court rejected the
13 actual potential competition claim, finding it was not reasonably probable that either firm would
14 enter absent the transaction. The court credited live testimony from executive decision makers,
15 explaining that “it is essential to distinguish between the views and actions of those in the [potential
16 entrant’s] organization who were charged with decision making responsibility, and those whose
17 function it was to make preliminary studies and recommendations.” *United States v. Penn-Olin*
18 *Chem. Co.*, 246 F. Supp. 917, 919 (D. Del. 1965) (“Obviously the former are vastly more
19 significant than those of the latter in predicting hypothetically what [the potential entrant] would
20 have done but for the [transaction].”), *aff’d by an equally divided Court*, 389 U.S. 308 (1967); *see*
21 *also id.* at 927 (“But even if a proposal for [independent entry] would have passed muster with the
22 staff, . . . no intelligent forecast can be made as to the likelihood of its approval by the Board of
23 Directors who had the final say.”).

24 398. The FTC’s effort to rely on “objective evidence” – effectively a claim that it need not
25 show any planning of actual entry under any standard, so long as it can show Meta “could” have
26 motive and resources to enter – is unsupported speculation that no court has accepted in decades as
27 a basis to block an acquisition. *See Tenneco*, 689 F.2d at 353-54 (“interest,” “incentive,” and
28 “financial resources” to enter only amounted to “unsupported speculation”); *Siemens*, 621 F.2d at

1 507 (“interest and incentive to enter” was “inadequate to demonstrate the likelihood, much less the
 2 certainty,” of entry); *Mercantile Texas Corp. v. Bd. of Governors of Fed. Rsrv. Sys.*, 638 F.2d 1255,
 3 1268 (5th Cir. Unit A Feb. 1981) (similar); *Atl. Richfield*, 549 F.2d at 299 (same). As the
 4 concurring opinion in *B.A.T. Industries* explained of the FTC’s own precedent that will govern in
 5 the administrative proceeding here: “B.A.T. was intended as a test case to see if purely objective
 6 evidence could establish liability under the actual potential entrant theory. The answer today is that
 7 it cannot. Despite a well-litigated case which presented us with as extensive and in-depth an
 8 economic record as we are likely to see, the inherent limitations of economic evidence mean that,
 9 standing alone, it cannot meet a ‘clear proof’ (or, in my opinion, even a ‘reasonable probability’)
 10 standard.” *B.A.T. Indus.*, 1984 WL 565384, at *26 (Bailey, Comm’r, concurring); *see also Bell Atl.*
 11 *Corp. v. Twombly*, 550 U.S. 544, 569 (2007) (holding speculation about potential entry insufficient
 12 to maintain Section 1 claim and noting that firms “do not expand without limit and none of them
 13 enters every market that an outside observer might regard as profitable”).

14 399. Even setting aside the overwhelming volume of uncontradicted testimony – Meta
 15 had no plan to build a VR fitness app on its own, in any way, *see supra* ¶¶ 389-391 – the
 16 contemporaneous and “objective” documentary evidence forecloses the FTC’s claim. Meta
 17 memorialized its decision *not* to build a VR fitness app from scratch – and even explained why
 18 modifying Beat Saber would not work, and why cloning Beat Saber would not work – months
 19 before approaching Within. *See supra* ¶¶ 173-176, 192-193. Equally telling is the absence of a
 20 single document indicating that any proposal to build a VR fitness app from scratch, modify Beat
 21 Saber, or clone Beat Saber initiated even one of the many stages of mandatory Review, a game-
 22 design document, the green-light process, and the Reality Labs approval authority matrix. *See*
 23 *supra* ¶¶ 210-213, 221. None exists. The FTC’s own precedent concludes that is sufficient to
 24 defeat the claim. *See B.A.T. Indus.*, 1984 WL 565384, at *6 (“[I]f the firms’ intention to enter
 25 independently has become sufficiently concrete . . . , that intention will ordinarily be memorialized
 26 in one documentary form or another.”).

27 400. In any event, the objective factors the FTC identifies – such as financial resources
 28 and a VR platform on which to build – are not unique to Meta. *See supra* ¶ 262. And Meta is

1 without several objectively necessary tools to build a “VR dedicated fitness app,” including fitness-
2 knowledgeable VR engineers or any fitness background at all ([REDACTED]

3 [REDACTED]
4 [REDACTED]). *See supra* ¶¶ 169-170, 260-261.

