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EXHIBIT B

EXPERT REPORT OF DAMON L. McCOY, Ph.D.

State of New Mexico v. Meta Platforms, Inc., et al.

State of New Mexico, First Judicial District Court, Santa Fe County

No. D-101-CV-2023-02838

July 11, 2025

safety.⁷⁶ The non-exhaustive list of features (or lack of features in some cases) discussed in the following sections are not intended to cover every shortcoming or failure on Meta’s platforms, but exemplify some of the most serious.

Age Gating / Lack of Age Verification

Age verification refers to the processes and technologies platforms use to confirm that users meet minimum age requirements. Age verification is important to protect minors from inappropriate content and conduct that they may be exposed to on a given platform, as well as to ensure adult strangers are not freely permitted to interact with minors on a given platform. It should also be used to restrict access or provide parental monitoring for products that are not designed to be safe for children.

Facebook’s official policy in the U.S. is and has long been that users must be at least 13 years old to sign up.⁷⁷ It has claimed for many years that it has “systems in place at the point of sign-up to prevent people who identify themselves as under the age of 13 from creating accounts,” that it would be “a violation of our Statement of Rights and Responsibilities to provide false birth date information,” that “we have community verification systems after sign-up to help identify people who are doing this so we can take appropriate action,” and that it “encourage[s] users to report people who have falsified their age either through the report links on the site or through the dedicated contact form in our Help Center.”⁷⁸ (Instagram, in contrast, did not ask new users to provide their date of birth during the sign-up process until late 2019, and instead simply asked such users to confirm they were over age 13 without any type of robust verification measures.⁷⁹)

⁷⁶ See, e.g., METANMAG-002-01350992 (Internal 2019 “User-Engagement vs. User Value” presentation which states “we often make product decisions based on the effects on user-engagement (e.g. sessions, clicks, etc.) — and are uncertain about the impact on user-value — i.e. what’s the effect on the true utility and value that users get from using the product?” and exploring “three broad reasons why increasing user-engagement might not increase user-value,” including “when the product stretches value out — i.e., it spreads value thinly, to maximize engagement,” “when the product is misleading — i.e., the product makes promises about value without fulfilling them,” and “when users’ choices don’t represent their own best interests — e.g. when users have self-control problems.”); METANMAG-002-00978465 at -484 (Internal 2022 “Central Well-Being” memo noting that the “stance we have historically taken is to give people control, but not in a way that hurts metrics.”).

⁷⁷ Diwanji, P., *How Do We Know Someone Is Old Enough to Use Our Apps?*, Meta (Jul. 27, 2021), <https://about.fb.com/news/2021/07/age-verification/>.

⁷⁸ METANMAG-005-01367715 (2010 presentation entitled “Safety on Facebook”).

⁷⁹ See METANMAG-002-00702183. See also, e.g., METANMAG-007-00340416; Bejar Dep. Tr. 183-203 (noting age verification is critical part of safety framework, that Instagram did not ask for age prior to 2019 and operated under a “don’t ask, don’t tell” approach where if users’ age was not known, no action was taken, and even afterwards lacked an effective enforcement mechanism, that the large numbers of underage users on Instagram was one of the “key reasons” for its acquisition by Facebook, that his independent testing easily found underage accounts, , that it was “common knowledge” within Meta that underage users were on the platform but was

Facebook, in the US, historically relied on self-declaration at sign-up to verify a user's age,⁸⁰ done by simply asking users to input their date of birth when creating an account (or in Instagram's case, asked users to simply check a box to confirm that they are the required age). In April 2018, Mark Zuckerberg testified before the U.S. Senate that "we don't allow people under the age of 13 to use Facebook,"⁸¹ despite receiving a report only months earlier estimating that four million children under the age of 13" were on Instagram alone.⁸² However, internal documents indicate Facebook's knowledge that significant numbers of teens lied about their age to pass as adults on the platforms.⁸³ Meta knew it had, and continued to establish, user accounts for children

"something you did not talk about," that Meta's leadership was likely aware of the issue, that Meta executives claims that the company does not allow underage users was "lying," that with "millions and "millions" of kids were on Instagram, that Meta made it "nearly impossible" to report underage Instagram accounts, and tools to detect such users were not effectively deployed, and that Instagram was not a "safe" environment for underage users due to their exposure to sexual content, distressing material, and other harms.)

