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15 **UNITED STATES DISTRICT COURT**
16 **NORTHERN DISTRICT OF CALIFORNIA**
17 **SAN JOSE DIVISION**

18 NETCHOICE, LLC, d/b/a NetChoice,

19 Plaintiff,

20 v.

21 ROB BONTA, ATTORNEY GENERAL OF
22 THE STATE OF CALIFORNIA, in his official
23 capacity,

24 Defendant.

Case No. 5:22-cv-08861-BLF

**BRIEF OF DESIGN RESEARCHERS
AND PRACTITIONERS AS AMICI
CURIAE IN SUPPORT OF
DEFENDANT**

Hearing Date: January 23, 2025

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Judge: Hon. Beth Labson Freeman

Court: Courtroom 3, 5th Floor

Action Filed: December 14, 2022

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1 **INTEREST OF *AMICI CURIAE***¹

2 The Tech Justice Law Project (TJLP) is a legal initiative of Campaign for Accountability,
3 a 501(c)(3) nonpartisan, nonprofit organization. TJLP works with a collective of legal experts,
4 academics, policy advocates, digital rights organizations, and technologists to ensure that legal
5 and policy frameworks are responsive to emergent technologies and their societal effects. TJLP
6 advocates for better, safer, and more accountable digital spaces by convening a broad range of
7 legal and technical expertise in numerous areas, including platform design, the First Amendment,
8 and data-based consumer harms.

9 The Tech Policy Clinic is part of Princeton University’s Center for Information
10 Technology Policy (“CITP”), which works to understand and improve the relationship between
11 technology and society. The CITP Clinic provides nonpartisan research, analysis, and
12 commentary in the public interest. This brief is the product of a CITP Clinic project and reflects
13 the views of academic researchers, and practitioners who study the behavior of online platforms
14 and the effects they have on society at large.²

15 The below *amici* are represented in their individual capacities; the brief does not reflect
16 the views of their affiliated institutions:

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¹ *Amici* certify that no person or entity, other than *Amici*’s own staff or counsel, made a monetary contribution to the preparation or submission of this brief or authored this brief, in whole or in part.

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1 **INTRODUCTION**

2 This brief addresses NetChoice’s First Amendment argument in its renewed facial
3 challenge of the provision of California’s Age-Appropriate Design Code (“AADC”) related to
4 dark patterns. This brief explains how dark patterns function and why the provision should be
5 evaluated as a content-neutral regulation that preserves user autonomy, prevents user
6 manipulation, and promotes free expression values of California residents. Consequently,
7 NetChoice’s argument that the dark patterns provision violates the First Amendment should be
8 rejected.

9 The Supreme Court recently explained in *Moody v. NetChoice LLC* that laws affecting
10 our “variegated and complex” online environment will have different impacts on different modes
11 of connection. 144 S. Ct. 2383, 2398 (2024). Because there are “different levels of editorial
12 choice” for each type of connection, a court evaluating a facial challenge “must determine a
13 law’s full set of applications” before assessing whether the law runs afoul of the First
14 Amendment. *Id.* But NetChoice chooses to ignore the Supreme Court’s clear direction for factual
15 specificity and persists in seeking facial relief from a speculative application of the law to a
16 narrow set of design features, namely “continuous scroll, autoplay, and other design features”
17 they claim affect online content, without addressing the full set of dark patterns that the law
18 proscribes. Pl.’s Second Mot. Prelim. Inj. at 17. The Court should reject NetChoice’s attempt to
19 contest these specific design features from the broader dark pattern regulatory framework.

20 This brief focuses on specific design choices that constitute dark patterns and gathers
21 several examples of how these particular “regulated activities *actually function.*” *Moody*, 144 S.
22 Ct. at 2411 (Jackson, J. concurring) (emphasis in original). “Dark patterns” are user interface
23 features that benefit an online service by leading users to make decisions they might not
24 otherwise make. *See* Cal. Civ. Code § 1798.140 (defining a dark pattern under the California
25 Consumer Privacy Rights Act as “a user interface designed or manipulated with the substantial
26 effect of subverting or impairing user autonomy, decision making, or choice”). We first explain
27 what dark patterns are and how they manipulate vulnerable users, providing specific examples of
28

1 dark patterns that commonly affect children and do not implicate expressive conduct. Next, we
2 explain why the AADC’s provision, even when applied to the narrow class of manipulative
3 designs NetChoice asserts, is a reasonable, content-neutral regulation aimed at preventing unfair
4 or deceptive practices from harming vulnerable users and does not burden more speech than
5 necessary to further that interest.

