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Exhibit S

**IN THE UNITED STATES DISTRICT COURT FOR
THE NORTHERN DISTRICT OF CALIFORNIA**

PEOPLE OF THE STATE OF CALIFORNIA,
et al.,
Plaintiffs,

v.

META PLATFORMS, INC, et al.,
Defendants

IN RE: SOCIAL MEDIA ADOLESCENT
ADDICTION/PERSONAL INJURY
PRODUCTS LIABILITY LITIGATION

THIS DOCUMENT RELATES TO:
4:23-cv-05448

MDL No. 3047

Case No. 4:23-cv-05448-YGR

Judge: Hon. Yvonne Gonzalez Rogers

Magistrate Judge: Hon. Peter H. Kang

TRIAL REPORT OF TIM ESTES
March 20, 2026

and drew upon my knowledge and experience from decades of working in digital platform development, including my work for Thorne developing technology to reduce child sex trafficking and my work and AngelQ making a safe online platform for kids. This is the same methodology that I typically use when evaluating digital platforms for companies I am advising, or when developing a digital platform myself.

V. Background

A. Overview of Meta's Platforms

28. The size of these companies, and the resources available to them, are relevant to understanding the feasibility of the safer alternative designs that are discussed below.

29. **Meta Platforms, Inc.** Meta operates two of the largest social-networking services in the world – Facebook, launched in February of 2004, and Instagram, introduced as a mobile photo-sharing app in October 2010.² Together these apps reach roughly 3.07 billion and 2 billion monthly active users (MAUs) respectively, making Meta the largest social-media provider by audience size.³ The company derives most of its revenue from targeted advertising delivered across Facebook, Instagram, Messenger, and related services.⁴

B. Harms of Meta's Platforms

30. As demonstrated in the expert reports previously submitted by the Plaintiffs, as noted by the U.S. Surgeon General, and based on my experience and knowledge from studying and working in this area, I understand that Meta's social media platforms can contribute to a wide range of harms in adolescents.⁵ Those include anxiety, depression, sleep disruption, negative body

² “Facebook Launches” (October 29, 2019), <https://www.history.com/this-day-in-history/february-4/facebook-launches-mark-zuckerberg>.

³ “What are the top social media platforms in the world?” (last updated March 11, 2025), <https://soax.com/research/top-social-media-platforms>.

⁴ “Meta Earnings: Record Profits, Sales as Ads Stay Robust During Zuckerberg's Year of Efficiency”(October 25, 2023), <https://www.forbes.com/sites/dereksaul/2023/10/25/meta-earnings-record-profits-sales-as-ads-stay-robust-during-zuckerbergs-year-of-efficiency/>.

⁵ See generally Social Media and Youth Mental Health: The U.S. Surgeon General's Advisory (2023) (hereinafter, “Surgeon General's Advisory”).

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(sextortion); children have committed suicide following sextortion; and children have been abducted and sexually abused by predators.¹⁷

38. Law enforcement and child safety organizations have repeatedly warned that popular apps are used to lure children into inappropriate contact or worse. In the UK, where such crimes are diligently tracked, over 7,000 instances of online grooming (sexual communication with a child) were recorded in 2023-24 – an 89% increase since 2017.¹⁸ Instagram and Facebook were among the most common platforms used by perpetrators to target children online.¹⁹ The youngest victim was just five years old – meaning a kindergartner ended up on a platform and in contact with a predator.²⁰

39. Many of these harms could be prevented or greatly reduced with technical solutions that were readily available to Meta. For example, Meta could have (and should have):

- combined age verification technology with Verified Parental Consent systems to ensure that minors could not access the platform without their parents’ or guardians’ knowledge and informed consent;

40. As outlined below, these and numerous other options were technically feasible, and in many cases had been implemented by other companies in other contexts. But Meta either did not implement them, waited unreasonably long to implement them, or implemented them in ways that were ineffective.

VI. OPINION 1: META’S AGE VERIFICATION AND PARENTAL CONSENT SYSTEMS WERE BROKEN

A. Overview

41. Having failed to create a safe environment for children, Meta should have implemented systems to help parents protect children from the potential harms of their platforms.

¹⁷ META3047MDL-014-00350154; Rothschild Dep. at 314-18.

¹⁸ Online Grooming Crimes Against Children Increase by 89% in Six Years” (Nov 1, 2024), <https://www.nspcc.org.uk/about-us/news-opinion/2024/online-grooming-crimes-increase/>.

¹⁹ *Id.*

²⁰ *Id.*

offered). Nonetheless, multiple options exist if a parent doesn't have a card – Microsoft, for instance, allows an adult to contact customer support and verify with a government ID instead.⁶⁴

82. Overall, credit card verification has been a feasible, affordable solution since at least the early 2010s, and companies like Nintendo, Sony, Microsoft, Apple, Google, and Niantic (makers of Pokémon GO) have all utilized it to comply with child safety laws. Those use cases demonstrate that this method works at scale. Moreover, the cost and friction are minimal, as evidenced by parents routinely completing these verifications within minutes.

2. Government ID Scanning and Database Checks (2012 to present)

83. Another highly effective method available for years is scanning an official ID (driver's license, passport, etc.) and verifying the birthdate. By 2012, services like Jumio and Veratad offered SDKs to scan an ID with a smartphone camera and automatically parse the data for age verification.⁶⁵ The COPPA rule was updated in 2013 to explicitly allow “checking a government-issued identification against databases, provided the ID is deleted after verification.”⁶⁶ Many online alcohol and tobacco retailers, for instance, have used third-party identity verification services to confirm age before shipment, leveraging DMV or credit bureau databases.⁶⁷ Dating apps and sharing economy platforms also commonly verify IDs to ensure users are adults or authentic.⁶⁸

⁶⁴ Getting Started With Microsoft Family Safety, <https://support.microsoft.com/en-us/account-billing/getting-started-with-microsoft-family-safety-b6280c9d-38d7-82ff-0e4f-a6cb7e659344>.

⁶⁵ Jumio, Identity Verification FAQs, Jumio, <https://www.jumio.com/faq/>; Veratad, Identity Documents, Veratad, <https://veratad.com/methods/identity-documents>.

⁶⁶ Bumble Rolls Out ID Verification in Dating App Safety Push, Yahoo Finance, (March 17, 2025) <https://www.ftc.gov/business-guidance/resources/childrens-online-privacy-protection-rule-six-step-compliance-plan-your-business>.

⁶⁷ See, e.g., How Does Drizly Work? Everything Explained, Idea Usher (Mar. 3, 2026), <https://ideausher.com/blog/how-does-drizly-work/>.

⁶⁸ See, e.g., Bumble Rolls Out ID Verification in Dating App Safety Push, Yahoo Finance, Mar. 17, 2025, <https://finance.yahoo.com/news/bumble-rolls-id-verification-dating-120000362.html>.

The undersigned hereby certifies their understanding that they owe a primary and overriding duty of candor and professional integrity to help the Court on matters within their expertise and in all submissions to, or testimony before, the Court. The undersigned further certifies that their report and opinions are not being presented for any improper purpose, such as to harass, cause unnecessary delay, or needlessly increase the cost of litigation.

Dated: March 20, 2026



Timothy W. Estes