⁸⁰ Facebook announced a shift in its policies only in 2021. *See, e.g., Facebook, How Do We Know Someone Is Old Enough to Use Our Apps?* (July 27, 2021), <https://about.fb.com/news/2021/07/age-verification/>; *see also, e.g.,* METANMAG-002-00157461 (internal 2020 discussion regarding "Age Management Decisions" prompted by external pressure regarding under-13 users and teens, and noting a "general understanding that an unknown number of u13s are on FB and especially IG, and lying about their age," and that the decision on how to handle age falsification was paused due to limited resources, though action was required to "gain credibility needed to influence upcoming regulation in this area.").

⁸¹ *Transcript of Mark Zuckerberg's Senate hearing*, The Washington Post (Apr. 10, 2019), <https://www.washingtonpost.com/news/the-switch/wp/2018/04/10/transcript-of-mark-zuckerbergs-senate-hearing/>.

⁸² MT-IG-AG-NM-000020872 (internal January 2018 memo entitled "H2/H1 2018 Youth Team Review" noting that "Looking at people we predict to be 13 and 14 today, we can estimate that there were 4M people under 13 in 2015 on IG," which "represents around 30% of all 10-12 years old in the US," and stated that "assuming similar numbers today, 75% of US teens are MAP [monthly active persons] on IG."); *see also* METANMAG-002-00610846 (Zuckerburg as custodian.).

⁸³ METANMAG-002-02352081 (Internal 2012 Facebook "Project Kid" presentation regarding Facebook's plans to "allow[] <13s to join Facebook without lying" because of the "estimated growth opportunity of ~25M incremental MAUs [monthly active users] within a year," where "allowing <13s to register for Facebook could increase new user registration by ~850K users per week (~45M per year)" which was "estimate[d] ... from looking at the number of unique registrants who are currently being rejected for inputting a <13 age and subtracting out those users that we know to have come back and signed up with a >13 age," and noted that "[t]here is [currently] no age verification for anyone who claims to be >13."); METANMAG-011-01017270 ("June 2012 Families on FB" presentation noting that "Evidence indicates that millions of children under 13 on Facebook" and "Current system is not designed to help parents protect those children."); METANMAG-002-00355288 (2017 internal conversation including Facebook's Head of Global Safety Antigone Davis noting concerns about age gating and

under 13 years of age, failed to screen those accounts from inappropriate and dangerous activity and conduct, and collected and used data from those children.⁸⁴ For example, an internal 2019 Safety & Well-Being Integrated Plan” noted that “[w]e have a weak system for keeping U13s off the platform and verifying age for protection of minors.”⁸⁵ Nevertheless, two years later, feedback regarding internal efforts to “identify u13s and ensure youth are in age-appropriate experiences” on one of Meta’s platforms, detailed CEO Mark Zuckerberg’s push back against efforts to identify those under 13, instructing that those efforts be scaled back to only “provide tools to parents to ensure u13s are in safe experiences,” and noting that efforts to “provide all developers w/ core tech to detect and prevent harmful behavior” should be deemed “aspirational” only, despite Meta executive Andrew Bosworth noting that “we’re weak here.”⁸⁶

As noted in the report of Dr. Colin Gray regarding “dark patterns” present on Meta’s platforms, Meta’s underage reporting form “uses obstruction, interface interference, and forced action to discourage reporting these [underage] users.”⁸⁷ Similarly, according to testimony from former Meta employee Vaishnavi Jayakumar, this dark-pattern laden, high-friction underage reporting form was apparently an improvement over the underage reporting flow in place at least prior to 2021: “if you wanted to report a user for being under 13, you had to go to a web form. And so, you know, go out of the app essentially, go to a form and then report that account for being under 13.”⁸⁸ Once at this form, it took “over 7 screens for users to report U-13 users on IG.”⁸⁹ Ms. Jayakumar acknowledged (and Meta employees discussed at the time) how an “in-app” reporting feature would be “a much faster, much more seamless way to report users,”⁹⁰ but also how making this change would be a “significant lift from the legal and privacy perspective,” because growing

existence of “age liars”); METANMAG-007-00387286 (2017 Post & Presentation regarding “Digital Me: Exploring Tweens’ Social Media Habits,” what the children are looking for on the apps); METANMAG-002-01453637 (email from Antigone Davis noting that “Until we have really strong mechanisms for preventing inappropriate adult/minor contact, I think we risk generating more negative press than positive - especially when we do very little to keep U13s [under 13 year old children off our platform.]”).