5 401. Finally, even if the “objective” and “subjective” evidence pointed in different
6 directions – in fact, both weigh decisively against the FTC’s position here – the Supreme Court
7 affirmed *Penn-Olin* following remand, where the district court relied on testimony (like the
8 uncontradicted testimony in this case) explaining that entry would not occur notwithstanding
9 “objective” factors favoring potential entry. *See Penn-Olin*, 246 F. Supp. at 926, 932-33.

10 402. The Court concludes that the FTC has not shown a likelihood of success as to actual
11 potential competition. The FTC has not carried its evidentiary burden even under the “reasonable
12 probability” standard (*Steris* requires there be some proof the acquirer “would” enter – not “could”
13 enter). The Court need only compare the facts here to *Steris* – where the FTC lost a Section 13(b)
14 actual potential competition claim subject to “reasonable probability” despite showing board
15 approval of a plan and steps to implement it – to confirm that the FTC has not carried its burden.

16 **2. The FTC Cannot Show That Meta Was One of Few Potential Entrants**

17 403. The FTC has offered no proof that Meta is the only firm or one of very few firms
18 that could enter – as the FTC has previously acknowledged it must prove in a Section 13(b) case
19 asserting a loss of actual potential competition, despite conspicuously abandoning here. *See Steris*,
20 133 F. Supp. 3d at 966 (citing FTC’s brief). The FTC’s newly minted litigation position that it can
21 further lower the bar for its claim by dropping that element finds no support in any case law. *See*
22 *Siemens*, 621 F.2d at 509; *Black & Decker*, 430 F. Supp. at 743 n.23. Not even *Steris* – which
23 assumed *arguendo* that the FTC’s standard would apply – allowed that an actual potential
24 competition claim could succeed without showing “there are few other firms that can enter
25 effectively.” 133 F. Supp. 3d at 966.

26 404. And, indeed, the evidence establishes that many firms *could* enter and at least as
27 effectively as Meta, if not more so. *See supra* ¶¶ 94-104. The same objective factors that the FTC
28 identifies as evidence that Meta could enter – such as access to capital and engineering resources,

1 and an incentive to succeed in VR/AR – are common to many firms, including every tiny startup to
 2 make a VR fitness app. *See supra* ¶¶ 262, 264. And Meta’s status as a platform owner makes it no
 3 better positioned to enter than [REDACTED]

4 [REDACTED]. *See supra* ¶¶ 95-
 5 102. [REDACTED]

6 [REDACTED]. *See supra* ¶¶ 95-99. The FTC’s expert confirmed that several large technology firms –
 7 each with vast resources, fitness experience (or even existing VR fitness products), or access to a
 8 VR platform (sometimes all three) – could build a VR fitness app. *See supra* ¶ 103.

9
 10 **C. The “Perceived Potential Competition” Theory Fails for Additional Reasons**

11 405. The perceived potential competition theory fails because there is no evidence that
 12 “VR dedicated fitness” apps refrained from any “oligopolistic behavior” or other anticompetitive
 13 conduct because of the perception of Meta’s potential entry. *Marine Bancorporation*, 418 U.S. at
 14 624-25; *see Tenneco*, 689 F.2d at 355; *cf. Black & Decker*, 430 F. Supp. at 772-73 (rejecting
 15 potential competition claim because “the absence of any actual market response” to the potential
 16 entrant “tends to corroborate” the potential entrant’s lack of “expertise” in the target market).

17 406. The Supreme Court was clear that this is a required element (stated in a conjunctive
 18 series) for a perceived potential competition claim: “In developing and applying the doctrine, the
 19 Court has recognized that a market extension merger may be unlawful if the target market is
 20 substantially concentrated, if the acquiring firm has the characteristics, capabilities, and economic
 21 incentive to render it a perceived potential de novo entrant, *and* if the acquiring firm’s premerger
 22 presence on the fringe of the target market *in fact* tempered oligopolistic behavior on the part of
 23 existing participants in that market.” *Marine Bancorporation*, 418 U.S. at 624-25 (emphases
 24 added). The FTC has not made that required showing here.

