

Recommender Systems as Commercial Speech: A Framing for US Legislation

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Abstract

Recommender Systems (RS) on digital platforms increasingly influence user behavior, raising ethical concerns, privacy risks, harmful content promotion, and diminished user autonomy. This article examines RS within the framework of regulations and lawsuits in the United States and advocates for legislation that can withstand constitutional scrutiny under First Amendment protections. We propose (re)framing RS-curated content as commercial speech, which is subject to lessened free speech protections. This approach provides a practical path for future legislation that would allow for effective oversight of RS, particularly in areas of substantial public interest like child safety, national security, and misinformation.

Keywords

Algorithms • Algorithmic regulation • Artificial Intelligence • Commercial speech • Digital Ethics • First Amendment • Recommender systems

1. Introduction

Digital platforms are some of the most influential infrastructures of the 21st century, with companies like Airbnb, Amazon, Meta, and YouTube facilitating e-commerce, communication, video streaming, digital labor, and many other activities and interactions. These sites “mediate different groups of users, such as buyers and sellers” using an “extensible codebase to which complementary third-party modules can be added.” (de Reuver, Sørensen, and Basole 2018) Digital platforms employ Recommender Systems (RS henceforth) – complex and increasingly AI-powered algorithms largely responsible for what content is displayed to users and in what order – to present information to their users. RS are essential to the services digital platforms provide, and their influence can be wide-ranging, impacting what content goes viral, what search results are prioritized, and more.

RS do not function solely to serve users. Instead, they operate within a multi-stakeholder ecosystem, encompassing users, service providers, and the platform (Milano, Taddeo, and Floridi 2021). RS can have an impact on each of these stakeholders, generating long-term effects on individuals as well as society at large. As a result of a complex stakeholder landscape, RS raise several ethical challenges (Milano, Taddeo, and Floridi 2020). For instance, a significant concern is the promotion of harmful or inappropriate content. RS often prioritize engagement-driven content, which may rapidly spread shocking, violent, or culturally insensitive information before moderation systems (even assuming one is in place) can intervene. Additionally, RS pose substantial privacy risks due to their heavy reliance on vast amounts of behavioral data that are collected, stored, and processed, often with insufficient safeguards. RS may also undermine individual autonomy by nudging users toward behaviors they might not have engaged in without these systems’ recommendations.¹ Furthermore, RS may contribute to increased anxiety and depression in specific groups – particularly adolescents – by reinforcing patterns of constant social comparison on social media platforms (Metzler and Garcia 2024; Haidt 2024). **Compounding** these issues is the lack of transparency around how RS operate, leaving users and regulators with limited insight into the systems’ inner workings and potential harms.

These ethical concerns underscore the broader societal implications of RS, which extend far beyond individual user experiences and have spurred calls for regulatory intervention across various legal systems. A key issue, however, lies in the legal qualification of RS activities and associated

¹ These nudges are wide ranging in severity, from small actions such as a user making a purchase after frequent display of a product on their social media feed to drastic shifts in behavior, mood, and even political beliefs as a result of being shown targeted posts (see, for instance, Facebook’s voting experiments and the Cambridge Analytica scandal).

safeguards, which presents interpretative and enforcement challenges. In particular, this article focuses on US constitutional considerations around RS regulation, where First Amendment protections have often been cited in lawsuits seeking to stymie restrictions on RS. We argue that legislators should consider reframing RS-curated content as commercial speech, a mode that receives less stringent First Amendment protection. This approach would allow regulators to enforce limitations on RS that are more likely to withstand constitutional scrutiny in order to address the critical concerns associated with their use.

The article is organized as follows. Section two clarifies the scope of our analysis and the kinds of RS to which it applies. Section three reviews the current legislative framework governing RS and examines the constitutional challenges of regulating these systems in the United States. Section four analyzes the implications of considering RS-curated content as a case of commercial speech. Section five explores how this legal framework could lead to overcoming the regulatory challenges posed by RS. Section six briefly concludes the article.