6 The Ninth Circuit previously indicated that “it is far from certain that a ban [on dark
7 patterns] should be scrutinized as a content-based restriction, as opposed to a content-neutral
8 regulation of expression.” *NetChoice, LLC v. Bonta*, 113 F.4th 1101, 1123 (9th Cir. 2024) (citing
9 *U.S. v. O’Brien*, 391 U.S. 367, 376–77 (1968)). The Ninth Circuit is correct: NetChoice’s
10 position misconstrues the nature of California’s design-based prohibition against dark patterns,
11 its purpose, and the applicable constitutional framework.

12 ARGUMENT

13 **I. Prohibiting dark patterns preserves peoples’ ability to make free and informed** 14 **choices.**

15 *What are dark patterns?*

16 The AADC’s dark pattern provision prohibits online services from using manipulative
17 interfaces that “lead or encourage children” to (a) “provide personal information beyond what is
18 reasonably expected[, or] forego privacy protections”; or (b) “take any action that the business
19 knows, or has reason to know, is materially detrimental to the child’s physical health, mental
20 health, or well-being.” Cal. Civ. Code § 1798.99.31(7).

21 In the context of online interfaces, the term “dark patterns” was coined over a decade
22 ago to spotlight designs that are “carefully crafted to trick users into doing things they may not
23 otherwise do.” Harry Brignull, *Dark Patterns: Inside the Interfaces Designed to Trick You*,
24 Verge (Aug. 29, 2013).³ Subsequent academic work in the field of human-computer interaction
25 has developed extensive taxonomies that document how different services take advantage of

26
27 ³ <https://www.theverge.com/2013/8/29/4640308/dark-patterns-inside-the-interfaces-designed-to-trick-you>.
28

1 their visitors through these intentional design choices. *See, e.g.,* Johanna Gunawan, et al. *A*
2 *Comparative Study of Dark Patterns Across Web and Mobile Modalities*. 5 PROC. ACM HUM.-
3 COMPUT. INTERACT. 377 (2021); Colin M. Gray et al. *The Dark (Patterns) Side of UX Design*
4 1, PROC. 2018 CHI CONF. HUM. FACTORS COMPUT. SYS. (2018).

5 *Design Features and Dark Patterns*

6 Manipulative design interfaces maximize visitors' engagement within an app or service
7 to maximize revenue. Companies deploy such designs to increase visitors' likelihood of paying
8 for certain features or products, to serve advertisements, and to augment their ability to collect,
9 process, and monetize data concerning who uses their products and how. Engagement-
10 maximizing designs function to keep visitors in or bring them back to the service. Such features,
11 including banners, push notifications, nudge techniques, bait-and-switch ads,
12 anthropomorphized game or chatbot characters, autoplay, and continuous scroll are part of the
13 service's persuasive design: tools to capture peoples' attention and time to the financial benefit
14 of the companies. *See* Gaia Bernstein, UNWIRED: GAINING CONTROL OVER ADDICTIVE
15 TECHNOLOGIES 35–38 (2023) (canvassing addictive design features).

16 Several manipulative design features exploit the release of dopamine, the pleasure-
17 enhancing neurotransmitter. Our brains release more dopamine when we receive an unexpected
18 reward; along with other design features, this anticipated release of more dopamine is part of
19 what makes pulling the lever on a slot machine so addictive. *See generally* Natasha
20 Dow Schüll, ADDICTION BY DESIGN: MACHINE GAMBLING IN LAS VEGAS (2012). Online
21 businesses exploit this human reaction with a variety of design features like push notifications
22 and rewarding streaks that train the brain to repeatedly pick up the phone and return to (and
23 spend more time on) the platform. More time in an app or service translates to more
24 opportunities to serve visitors ads, convince them to pay for features, and monetize their data.