⁸⁴ METANMAG-002-00182409 at -417 (Internal August 2020 “Integrity Update” noting “large backlogs in our u13 [under 13 years old] review queues” which were “a lower priority area” despite having over 1.16 million reports.)

⁸⁵ METANMAG-002-00387269; *compare* METANMAG-002-00022877 (2016 email regarding “Text Analysis for teen age modeling” to build age model for users of Facebook Family products including Facebook, Instagram, WhatsApp, and Messenger, with goal to generate a high confidence year of birth prediction for every user).

⁸⁶ METANMAG-059-00000318.

⁸⁷ *See* Gray Report, ¶¶ 89, 90.

⁸⁸ *See* Jayakumar Dep. Tr. 91:24-92:3; *see also Report an Underage User on Instagram*, <https://help.instagram.com/contact/723586364339719>

⁸⁹ *See* Jayakumar Dep. Tr. 96:9-14; METANMAG-002-01054251.

⁹⁰ METANMAG-002-01054251.

the volume of reports would add to an already-existing “backlog of 2.5 million cases age-related reports to review.”⁹¹

Even earlier, Meta’s internal documents emphasized the importance in maintaining and growing teenagers’ usage of its platforms, despite the risks around its admittedly weak age gating policies.⁹² In 2019, Instagram’s head of public policy (Karina Newton) acknowledged to other executives that “IG has some key product and demographic differences which creates a higher risk environment and unique vulnerabilities” including “younger demographic + no age collection ... our lack of proactive action on detecting under 13 accounts undermines our credibility generally but it’s compounded by both our younger demographic as well as the fact that because we don’t collect age, using age-gating as a solution to ensure content that’s especially inappropriate for younger users isn’t something we can lean into.”⁹³ Similarly, another internal message from Newton noted that “it doesn’t seem like we are critically identifying what problems we’re trying to solve for and what the actual business risk for those problems is. And by ‘we’ I mean ‘FB leadership,’” and that the “biggest issue underlying all of this is ... what is appropriate for teens and pre-teens and the elephant in the room there is age,” to which a colleague noted “we keep pretending there’s a purely technical solution.”⁹⁴ As noted above, Instagram was not collecting even self-reported age at that time beyond the attestation that the user is at least 13 years old.

⁹¹ METANMAG-002-01054251; *see also, e.g.*, MT-IG-AG-NM-000210561 (April 2021 internal document noting “[a]ge verification (for under 13) has a big backlog and demand is outpacing supply,” that “[a]ge verification has no ground truth to give robust measurement of effectiveness,” and that “progress on these and any other issues not raised is hampered by lack of capacity.... Central Integrity has 1 DS [data scientist] on Child Safety and we are working to get a bit more support, but addressing gaps will require a more robust XFN [cross-functional] effort.”).

⁹² *See, e.g.*, METANMAG-002-00208305 (internal Facebook presentation titled, “Teen Data Platform + Understand,” which outlined goals for increasing teen engagement across the Facebook family of apps, specifically focusing on “flattening the curve” of teen participation and increasing total teen time spent, including through features like “People You May Know”); METANMAG-002-00172395 (2016 deck regarding teen usage, noting “We have a DAP and Engagement (TS/DAP) problem with Teens and Young Adult people in the US. We believe this may be worse than we previously thought and getting worse over time”); METANMAG-002-00300967 (2016 message in which CEO Zuckerberg sent out a list of areas where they need to start focusing on teen’s engagement); METANMAG-005-01162487 (2016 “US Teens & Growth” deck describing “teen growth problems” as including the fact that “40-50%” of teens get their “first smartphone” by “10-11y” and “40%” their “first ‘social media account’ by ‘11y’” but noting “we can’t/done have an [official] acquisition strategy for these youngest of teens”); METANMAG-002-00697124 (2020 “Tweens Competitive Audit” focused on market research for kids under 13).

⁹³ MT-IG-AG-NM-000049647.