2. Scope: RS as Part of Business Models

RS is a broad term applied to several algorithmic item discovery and recommendation techniques. The three main methods composing RS are content-based, collaborative, and hybrid filtering, although numerous additional sub-types exist (Patel, Desai, and Panchal 2017). Some of these techniques operate without AI, but machine learning techniques such as deep neural networks, convolutional neural networks, and autoencoders are increasingly employed for content recommendation (Zhang, Lu, and Jin 2021). All this is important, but in this article, we do not focus on regulating RS based on their technical mechanism. Instead, our emphasis is on how they are deployed. Specifically, this article targets RS used by commercial platforms as part of their business model – such as a recommendation algorithm employed to maximize advertising revenue. A determination of when this classification would apply can be made by evaluating the context of the platform and the purpose of the RS usage. For instance, consider some European Public Service Media platforms’ use of RS to limit polarization by presenting their users with diverse content (Álvarez, López, and Ruíz 2020). Given that these platforms are publicly financed, specifically designed to serve the public, and their use of RS has a societal rather than financial justification, this example does not fall within the scope of this article. By contrast, a platform like Meta, a for-profit company with a market cap of over \$1.5 trillion, using RS as part of their Instagram post ordering to maintain engagement and drive ad revenue, is within its purview. Other examples include an e-commerce platform like Amazon employing RS to recommend

merchandise to users and facilitate sales or a video-sharing service like YouTube deploying RS to personalize advertisements to obtain the highest user response. We shall elaborate more thoroughly on how the usage of RS by most digital platforms is commercial and could be regulated in section five.

3. The Regulatory Landscape: EU and US

A worldwide debate over how and to what extent RS should be regulated has ensued (Katharina Kaesling, Sergio Genovesi, and Scott Robbins 2023). In the European Union, a range of legislation has been introduced and passed to address issues of discrimination, fairness, and personal autonomy arising from RS. These include the General Data Protection Regulation (GDPR), which limits how platforms can use personal data to target advertisements and content, and the Digital Services Act (DSA), which requires platforms to detail the parameters used in their recommendations (Arnold, n.d.) (“Article 27, the Digital Services Act (DSA),” n.d.). Recently, the European Union approved its most significant legislation concerning the design, development, and deployment of AI systems, the AI Act (AIA). Although the AIA does not explicitly mention RS, they are likely to be encompassed under its scope, as the Act defines regulated AI systems as “machine-based systems designed to operate with varying levels of autonomy, that may exhibit adaptiveness after deployment, and that, for explicit or implicit objectives, infer from the input they receive how to generate outputs, such as predictions, content, recommendations, or decisions, that can influence physical or virtual environments”.² This definition appears sufficiently broad to encompass RS, which operate with a degree of autonomy and adaptability, as they can learn from user behavior data to infer preferences and generate personalized outputs.

In contrast to the EU, the United States has introduced only a handful of relevant bills. Furthermore, while the focus on RS-related legislation has grown rapidly in recent years, many laws have failed to pass or have been stalled in legislative processes. For instance, the Platform Accountability and Transparency Act, a bipartisan bill focusing on social media reform, was reintroduced in mid-2023. This bill would require platforms to disclose information about advertisements, viral content, and the mechanisms of any ranking and recommendation algorithms.

² See *(Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 Laying down Harmonised Rules on Artificial Intelligence and Amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act) (Text with EEA Relevance) 2024).*

The Act was most recently referred to a committee in the Senate, but further traction remains to be seen (“U.S. Senator Christopher Coons of Delaware” 2023). A second law, the Algorithmic Justice and Online Platform Transparency Act – which would require platforms to make similar information available in addition to requiring platforms to assess the impact of their algorithms as agents of demographic discrimination – has also been stalled in committee since mid-2023 (Sen. Markey 2023).