25 Determining whether any of these design features are dark patterns is a fact-driven
26 inquiry that evaluates when and how the persuasive design elements interfere with peoples'
27 ability to make free and informed choices. *See* Jamie Luguri & Lior Strahilevitz, *Shining a Light*
28

1 *on Dark Patterns*, 13 J. LEGAL ANALYSIS 43 (2021); Agnieszka Kitkowska, *The Hows and*
2 *Whys of Dark Patterns: Categorizations and Privacy*, in HUM. FACTORS PRIV. RSCH. 173
3 (2023). Some dark patterns deceive users, while others exploit cognitive biases or shortcuts to
4 manipulate, coerce, or force them into choices that they would not have freely selected. A
5 growing number of academic studies examine how online services can use digital interfaces to
6 manipulate visitors in different settings. *See* Arunesh Mathur, et al., *What Makes a Dark*
7 *Pattern...Dark?*, PROC. 2021 CHI CONF. HUM. FACTORS COMPUT. SYS. (2021).

8 *Dark Patterns Undermine User Choice*

9 The common thread running through the different techniques described as dark patterns
10 is that they affect users by taking advantage of cognitive shortcuts (heuristics and biases) in
11 their decision-making processes. By doing so, dark patterns unfairly influence people’s
12 choices—the core concern of consumer protection laws. *See generally* Brett Frischmann &
13 Evan Selinger, RE-ENGINEERING HUMANITY (2018). When confronted with dark patterns,
14 visitors are manipulated, deceived, obstructed, or coerced into accepting a decision or feature
15 that they would not have chosen if they were instead given a free and informed choice. Over
16 time, consistent exposure to a variety of dark patterns that manipulate online behavior further
17 degrades peoples’ autonomy. These tactics are especially harmful in the case of children, as
18 they may be unaware of the risks resulting from an action taken online and are more susceptible
19 to manipulative designs. A few examples follow.

20 In a recent enforcement action, the FTC charged Epic Games, the makers of the popular
21 videogame, Fortnite, with using counterintuitive, inconsistent, and confusing button
22 configurations to lead players to incur unwanted charges based on the press of a single button.
23 Compl., *In the Matter of Epic Games Inc.*, File No. 192-3203.⁴ Epic Games also made it easy
24 for children to make purchases while playing the game without requiring any parental consent.
25 It settled those allegations for \$245 million.

26
27 _____
28 ⁴ https://www.ftc.gov/system/files/ftc_gov/pdf/1923203EpicGamesComplaint.pdf.

1 Earlier, the FTC alleged Amazon’s system was designed to allow children to spend
2 unlimited amounts of real money to pay for virtual items while playing games. *Fed. Trade*
3 *Comm’n v. Amazon.Com, Inc.*, 71 F. Supp. 3d 1158, 1166 (W.D. Wash. 2014) (denying motion
4 to dismiss and noting that Amazon did not give customers the “free and informed choice to
5 submit themselves to the risk of in-app purchases”). Internal communications demonstrated
6 Amazon’s awareness that this design choice was “clearly causing problems for a large
7 percentage of our customers,” and that the situation was a “near house on fire.” Compl. at 3,
8 *Fed. Trade Comm’n v. Amazon.Com, Inc.*, No. 2:14-cv-01038 (W.D. Wash. July 10, 2014).⁵
9 Amazon settled those allegations for \$70 million.

10 A final example of an expression-agnostic design feature is discussed in *Lemmon v.*
11 *Snap, Inc.*, 995 F.3d 1085 (9th Cir. 2021). At issue in that case was the interaction between
12 Snapchat’s reward system and its Speed Filter that led to allegations of bodily harm. The
13 allegation was that Snapchat’s filter, which allowed users to capture how fast they are going and
14 share it with friends, encouraged reckless driving. *Lemmon* explains that, because such designs
15 did not involve “editing, monitoring, or removing of the content that its users generate through
16 Snapchat,” they did not raise speech-related concerns. *Id.* at 1092.

17 *The AADC’s Dark Pattern Prohibition Applies to Many Manipulative Design Practices*

18 The AADC’s dark patterns provision encompasses a wide spectrum of manipulative
19 design practices that extend beyond how third-party content is organized and displayed. These
20 practices include manipulation using advertisements, such as design elements that make pop-up
21 advertisement closure deliberately difficult, deceptive integration of advertisements that mimics
22 authentic in-app content, and implementation of advertisements disguised as legitimate game
23 progression elements. Additionally, the provision addresses data collection practices using
24 social engineering practices, including unnecessary prompts for additional (and unnecessary)
25 personal information, coercive tactics that encourage children to link their external social media
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27 _____
28 ⁵ <https://www.ftc.gov/system/files/documents/cases/140710amazoncmpt1.pdf>.