25 407. *First*, the FTC presented no evidence that existing or forthcoming “VR dedicated
 26 fitness” apps perceive Meta as a potential entrant. *See Ginsburg*, 649 F. Supp. 2d at 947
 27 (dismissing perceived potential competition claim). *Every* in-market “VR dedicated fitness” app
 28 witness explained that it did not perceive Meta to be a likely entrant and that any possible entry by

1 Meta had no effect on conduct, pricing, output, or innovation. *See supra* ¶¶ 250-254, 259. That
 2 reflects Meta’s limited experience developing its own first-party VR apps, its difficulties in doing
 3 so, and its dearth of fitness expertise. *See supra* ¶¶ 260-262. This uncontradicted testimony from
 4 market participants, including Within, is dispositive. *See Siemens*, 621 F.2d at 509 (crediting
 5 market participant’s testimony that acquirer’s “possible entry never had any impact upon any
 6 pricing or marketing decision”); *see also B.A.T. Indus.*, 1984 WL 565384, at *5 n.13 (“In perceived
 7 potential competition cases, courts have . . . relied upon the perceptions of incumbent firms to
 8 determine whether or not a potential entrant constraints incumbent behavior.”). This evidence is
 9 also in accord with the documents on which the FTC relies – Within feared *many* competitive
 10 “threats” on-VR and off-VR (*see supra* ¶¶ 256-258) and foresaw that “*other* competitors” might
 11 “enter the market” (*see supra* ¶ 257), not Meta alone (or at all, *see supra* ¶ 259).

12 408. *Second*, the FTC presented no evidence that existing or forthcoming “VR dedicated
 13 fitness” apps perceive Meta as a *uniquely* likely entrant – i.e., that it was the one firm at the edge of
 14 the “VR dedicated fitness” market without which existing participants will *in fact* engage in
 15 anticompetitive conduct. *See Siemens*, 621 F.2d at 509 (“Usually this is proved by evidence that the
 16 actual or perceived potential entrant is one of but a few likely entrants.”); *Atl. Richfield*, 549 F.2d at
 17 300 (similar); *Black & Decker*, 430 F. Supp. at 743 n.23 (“For the perceived potential entrant to
 18 enhance competitive possibilities, it must be part of a small group, since if a large group of potential
 19 entrants exists, the loss of one will be insignificant.”). Current and future “VR dedicated fitness”
 20 apps monitor potential entry or expansion from many firms, including scores of other VR apps, as
 21 well as potential entry from off-VR fitness and technology firms. *See supra* ¶¶ 82, 94. That fear
 22 appears well-founded, as several of these firms have plans to enter, have at least considered entry,
 23 or have actually entered. *See supra* ¶¶ 95-102. And the FTC expert admitted that many large
 24 technology companies – including several with established fitness brands – could build VR fitness
 25 apps, a perception that market participants surely share with the FTC’s economist. *See supra* ¶ 103.

26 **D. The FTC Is Not Likely To Prove Harm to Consumers**

27 409. The FTC has not shown a likelihood of success in proving, as it must, that the
 28 transaction is reasonably likely to harm competition and thereby consumers. *See supra* ¶¶ 338-340.

1 For the reasons above, the Court has no basis to conclude that there is in fact a VR dedicated fitness
2 market, that such a market is oligopolistic (or even concentrated), that Meta would in fact enter that
3 market without the transaction, or that existing firms in this market altered their behavior in any
4 way for fear of Meta entry. To the contrary, the evidence is that there is vibrant entry from small
5 firms that perceive many competitive threats, spurring them to innovate, diversify prices and pricing
6 models, and maximize the output of “VR dedicated fitness.” There is, accordingly, no likelihood
7 that allowing Meta and Within to close the transaction will make this already-competitive space less
8 competitive. *See supra* ¶¶ 306-331.

9 410. Nor is there persuasive evidence that Meta would increase Supernatural’s price if the
10 acquisition is completed. *See supra* ¶¶ 315-317. The empirical, economic, and witness evidence is
11 all the exact opposite – Meta is more likely to maintain (or cut) Supernatural’s price, expand output,
12 and enable Within to improve quality as part of the effort to attract more people to Quest and to VR
13 generally. *See supra* ¶ 317. That is what Meta has done with past acquisitions, e.g., scaling Beat
14 Saber, making it available to consumers on VR platforms off the Quest, and even making the app
15 available for free for a time – all while allowing the Beat Games studio to innovate as it deems best.
16 *See supra* ¶¶ 315-316. That reflects Meta’s overriding incentive to increase the output and quality
17 of VR apps generally, including by improving the Quest platform for fitness by sharing with third
18 parties the innovations that Meta and Within can develop together. *See supra* ¶ 317.