In addition to these attempts to pass comprehensive legislation regulating RS, legislators have displayed support for laws addressing the usage of RS in specific contexts, especially at the state level. One prominent area of focus is the implication of RS in national (cyber-)security concerns. TikTok and its algorithm, for instance, have been subject to intense scrutiny in recent months. Critics in Congress argue that the app’s RS have been engineered to sow political unrest in the United States by boosting divisive content, and that the overseas storage and processing of user data collected via RS poses a national security risk (“TikTok Bans Explained: Everything You Need to Know,” n.d.) (Roscoe 2023). In April 2024, the House passed a bill demanding that the app be sold to new owners or banned nationwide. The potential impact of RS on child welfare has emerged as another significant driver of RS regulation in the US. New York has enacted legislation that prohibits the display of specific RS-driven social media feeds to minors without parental consent and limits the kinds of information platforms can collect from underage users (“Stop Addictive Feeds Exploitation (SAFE) For Kids Act,” n.d.). Similarly, California has passed a law restricting the data collection of minors and prohibiting the usage of RS to manipulate or harm underage users (“The California Age-Appropriate Design Code Act,” n.d.). At the federal level, the Federal Trade Commission (FTC) recently proposed amendments to its guidelines that would restrict the usage of specific RS-driven mechanisms that encourage children to stay online (“FTC Proposes Strengthening Children’s Privacy Rule to Further Limit Companies’ Ability to Monetize Children’s Data” 2023).

However, the emerging trend towards RS regulation has faced opposition, with lawsuits challenging much of the limited legislation enacted in the United States. In these cases, platforms’ algorithmic content delivery has often been defended as a form of “speech” and granted First Amendment protection (Gonzalez 2023; “NetChoice, LLC, et al. v. Attorney General, State of Florida, et al., No. 21-12355 (11th Cir. 2022)” 2024). California’s child safety law – the Age-Appropriate Design Code Act – is a notable example of a regulation that has been successfully challenged, with a district court initially blocking implementation due to the law’s broadness and potential infringement on the First Amendment (“NETCHOICE LLC v. BONTA (2023),” n.d.). While a subsequent Ninth Circuit decision has since partially vacated that judgment, the law remains mired in appeals (“UNITED

STATES COURT OF APPEALS FOR THE NINTH CIRCUIT, *NetChoice v. Bonta*” 2024). Similarly, the law requiring TikTok to be sold to new owners or banned in the United States has faced a series of high-profile lawsuits, with the law still in jeopardy even after the Supreme Court upheld it on appeal due to an executive order issued in January 2025 by President Trump preventing it from being enforced for at least 75 days.

These lawsuits have introduced uncertainty about the durability and impact of current regulatory efforts.³ They highlight an urgent need for a broadly applicable regulatory framework to address RS risks effectively without being systematically undermined by First Amendment-based objections.

4. Recommender Systems as Platform Speech

The First Amendment has historically shielded platforms from regulation. Courts have tended to view technology companies as private entities participating in protected speech through their use of RS (“*NetChoice, LLC, et al. v. Attorney General, State of Florida, et al.*, No. 21-12355 (11th Cir. 2022)” 2024; “*NETCHOICE LLC v. BONTA* (2023),” n.d.). However, not all forms of speech are created equally. A meaningful distinction can be made between the two types of speech platforms engage in: moderated and *curated*. The following section discusses each type of speech and its implications for RS.

4.1. Two Forms of Platform Speech

Content moderation concerns a platform’s review of the content it hosts. Typically, content will be evaluated against rules or community guidelines to ensure that it is not illegal or unrepresentative of a company’s stated values. For instance, YouTube has policies restricting or outright prohibiting content containing sensitive, violent, and illegal themes such as hate speech or pornography to maintain the site’s integrity (“YouTube Community Guidelines & Policies - How YouTube Works,” n.d.). Platforms like YouTube typically engage in moderation through artificial intelligence and human screening, although companies increasingly rely on algorithmic moderation systems to monitor and remove content (Gorwa, Binns, and Katzenbach 2020).