1 accounts in order to provide the game designer with additional personal information, mandatory
2 registration requirements before accessing a product or app’s core services, and strategic
3 conversion pressure from free to premium accounts after installing an app on a device. The
4 provision further contemplates examining practices known to be manipulative, such as
5 extended, non-skippable promotional content targeting minors, “bait-and-switch” techniques
6 advertising services that materially differ from their actual functionality, and emotionally
7 manipulative messaging, including “confirmshaming,” designed to encourage specific actions
8 and facilitate increased data collection through personalization features. Moreover, the
9 provision could apply to psychological manipulation tactics, including the anthropomorphizing
10 of non-human elements (such as AI chatbots and game characters) used to establish parasocial
11 relationships that particularly exploit children’s susceptibility, or the implementation of
12 “grinding” mechanics within games requiring repetitive task completion to prolong usage.
13 Finally, the provision addresses user safety concerns, encompassing intentional platform design
14 choices that impede peoples’ ability to protect themselves from harmful interactions and
15 insufficient safeguards against unwanted sexual contact within apps and services, particularly
16 concerning minors.

17 This brief survey of the many potential applications of the Act’s dark patterns provision
18 demonstrates how it can help identify and mitigate the effects of manipulative design practices
19 across digital platforms and services. These practices all undermine user autonomy and choice,
20 and they do not relate to organizing third-party content any more than a television
21 manufacturer’s decision to design TV screens at a particular width organizes third-party content.

22 Ignoring the wide variety of dark patterns, NetChoice’s attempt to narrowly constrain its
23 facial challenge to specific design features contradicts the Supreme Court’s analytical
24 framework established in *Moody*. See Pl.’s Am. Compl. Prayer ¶ 8. The Court indicated that the
25 First Amendment is not always implicated in these cases, so as-applied challenges are preferred
26 to facial challenges in this realm. *Id.* at 2398; *id.* at 2411 (Barret, J. concurring); *id.* at 2439
27 (Alito, J. concurring). The Court also explicitly directed that facial challenges require a
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1 comprehensive evaluation of “a law’s full set of applications,” to determine “which are
2 constitutional and which are not, and compare the one to the other.” 144 S. Ct. at 2394. As we
3 have demonstrated, a review of the full set of applications of the prohibition against dark
4 patterns suggests that there are numerous applications of the provision that are constitutional
5 and do not implicate expressive conduct. NetChoice fails to address these
6 applications. Moreover, any specific challenge to an application of the AADC to certain features
7 would appropriately be brought as an-applied challenge, not as a broad facial challenge.

8 **II. California has a legitimate and substantial interest in protecting minors from**
9 **manipulative design practices.**

10 Even with NetChoice’s artificially segmented subcategory of design features—namely
11 recommendation algorithms, autoplay, and continuous scroll—there are several applications of
12 these design features that are constitutional and have only an incidental effect on expressive
13 conduct—if at all. *See NetChoice, LLC v. Bonta*, 113 F.4th at 1123 (questioning whether a dark
14 pattern even “constitutes protected speech”). NetChoice should not be allowed to immunize the
15 use of those designs on young audiences under the guise that they have a First Amendment right
16 to manipulate those users.

17 Indeed, two courts recently affirmed the principle that design choices are distinct from
18 expressive conduct. In *Suffolk v. Meta Platforms, Inc. et al.*, a Massachusetts court upheld the
19 Massachusetts Attorney General’s claims against Meta for designing and using addictive design
20 features on Instagram, such as infinite scroll, autoplay, ephemeral features, and intermittent
21 variable rewards, to exploit children’s psychological vulnerabilities. Mem. and Order on Mot. to
22 Dismiss, 2024 WL 464835 (Mass. Super. Ct. Suffolk Cty. Oct. 17, 2024). The Court found that
23 Meta was being sued in its “distinct capacity as a product designer,” not for expressive content it
24 hosted. *Id.* at *7 (quoting *Lemmon*, 995 F.3d at 1092). In *State of Vermont v. Meta Platforms,*
25 *Inc. et al.*, a Vermont court similarly rejected Meta’s First Amendment challenge of claims
26 brought by the Vermont Attorney General against Meta for intentionally designing the Instagram
27 platform in a manner that is problematic for young people. Ruling on Mot. to Dismiss, 2024 WL
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1 3741424 (Vt. Super. Ct. July 29, 2024). The Court found that Meta’s argument failed to
2 distinguish between its “role as an editor of content and its alleged role as a manipulator of
3 Young Users’ ability to stop using the product.” *Id.* at *6.