19 411. Meta’s incentive, strategy, and executed plan – which it followed as to third-party
20 VR video games even after acquiring Beat Saber – is to grow the VR ecosystem by lowering app
21 prices and increasing high-quality app content. *See supra* ¶¶ 298-299, 303, 319-321. The notion
22 that Meta would try to recoup its [REDACTED] investment in Within (to say nothing of its multi-
23 billion-dollar investment in VR generally) by increasing the price of Supernatural for its
24 approximately [REDACTED] subscribers – [REDACTED] –
25 by \$1 or \$2 a month does not “make economic sense.” *Adaptive Power Sols.*, 141 F.3d at 952.

26 412. The record also belies the notion that Meta might “foreclose” access to a critical
27 input by withholding Supernatural from other VR platforms. Meta’s economic incentive is to grow
28 Supernatural by making it available to as many consumers as possible. *See supra* ¶¶ 323, 327. And

1 historically Meta has not limited its acquired apps to the Quest platform but instead has done the
2 exact opposite with Beat Saber, its most successful VR app to date. *See supra* ¶¶ 324-326. There
3 also is no evidence that Supernatural specifically is a critical input, necessary to the success of any
4 VR/AR platforms such that [REDACTED] simply cannot
5 survive without it. *See PSKS, Inc. v. Leegin Creative Leather Prods., Inc.*, 615 F.3d 412, 418 (5th
6 Cir. 2010) (rejecting vertical claim where market definition failed and there was “no structural
7 barrier to the interchangeability of [purportedly foreclosed] products with goods produced by
8 competing manufacturers”). Instead there are many VR fitness apps with constant new entry and
9 many other firms capable of building VR fitness apps per the FTC’s objective criteria. *See supra*
10 ¶¶ 90-105.

11 413. This “foreclosure” theory also fails legally. To start, it concerns a harm to other
12 VR/AR *platforms*, not other “VR dedicated fitness” apps. An antitrust plaintiff must prove harm in
13 the market alleged – here, “VR dedicated fitness” apps – and not some other market (e.g., for
14 VR/AR platforms). *See Times-Picayune Publ’g Co. v. United States*, 345 U.S. 594, 610 (1953); *see*
15 *also Ohio v. Am. Express Co.*, 138 S. Ct. 2274, 2284 (2018). Moreover, the FTC never pleaded a
16 claim based on vertical foreclosure. And as a matter of law the FTC cannot prevail on unpleaded
17 legal theories. *See La Asociacion de Trabajadores de Lake Forest v. City of Lake Forest*, 624 F.3d
18 1083, 1089 (9th Cir. 2010); *Challenge Printing Co. v. Elecs. for Imaging Inc.*, 2022 WL 4472065,
19 at *6 (N.D. Cal. Sept. 26, 2022) (Davila, J.).

20 **III. The Equities Disfavor Preliminary Injunctive Relief**

21 414. The FTC also has not proven, as Section 13(b) requires at this stage, that the equities
22 favor a preliminary injunction halting the transaction. *See supra* ¶ 336.

23 415. The Court considers both the public interest and the parties’ private interests. *See*
24 *supra* ¶ 336. Here, both equitable considerations disfavor a preliminary injunction because it would
25 kill the transaction. *See supra* ¶ 12; *see also Arch Coal*, 329 F. Supp. 2d at 159-60 (denying Section
26 13(b) preliminary injunction after crediting testimony that the companies would “abandon the
27 transaction” during the pendency of administrative proceedings). That makes the relief the FTC
28 seeks particularly dramatic – and the equities weighing against it particularly significant. *See FTC*

1 *v. Great Lakes Chem. Corp.*, 528 F. Supp. 84, 99 (N.D. Ill. 1981) (“the usual rule that a preliminary
 2 injunction is an extraordinary and drastic remedy is particularly true in the acquisition and merger
 3 context” because the “‘preliminary’ relief sought by the FTC would doom this transaction”); *FTC v.*
 4 *Exxon Corp.*, 636 F.2d 1336, 1343 (D.C. Cir. 1980) (similar).