Content curation refers to the RS-powered delivery of a personalized user feed comprising an individualized set of items. This form of platform speech involves using RS to order content based

on a person's tastes and preferences, typically to maximize utility, which may have different definitions depending on the stakeholder considered (Burke, Felfernig, and Göker 2011). For our purposes, we evaluate utility on the platform side, which amounts to user engagement. One strategy commercial platforms use to maximize their utility is to maintain high use rates to operate in the attention economy, defined as the present-day economic landscape in which human attention is "the scarce resource over which digital platforms compete" (Bruineberg 2023). Capturing attention enables platforms to secure an audience for ads and product revenue, stave off their competitors, and collect user data, which can be directly sold and used to improve the RS used in curation.

Differences between the two types of speech are better highlighted when considering the concept of 'editorial judgment;' that is, the power that editors, like broadcasters, cable operators, and publishers, exercise over the content they transmit. Editorial judgment "*sometimes* expresses and conveys an editor's own message," and other times does not (Candeub 2022, emphasis added). The Supreme Court has held that editorial decisions must express and convey the editor's message to receive full First Amendment protection ("FCC v. Midwest Video Corp., 440 U.S. 689 (1979)," n.d.). Specifically, for an editorial decision to be protected, it must meet the following three criteria: "convey meaning through speech or expressive conduct;" be interpretable by an audience who "understands the speech or expressive conduct with common language or set of understandings placed within a comprehensible context;" and use a "discrete set of words or expressive conduct or acts" (Candeub 2022). Candeub draws a distinction between instances in which this conduct is expressive – for example, the creation of a poetry anthology where "each poem selected reflects the editor's chosen theme and ideas he wishes to express, i.e., formal, thematic, cultural, or historical," – and instances in which it fails to meet this bar, like when arranging the anthology by "author's last name rather than date authored" or using "a certain kind of paragraph indentation." In the latter examples, even if "an editor might *intend* to convey meaning," they are not subject to full First Amendment protection because "they lack context for people to infer meaning" (Candeub 2022) and fail to meet the second criterion.

An opportunity to regulate RS-curated content emerges upon evaluating each of the two types of platform speech against the criteria of protected editorial judgment. Moderation, we contend, may be awarded this protection, consistent with judgments in lawsuits successfully defending it as such ("NetChoice, LLC, et al. v. Attorney General, State of Florida, et al., No. 21-12355 (11th Cir. 2022)" 2024). Because moderation involves selecting content with the explicit intent of conveying values in ordinance with a platform's community guidelines, it conveys meaning, is interpretable, and achieves

these aims through a discrete set of acts, thus meeting the three criteria for protection. We argue, however, that curation does not rise to the standards of editorial judgment. Curation is not expressive but *predictive*, as it operates by statistically modeling users based on their behavior and presenting content to maximize some success metrics, such as prediction accuracy or user engagement. While editorial choices may be involved in designing the predictive algorithm or shaping engagement strategies, these choices do not amount to expressing a viewpoint since their purpose is to capture attention not only to convey a message. Therefore, it makes little sense to view these recommendations as expressive in any capacity, especially when the algorithms driving them are constantly changing, highly personalized at an individual level, and often opaque even to the engineers who developed them (“Google Algorithm Updates: The Latest News and Guides,” n.d.) (“Scaling the Instagram Explore Recommendations System” 2023). The dissimilarity between the two modes of platform speech is made evident by the fact that on commercial platforms, the aims of curation and moderation are sometimes in direct conflict, with curation promoting engagement-driving extremist content that violates platforms’ guidelines and later has to be quashed via manual or automated moderation (Alfano et al. 2021).

4.2. ‘Curation’ as Commercial Speech

The distinction between platform curation and platform moderation opens the door for regulation that could survive legal scrutiny. We propose that curation – and, by extension, one of the core functions of recommendation systems (RS) – should (in cases to be specified by the legislator) be treated as *commercial speech*, a category afforded considerably less protection under the First Amendment. Specifically, we argue that when digital platforms employ curation to directly facilitate revenue through product sales or to indirectly generate profit as a component of their advertising and data brokerage ecosystems, it should be considered a form of commercial speech due to the inherent financial motivation behind these uses. To make this argument, we consider the evolving legal definition of commercial speech and how this classification applies to curation.