4 As detailed below, California has a legitimate and significant interest in prohibiting these
5 manipulative practices from affecting vulnerable residents. There is growing evidence that
6 services can exploit young users through specific design features that promote engagement at the
7 expense of their mental health. *See* Emily Weinstein & Carrie James, BEHIND THEIR SCREENS:
8 WHAT TEENS ARE FACING (AND ADULTS ARE MISSING) (2022). Indeed, this is a claim that many
9 internal whistleblowers have raised publicly. *See* Jeff Horwitz, *His Job Was to Make Instagram*
10 *Safe for Teens. His 14-Year-Old Showed Him What the App Was Really Like*, Wall St. J. (Nov. 2,
11 2023);⁶ Georgia Wells, Jeff Horwitz, and Deepa Seetharaman, *Facebook Knows Instagram Is*
12 *Toxic for Teen Girls, Company Documents Show*, Wall St. J. (Sept. 14, 2021).⁷ While these
13 mechanisms might drive engagement across all demographics, their impact is particularly
14 concerning for adolescents and young children, whose developing minds are more susceptible to
15 the dopamine-driven feedback loops these features create, resulting in physical and
16 psychological harms.

17 Several studies indicate that the manipulative design features NetChoice focuses on can
18 lead to anxiety, decreased attention spans, and disrupted sleep patterns among young users. The
19 National Academies of Sciences, Engineering, and Medicine published a comprehensive report
20 on how these design features are engineered to increase platform usage, negatively affecting
21 adolescent mental health. Nat’l. Acads. Scis., Eng’g, & Med., *Social Media and Adolescent*
22 *Health* (2024).⁸ Continuous scrolling allows users to move through their feeds seamlessly,
23 without needing to navigate to a “next page” button, leading to extended time on the platform.
24 Infinite feeds can also result in feedback loops that reinforce existing beliefs and prioritize

25 _____
26 ⁶ <https://www.wsj.com/tech/instagram-facebook-teens-harassment-safety-5d991be1>.

27 ⁷ <https://www.wsj.com/articles/facebook-knows-instagram-is-toxic-for-teen-girls-company-documents-show-11631620739>.

28 ⁸ <https://www.ncbi.nlm.nih.gov/books/NBK603437/#>.

1 sensationalized content. All these features are “part of persuasive design, tools to capture users’
2 attention and time to the financial benefit of the companies.” *Id.* at 34.

3 The National Academies report also identifies how adolescents developing cognitive
4 control experience a heightened sensitivity to rewards, making it difficult to disengage from
5 social media despite intentions to do so and awareness of the harms. When pushed content is
6 increasingly emotionally exciting, getting offline is more difficult; the adolescent brain is
7 particularly susceptible to highly emotional or arousing contexts. Moreover, adolescents’ drive
8 for social connection can influence their online behavior by compelling them to frequently
9 monitor their accounts for peer reactions such as likes and comments. This social feedback
10 activates reward centers in the brain that release dopamine. This same reward-seeking
11 mechanism makes it difficult for young people to resist checking notifications about new
12 messages or comments constantly. *Id.* at 50. These design choices lead to compulsive,
13 problematic use, which some researchers characterize as addictive behavior. *See* Anna Lembke,
14 DOPAMINE NATION: FINDING BALANCE IN THE AGE OF INDULGENCE (2021).

15 In the aggregate and over time, researchers find that these manipulative designs succeed
16 in driving engagement, especially for young people who are at a cognitive disadvantage in
17 resisting them. Common Sense Media found in a 2023 report on Teens and Mental Health that
18 among girls aged 11 to 15, more than one-third report feeling “addicted” to social media
19 platforms. Jacqueline Nesi et al., *Teens and Mental Health: How Girls Really Feel About Social*
20 *Media* (2023).⁹ Similarly, researchers from University of Michigan’s Institute for Social
21 Research surveyed 8th and 10th graders and revealed that teens spend an average of 3.5 hours
22 daily on social media, with one-quarter logging over 5 hours and one-seventh exceeding 7 hours
23 per day. Richard A. Miech et al., *Monitoring the Future: A Continuing Study of American Youth*
24 *(8th- and 10th-Grade Surveys), 2021 (ICPSR 38502)* (2022).¹⁰

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27 ⁹ [https://www.common sense media.org/sites/default/files/research/report/how-girls-really-feel-
about-social-media-researchreport_final_1.pdf](https://www.common sense media.org/sites/default/files/research/report/how-girls-really-feel-about-social-media-researchreport_final_1.pdf).