5 416. *First*, the public equities – which “include improved quality, lower prices, increased
 6 efficiency, [and] realization of economies of scale” – disfavor killing a pro-competitive transaction.
 7 *Lab. Corp.*, 2011 WL 3100372, at *22; *see also Warner*, 742 F.2d at 1165 (recognizing public’s
 8 interest in “beneficial economic effects and pro-competitive advantages”). An injunction would
 9 impede the development and sharing of improvements in VR technology and the Quest platform to
 10 the detriment of *other* VR fitness apps (none of whom testified against the transaction) and VR
 11 consumers. *See supra* ¶¶ 287-288, 297. It also would set back VR investment – deterring venture
 12 capital funding if the possibility of an exit by Meta acquisition (or any other large technology
 13 company that “could” build on its own) is off the table – again to the detriment of all VR developers
 14 and consumers (and potentially even the broader startup economy beyond VR/AR). *See supra*
 15 ¶¶ 300-302. Blocking this acquisition could call into question the ability of not just Meta but many
 16 other firms to engage in a common form of pro-competitive acquisition to the benefit of
 17 competition. *See also United States v. AT&T Inc.*, 310 F. Supp. 3d 161, 193 (D.D.C. 2018)
 18 (“[C]omplicating the Government’s challenge is the recognition among academics, courts, and
 19 antitrust enforcement authorities alike that many vertical mergers create vertical integration
 20 efficiencies between purchasers and sellers.”), *aff’d*, 916 F.3d 1029 (D.C. Cir. 2019).

21 417. *Second*, the parties’ private interests strongly weigh against preliminary injunctive
 22 relief. *See FTC v. Evans Prods. Co.*, 775 F.2d 1084, 1089 (9th Cir. 1985) (denying injunction given
 23 defendant’s “precarious financial position,” which is an equitable consideration without a “failing
 24 firm” defense); *FTC v. Simeon Mgmt. Corp.*, 532 F.2d 708, 717 (9th Cir. 1976) (Kennedy, J.)
 25 (similar); *Lab. Corp.*, 2011 WL 3100372, at *23 (same, stating this “is also an important equitable
 26 consideration” – not a “failing firm” defense); *see also FTC v. Freeman Hosp.*, 911 F. Supp. 1213,
 27 1227-28 (W.D. Mo.) (similar), *aff’d*, 69 F.3d 260 (8th Cir. 1995). Halting the acquisition for an
 28 administrative proceeding will kill it. *See supra* ¶ 12. [REDACTED]

1 [REDACTED] *See supra* ¶¶ 13-
 2 14, 72, 305-306. Meta will be at risk of falling behind VR rivals – as many are considering VR
 3 fitness – losing unrecoverable time to dynamic competition. *See supra* ¶¶ 95-102. These
 4 considerations are particularly acute given that VR is a dynamic, novel, and emerging technology.
 5 *See FTC v. Qualcomm Inc.*, 969 F.3d 974, 990-91 (9th Cir. 2020); *cf. United States v. Bazaarvoice,*
 6 *Inc.*, 2014 WL 203966, at *76 (N.D. Cal. Jan. 8, 2014) (declining “to weigh in on this debate”).

7 418. Against these equitable considerations, the FTC has only posited that it “may” be
 8 difficult to unwind the acquisition after an administrative proceeding. But the FTC adduced zero
 9 evidence at trial – and cited to none in any of its pre-trial submissions – that “unscrambling the egg”
 10 is a concern here. The evidence is instead that Meta will hold Within as one of several independent
 11 studios granted decision-making autonomy and creative control. *See supra* ¶¶ 198-200. Without
 12 some evidence, and the FTC has provided nothing, the Court cannot say that this is a case where the
 13 two parties might become so intertwined as to make a separation difficult, let alone impracticable or
 14 impossible, after an administrative proceeding. *See Lab. Corp.*, 2011 WL 3100372, at *23;
 15 *Occidental Petroleum*, 1986 WL 952, at *16; *Great Lakes*, 528 F. Supp. at 87, 98.

16 CONCLUSION

17 The FTC asks this Court to be the first (ever) to invoke potential competition as a basis for
 18 enjoining a transaction under Section 13(b). To do so, the Court would need to be the first (ever) to
 19 reach the following holdings: (1) potential competition applies to a concededly non-oligopolistic
 20 market despite *Marine Bancorporation*; (2) the standard for actual potential competition is
 21 “reasonable probability” of entry *and* that standard does not require evidence of any formal plan,
 22 approval, budget, a single concrete step toward implementation, or proof that the acquirer is one of
 23 only a few possible entrants; and (3) a perceived potential competition claim can survive absent any
 24 testimony or document proving that a single in-market participant perceived the acquirer as a
 25 uniquely likely potential entrant. And even after all that, the Court would need to credit a survey
 26 marred by implausible and fake responses to define the relevant antitrust market. The FTC asks the
 27 Court to break too much new legal ground and overlook too many factual infirmities.

28 The Court DENIES the preliminary injunction.

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