The criteria for speech to be considered commercial have shifted over the past century. In *Virginia State Board of Pharmacy v. Virginia Citizens Consumer Council, Inc* (1976), the Supreme Court broadly classified commercial speech as “speech which does no more than propose a commercial transaction” (“*Va. Pharmacy Bd. v. Va. Consumer Council*, 425 U.S. 748 (1976),” n.d.). In a similar vein, the Court defined commercial speech as “expression related solely to the economic interests of the speaker” in the 1980 case *Central Hudson Gas & Electric Corp. v. Public Service*

Commission (“Central Hudson Gas & Elec. v. Public Svc. Comm’n, 447 U.S. 557 (1980),” n.d.). RS-curated content would often fall under this category – for instance, in the case of e-commerce platforms employing recommendations to sell products to their users – enabling it to be treated as commercial speech due to the financial purpose at its core.

However, even in cases where RS's intent is multifaceted or purported to have an alternative aim, like content discovery, we argue that the classification of commercial speech would still apply. Subsequent Supreme Court cases expanded the legal definition of commercial speech so that speech with both commercial and noncommercial elements can be regulated as purely commercial. In *Board of Trustees of State University of New York v. Fox* (1989), a case involving a challenge to a university regulation prohibiting Tupperware parties from being held on campus, the Court held that, even though the speech at the parties contained noncommercial elements, the regulation was justified because the primary purpose of the gatherings was to sell products and was therefore commercial in nature (“BOARD OF TRUSTEES OF the STATE UNIVERSITY OF NEW YORK, et al., Petitioners v. Todd FOX et Al.,” n.d.). They found that speech of a mixed nature – containing both commercial and noncommercial elements – can be regulated at the lower standard of commercial speech if “nothing in the nature of [the noncommercial elements] requires them to be combined with commercial messages.”⁴

RS-driven content curation is a perfect example of this combined speech. Applying the two-part consideration introduced in Section 2, and expanding on a similar analysis applied to social media platforms (Grafanaki 2019), we evaluate how many present-day platforms’ context and the intent behind their RS usage qualify as commercial speech. Advertisement-based, commercial platforms have become ‘attention-economy businesses,’ or companies whose business model “hinges on keeping users active on a platform for prolonged periods of time” (Bhargava and Velasquez 2021). Personalization and continued user engagement enables these platforms to profit through various channels, including targeted advertising and data collection. How engagement becomes profitable is threefold. First, sustained engagement leads directly to larger ad revenue, as the longer users are engaged on a platform, the more ads they will see. Second, personalization via curation motivates higher click-through rates on these advertisements. Third, the longer users spend on a platform, the

⁴ In this instance, because “no law of man or of nature makes it impossible to sell housewares without teaching home economics, or to teach home economics without selling housewares,” the university regulation was upheld.

more data is generated, which can then be brokered and used to enhance a platform's recommendation abilities further. Curation plays a key role in every step of the way.

Advertising is a massive component of profitability for contemporary digital platforms. Google, for instance, boasted \$48 billion in ad revenue during the fourth quarter of 2023, accounting for more than 50% of the company's overall sales (Saul, n.d.). Platforms charge for advertisements on a pay-per-view (PPV) or pay-per-click basis (PPC) ("What Are Cost-Per-View (CPV) Ads? + Make More Money | BigCommerce," n.d.). In either instance, prolonged use is financially beneficial. The more time a user spends on a platform, the more chances the platform gets to display an ad to the user, leading to potential (in the PPC case) or direct (in the PPV case) revenue. Platforms that use RS to curate personalized content feeds have been shown to have longer use times, meaning curation directly increases revenue by ensuring users are exposed to more ads (Zanker, Rook, and Jannach 2019).