28 ¹⁰ <https://www.icpsr.umich.edu/web/NAHDAP/studies/38502/versions/V1>.

1 These issues were recognized in Surgeon General Vivek H. Murthy’s recent Advisory on
2 Social Media and Youth Mental Health. U.S. Pub. Health Serv., *Social Media and Youth Mental*
3 *Health: The Surgeon General’s Advisory* (2023).¹¹ The advisory cites recent research on youth
4 social media usage and emphasizes how harmful social media behavior, characterized by
5 compulsive and uncontrollable use, is linked to a myriad of health issues. *Id.* at 10. For example,
6 nearly one-third of adolescents report using screen media until midnight or later on weekdays,
7 with social media being their most-used applications. *Id.* A survey of 42 studies consistently
8 found that excessive social media use correlates with poor sleep quality, reduced sleep duration,
9 and increased depression among young people, with poor sleep further linked to altered
10 neurological development, depressive symptoms, and suicidal ideation in adolescents. Rea
11 Alonzo et al., *Interplay Between Social Media Use, Sleep Quality, and Mental Health in Youth:*
12 *A Systematic Review*, 56 SLEEP MED. REVS. (2021); *see also* Victoria Rideout & Michael B.
13 Robb, *Social Media, Social Life: Teens Reveal Their Experiences* (2018). Following that
14 advisory, an interagency report surveying the latest research in the field concluded that
15 “platforms and other interactive digital service providers should be required to prioritize the
16 safety and well-being of young people above profit in their product design.” Nat’l Telecomms. &
17 Info. Admin., *Online Health and Safety for Children and Youth: Best Practices for Families and*
18 *Guidance for Industry* 45 (2024).¹²

19 **III. The dark patterns provision is a reasonable means to protect children’s privacy**
20 **and well-being even if it may incidentally affect some expressive conduct.**

21 As a starting point, digital product design provisions like those in the AADC target
22 functional design features, not expressive conduct. They are safety regulations, just like the
23 regulations of the quality of paint in children’s toys. They place guardrails on design features that
24 can be shown to stimulate or even actuate harmful conduct, such as addictive and compulsive
25 behaviors, to which children are especially vulnerable. These provisions are concerned with how

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27 ¹¹ <https://www.hhs.gov/sites/default/files/sg-youth-mental-health-social-media-advisory.pdf>.

28 ¹² <https://www.ntia.gov/sites/default/files/reports/kids-online-health-safety/2024-kohts-report.pdf>.

1 much a person uses an interface and the built-in features that help them find limits to their
2 engagement.

3 The Act does not target, regulate, or discriminate between what is expressed or who
4 expresses it, and the regulations do not suppress or otherwise burden a specific message.
5 Companies’ reliance on dark patterns as design features demonstrate their commitment to
6 increasing engagement and profit—not to promoting certain ideas or viewpoints. Therefore,
7 functional design regulations like the AADC do not categorically implicate the First
8 Amendment. Indeed, when this case was on appeal, the Ninth Circuit expressed skepticism that
9 dark patterns implicate the First Amendment at all. *See Bonta*, 113 F.4th at 1122 (noting “most
10 of those provisions, by their plain language, do not necessarily impact protected speech in all or
11 even most applications”). It was unclear, on the record before the Court, whether a “dark pattern”
12 itself constitutes protected speech. *Id.* at 1123.

13 Cases involving First Amendment challenges to architectural-design regulations are
14 instructive here, in that they attempt to distinguish functional considerations from expressive
15 conduct. In *Burns v. Town of Palm Beach*, a homeowner sought approval from the Town of Palm
16 Beach’s architectural review commission to tear down his beachfront mansion and build a new
17 one “in the midcentury modern style.” 999 F.3d 1317, 1322 (11th Cir. 2021), *cert. denied*, 142 S.
18 Ct. 1361 (2022). Although the Eleventh Circuit declined to decide whether architecture can be
19 First Amendment-protected expression, it rejected the homeowner’s claim that residential
20 architecture is *always* expressive. *Id.* at 1335–36. In another case, a district court upheld aesthetic
21 housing regulations against a facial First Amendment challenge, declining to adopt a categorical
22 rule affording complete protection. *Comm. Reasonable Regul. Lake Tahoe v. Tahoe Reg’l Plan.*
23 *Agency*, 311 F. Supp. 2d 972, 1005 (D. Nev. 2004) (“the great majority of remodeling or
24 rebuilding projects involving residential housing are functional in nature and are not commonly
25 associated with expression.”).