⁹⁴ METANMAG-002-00086607; *see also, e.g.*, METANMAG-002-00157461 (2020 internal email regarding “Age Management Decisions” emphasizing increased external pressure regarding under-13 users and teens, noting decision on how to handle age falsification was paused due to limited resources, and highlighting regulatory pressure to adopt stricter age

Employees also noted internally how easy it was to bypass the platforms' stated age gateways, stating that internal growth teams had suggested asking for an "age range" instead of age or birthday, and noting "so long as we have a cool-down period, we're signaling that we are OK with letting u13s on our platform"; that when "a user tries to update their age to be <13, we do not checkpoint them as underage and they are able to continue using FB even after they confirm that they are a specific age (see the screenshot I took below, 'I confirm my age is 9')," and that "all I have to do is close the error dialog box and keep changing my birthdate until I get the right one."⁹⁵

More recently, Meta has stated that it has "developed [artificial intelligence] technology that allows us to estimate people's ages, like if someone is below or above 18."⁹⁶ However,

verification, including requiring ID, treating all users as minors without effective age enforcement, and potentially raising the age of consent to 16 or 18, as necessary to "gain credibility needed to influence upcoming regulation in this area."); METANMAG-002-00219693 (2020 policy discussion on Child Exploitation, noting "lack of U13 proactive age identification and enforcement mechanism," that leadership "will not prioritize the is work until we have clear legal obligations to do so," and seeking "leadership support to push product to act on knowledge we already have, i.e. clear out backlogs, disable verified u13s, build an u18 checkpoint to review minors who have been reported on 18+ products like FB Dating."); METANMAG-005-00170332 (2021 thread regarding parent/child focus groups on "Aging up" their accounts noting that "In our recent study, majority of 12 yr olds and about half [of 11 year olds] were already on IG (we couldn't ask if they had their own account" and noting "that a child can just go and create an IG or FB account without their [parent's] supervision anyway at 13?");

⁹⁵ METANMAG-002-00410280.

⁹⁶ Diwanji, P., *How Do We Know Someone Is Old Enough to Use Our Apps?*, Meta (Jul. 27, 2021), <https://about.fb.com/news/2021/07/age-verification/>; *see also*, e.g., Finkle, E., et al., *How Meta uses AI to better understand people's ages on our platforms*, Meta (June 22, 2022), <https://tech.facebook.com/artificial-intelligence/2022/06/adult-classifier/>; *however, see*, METANMAG-002-00219693 ("Child Safety State of Play" slides noting that "immediate product vulnerabilities" included "Lack of U13 proactive age identification and enforcement mechanism"; "Need for improved age identification models that allow us to better predict age of users and offer appropriate age-related filtering and protections," and noting "in March it was decided that we would not build a classifier to detect minors under 13 years old."); Clegg Dep. Tr. 567:1 (noting decision not to use a classifier to detect under 13 users in July 2020 because the teams felt it was better to push for an app store level solution); METANMAG-002-00698654 (2021 Messenger Wellbeing All Hands" document regarding risks to children on its platforms which notes "Our best available age model only determines teen/non-teen and cannot determine age gaps at a granular level which hampers our ability to action our policies, which rely on making specific age determinations"); METANMAG-002-00185276 (2021 e-mail regarding "State of Youth Integrity" noting that while "Meta uses central age prediction to identify minors and adults," "Age verification (for under 13) has a big backlog and demand is outpacing supply," "Age verification has no ground truth to give robust measurement of effectiveness," and "Progress on these and other issues not raised is hampered by lack of capacity."); Clegg Dep. Tr.

internal documents call into question their efficacy. For example, a 2021 Messenger Wellbeing All Hands” document regarding risks to children on its platforms notes that “Our best available age model only determines teen/non-teen and cannot determine age gaps at a granular level which hampers our ability to action our policies, which rely on making specific age determinations.”⁹⁷ Another document regarding “State of Youth Integrity” notes that while “Meta uses central age prediction to identify minors and adults,” “[a]ge verification (for under 13) has a big backlog and demand is outpacing supply,” “[a]ge verification has no ground truth to give robust measurement of effectiveness,” and “[p]rogress on these and other issues not raised is hampered by lack of capacity.”⁹⁸

Meta’s VP of Youth Products “first year observations re Meta,” penned in 2021, noted that “[y]outh support is not optional,” and “[i]t needs to be funded and executed in a coordinated and federated way” because “[s]crutiny will only continue to increase, and we are in red/orange in most areas mostly from lack of focus and investment”; that “[y]outh equates to tweens and early teens as 13 is not a magic number”; that Meta had “a responsibility as a giant to ensure that young people form good digital habits ... and not just jerk[ing] based on external factors like we have done.”⁹⁹ It also noted that “[a]ge gating and verification should be a critical part of our platform, a basic API that is available for anyone ... we need to check ID, or alternatively we need to do age check at declared (and detected) sensitive areas,” “we don’t verify identities very well,” and “we don’t identify well people with multiple accounts – legit or otherwise.”¹⁰⁰

As of today, Meta has not implemented any sort of mandatory age verification for US users of its platforms, instead still relies primarily on users’ self-declaration, and has actively fought regulatory measures to require age verification for minors.¹⁰¹ Based on my expertise, these issues

567:1 (noting decision not to use a classifier to detect under 13 users in July 2020 because the teams felt it was better to push for an app store level solution).