RS are used not only to curate content but also to decide which advertisements are displayed. Targeted advertising has been shown to be highly effective at increasing user interaction, including more than doubling click-through rates in some instances (Bleier and Eisenbeiss 2015). PPC advertisements are sold at significantly higher rates than PPV advertisements (in Google's case, one PPC ad is equivalent to around 500 views of a PPV ad), so it is extremely financially advantageous for companies to ensure that PPC ads are clicked on as soon as possible (Maake 2023). Curation enables this goal: for platforms selling ads on a PPC basis, the increased click-through rates yielded from curated ads translate into higher profits, thus enabling platforms to maximize revenue from each advertisement displayed.

These mechanisms are bolstered by the specialized data collection that curation enables. Platforms meticulously monitor and record user clicks, interactions, and views. These data then enable continuous improvement of ad and content recommendations through what Zuboff conceptualizes as the "behavioral value reinvestment cycle," a system in which "all behavioral data are reinvested in the improvement of the product or service" (Longreads 2019). This cycle has numerous commercial underpinnings in which curation is indispensable. Constantly improving recommendations contributes to a more intriguing user feed, leading to users' prolonged engagement with a platform. This translates to more data to feed into the cycle and further improve a platform's targeting capabilities. Platforms also profit from user data by selling data to other companies and third-party data brokers. Data brokerage alone is a multibillion-dollar industry, valued at \$319 billion in 2021, with a forecasted growth to more than \$500 billion by 2028 (Burriss 2023).

In addition to facilitating these profits from platform use, curation is employed to alter user behavior in ways that financially benefit platforms. It is a driving force behind *digital nudging*, or “the use of user-interface design elements to guide people’s behavior in digital choice environments” (Jesse and Jannach 2021). Jesse and Jannach identified at least 18 nudging mechanisms implemented in recommender systems, each with associated psychological effects (Jesse and Jannach 2021) leveraged for commercial gain. For instance, the e-commerce website Amazon engineers its RS to display its own products earlier in search results, increasing the opportunity for a larger revenue gain if Amazon’s items are purchased over alternatives (Farronato, Fradkin, and MacKay 2023).

This analysis shows that curation meets the requirements of the definition of commercial speech established by the Supreme Court – that is, it is speech directly related to the economic interests of the speaker (in this case, the platform). This is because it has a key role in profit generation. Platforms may defend their usage of RS in curation as noncommercial in nature, contending that these systems enhance the user experience by enabling the discovery of enjoyable or otherwise valuable content (“Our Approach to Explaining Ranking (Meta / Instagram),” n.d.) (“How TikTok Recommends Content | TikTok Help Center,” n.d.). We agree that RS, designed solely to improve user experience, could be a form of noncommercial speech. Consider, for instance, a platform that receives funding from grants and donations and operates entirely without advertisements. However, the broader context of contemporary RS usage within the multi-stakeholder model challenges the notion that this is the case for commercial platforms. Consider, for instance, that metrics like engagement are often prioritized over user satisfaction or well-being.⁵ Moreover, joint speech can be regulated as purely commercial if the commercial and noncommercial components can be disentangled, as the Supreme Court held in *Board of Trustees of State University of New York v. Fox*. This is true in the case of RS curation. By no means does recommending users with useful or interesting content necessitate enabling the rampant and enormously profitable advertising and data collection practices in which platforms engage. Since nothing in the nature of RS requires their usage to be entangled with commercial aims, we conclude that curation should be regulated as purely commercial speech.

⁵ An example is Meta leadership blocking changes to their Instagram recommendation algorithm that were thought to improve user mental health due to the potentially negative impact on engagement (Hagey and Horwitz 2021).

5. Recommender Systems as Commercial Speech

The Central Hudson Test governs the present-day evaluation of laws regulating commercial speech. This test was established by the Supreme Court in *Central Hudson Gas and Electric Corp. v. Public Service Commission* (1980), a ruling that granted commercial speech partial, but not complete, protection under the First Amendment (“*Central Hudson Gas & Elec. v. Public Svc. Comm’n*, 447 U.S. 557 (1980),” n.d.). The test determines when government restrictions on commercial speech are permissible under the First Amendment. Accordingly, courts employ the test by evaluating legislation against several elements. First, the speech governed by the law should be non-misleading and concerned with lawful activity. If the speech fails to meet these criteria, it will not rise to the level of commercial speech and could be regulated at an even lower standard. Second, the legislation must meet three bars: the government must have a substantial interest in regulating the speech, the regulation should directly advance the interest, and the law must be narrowly tailored.