26 Even if some aspects of digital product design regulation cause an incidental impact on
27 expressive conduct—which NetChoice has not demonstrated here—any regulatory burden would
28

1 at most constitute a content-neutral limitation on when, where, or how expressive activity is
2 conveyed when it “further[s] significant government interests.” *Berger v. City of Seattle*, 512
3 F.3d 582, 604 (9th Cir. 2008), *on reh’g en banc*, 569 F.3d 1029 (9th Cir. 2009). In other
4 contexts, the state can regulate how content is displayed on account of public safety
5 considerations without running afoul of the First Amendment. *See City of Austin v. Reagan Nat’l*
6 *Advert. of Austin, LLC*, 596 U.S. 61, 73 (2022) (explaining that only “regulations that
7 discriminate based on ‘the topic discussed or the idea or message expressed’...are content
8 based”) (internal citations omitted). The First Amendment also does not bar regulations requiring
9 businesses to communicate honestly with their customers. *Nationwide Biweekly Admin., Inc. v.*
10 *Owen*, 873 F.3d 716, 721 (9th Cir. 2017) (“The First Amendment does not generally protect
11 corporations from being required to tell prospective customers the truth.”); *Va. State Bd.*
12 *Pharmacy v. Va. Citizens Consumer Council, Inc.*, 425 U.S. 748, 771–72 (1976).

13 Under intermediate scrutiny, a law does not violate the First Amendment if it “further[s]
14 an important or substantial governmental interest” and the incidental burden(s) it imposes are
15 “no greater than is essential to the furtherance of that interest.” *Porter v. Martinez*, 68 F.4th 429,
16 443 (9th Cir. 2023) (internal quotation marks omitted). Here, California’s interest—protecting
17 children from the serious health impacts of addictive and other harmful online products—is
18 compelling. *See, e.g., New York v. Ferber*, 458 U.S. 747, 756–57 (1982) (“It is evident beyond
19 the need for elaboration that a State’s interest in safeguarding the physical and psychological
20 well-being of a minor is compelling”) (internal quotation marks omitted); *see also U.S. v. Yazzie*,
21 743 F.3d 1278, 1288 (9th Cir. 2014) (acknowledging child well-being is a compelling interest).

22 While the scope of governmental authority to protect children’s welfare is not limitless,
23 NetChoice’s reliance on *Brown v. Ent. Merchants Ass’n* is misplaced. *See* 564 U.S. 786, 794
24 (2011) (rejecting a “free-floating power to restrict the ideas to which children may be exposed.”).
25 The dark patterns provision satisfies intermediate scrutiny while avoiding the content-based
26 concerns animating *Brown*. It operates fundamentally differently than the law at issue in *Brown*
27 that imposed a blanket prohibition on a category of speech based on its violent content. Rather
28

1 than restrict speech based on its content, the AADC regulates digital architecture to require
2 transparent and honest interface designs that preserve peoples' autonomy. The dark patterns
3 provision does not limit what third-party content is available to minors. It merely places certain
4 restrictions on when, where, and how they engage with digital products to minimize their
5 chances of being manipulated. *Berger*, 512 F.3d at 604. The provision thus serves California's
6 substantial interest through narrowly tailored means that preserve ample alternatives for
7 companies to design their services.

8 California retains a substantial interest in preventing the manipulation of children by
9 online services. The AADC's dark patterns prohibition, which can only be enforced by the
10 Attorney General, gives online services an opportunity to get notice of a potential violation and
11 the opportunity to cure before facing a potential penalty. This is a reasonable and tailored means
12 to protect the governmental interest in protecting children.

13 CONCLUSION

14 For the foregoing reasons, *Amici* ask this Court to deny preliminarily enjoining the Act's
15 dark patterns provision, Cal. Civ. Code § 1798.99.31(7).

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