⁹⁷ METANMAG-002-00698654.

⁹⁸ METANMAG-002-00185276.

⁹⁹ METANMAG-021-00147753.

¹⁰⁰ METANMAG-021-00147753.

¹⁰¹ See, e.g., METANMAG-005-00633746 (2022 note from Meta executive Nick Clegg to Meta’s Board of Directors regarding “US Federal youth privacy legislation that *could* ... eliminate our ability to deliver ads to children ages 13-17” and detailing Meta’s lobbying efforts to prevent regulatory reforms); see, also, e.g., CBS News, *Federal judge blocks Mississippi law that would require age verification for websites* (July 2, 2024), <https://www.cbsnews.com/news/federal-judge-halts-mississippi-law-requiring-age-verification-for-websites-google-meta/> (noting suit challenging Mississippi law that would require users of websites and other digital services to verify their age was filed by NetChoice, whose members include Meta, the parent company of Facebook and Instagram, and efforts to block similar laws in other states, including Arkansas, California and Ohio).

with age verification likely undermine the potential efficacy of kids safety features that Meta has claimed to deploy.¹⁰²

Meta’s longstanding reliance on self-declared age and its resistance to implementing robust age verification measures reflect a systemic failure to prioritize the safety of young users. Despite internal acknowledgments of widespread underage use, poorly designed and under resourced reporting systems, weak enforcement mechanisms, and the risks posed to minors by some of their features, Meta consistently chose to underinvest in meaningful safeguards.

Based on my expertise and experience, there are several technically feasible and practical steps that Meta could take to improve their knowledge and ability to detect the age of teen and child users. The first is to reduce the friction in reporting under-age accounts. The second is to create improved tools to automatically assess these reports. These automated methods can leverage peer-reviewed data mining methodologies to perform initial review of reports and also proactively discover teen and under 13 year old accounts.¹⁰³ I would also recommend additional investment in human analysts to discover more heuristics to detect teen and child accounts. These human analysts can also validate the automated methods.

Likes and Social Comparison

“Likes” are a core engagement feature across Meta’s platforms, including Facebook and Instagram. In 2009, Facebook introduced the “Like” button, and began algorithmically sorting posts on user’s news feeds with weighting towards “Likes.”¹⁰⁴ When a user “likes” a post, photo, comment, or page, it signals approval, enjoyment, or support for the content. The “like” is visible to others, contributing to a visible metric of popularity or endorsement for posts, pages, and accounts. “Likes” are also a foundational engagement metric that play a crucial role in the platforms’ monetization ecosystem. For instance, “likes” signal to Facebook’s algorithms that a piece of content is engaging; when a post receives more likes, it is thus more likely to be promoted

¹⁰² See e.g., State of New Mexico’s Amended Complaint for Abatement and Civil Penalties and Demand for Jury Trial, at ¶¶ 113-14 (noting that Meta failed to detect underage account despite “profile ma[knig] abundantly clear that [it was] 13-years old,” by “regularly post[ing] pictures of herself and comment[ing] about school, the cafeteria, and the school bus,” and “lament[ing] that she lost her last baby tooth,” with “others marked her first day of 7th grade and sports tryouts,” and “also frequently mentioned her age in messages” including in “response to an adult male stranger who reached out to her.”).

¹⁰³ See, e.g., Dey, R., et al., Profiling high-school students with Facebook: how online privacy laws can actually increase minors’ risk, IMC ‘13: Proceedings of the 2013 conference on Internet measurement conference, <https://doi.org/10.1145/2504730.2504733>.

¹⁰⁴ Zara, C., *How Facebook’s ‘like’ button hijacked our attention and broke the 2010s*, Fast Company (Dec. 18, 2019), <https://www.fastcompany.com/90443108/how-facebooks-like-button-hijacked-our-attention-and-broke-the-2010s>; D’Onfro, J., *Facebook’s News Feed is 10 years old. This is how the site has changed*, World Economic Forum (Sept. 9, 2016), <https://www.weforum.org/stories/2016/09/facebooks-news-feed-is-10-years-old-this-is-how-the-site-has-changed/>.