We evaluate legislation regulating RS against these standards by considering first whether platforms’ RS-curated content involves non-misleading and lawful activity. Commercial speech that can potentially mislead the public, such as deceptive medical advertising, has previously failed to receive protection on this basis. There is an argument to be made that RS-curated content falls under a similar category due to their rampant promotion of mis/disinformation, with these algorithms amplifying false and misleading content regarding COVID-19, US elections, and more (Muhammed T and Mathew 2022)(Grafanaki 2019). In this article, however, we will assume that RS-curated content would pass this prong in order to conduct an exhaustive evaluation of the legislation’s potential to survive the remaining factors of the Central Hudson Test.

Next, we consider whether the government has a substantial interest in regulating curation. While there is no universal definition of interests that meet this legal threshold, previous Supreme Court cases have found that protecting public health and safety, ensuring national security, and maintaining fundamental rights are all examples of substantial interests that the government can readily enact legislation to protect (“*Compelling State Interest*,” n.d.). This list is by no means exhaustive. In *Buckley v. Valero* (1976), for instance, the Court found that limiting campaign contributions was acceptable, even though it infringed on First Amendment Rights, because there was a compelling interest in protecting the integrity of elections (“*Buckley v. Valeo*,” n.d.). Thus, a compelling argument can be made that the regulation of RS serves a substantial government interest. Child safety, for instance, is a paramount component of public health and safety. Legislation restricting RS targeted at children could meet this bar by asserting a desire to protect the mental health of minors,

arguing that RS demonstrably induce heightened rates of anxiety and depression (Metzler and Garcia 2024) in youth. Arguments could also be made that the vastly uninhibited spread of mis/disinformation discussed above threatens national security. Election disinformation, for instance, critically undermined the integrity of the 2020 Presidential Election and continues to pervade American attitudes toward the electoral processes today. As in *Buckley v. Valero*, the state could argue that RS need to be curbed to safeguard trust in voting systems in the United States.

Finally, we consider the potential for RS regulation to meet the final two bars – the law must directly advance a government interest and be narrowly tailored. Without considering the exact wording of a law, and since no existing pieces of RS legislation are structured to meet these aims, this determination is difficult. Neither is insurmountable in principle, however, and previous Supreme Court cases have upheld various narrowly tailored regulations aiming to serve interests like child safety, consumer health, and consumer transparency – areas of focus that RS legislation could very well address. For example, a law preventing tobacco advertising from being displayed within 1,000 feet of schools and a requirement that airlines display total price as opposed to a misleading, partial fare in their advertisements were both upheld under the *Central Hudson* test’s criteria (“*Lorillard Tobacco Company v. Reilly*,” n.d.; “*Spirit Airlines, Inc. v. U.S. Dep’t of Transp.* , No. 11-1219 (D.C. Cir. 2012)” 2024). Accordingly, we conclude that the First Amendment does not inherently disqualify legislation on principle and that a specifically worded law could meet the standards of narrow tailoring and direct advancement of a government interest.

Courts have already begun to imply their openness to consider RS-curated content as a form of commercial speech, suggesting that this reading could support the state in designing future legislation. To demonstrate this potential, we focus on the CAADCA litigation. This sweeping legislation, containing widespread provisions to address privacy and content considerations surrounding minors’ use of technology, was signed into law in 2022. CAADCA was initially stayed by an injunction in September 2023, but has since been partially upheld as of August 2024. We shall focus on how the litigation treated provisions of the Act addressing “dark patterns,” practices that have been codified in California law as “user interface[s] designed or manipulated with the substantial effect of subverting or impairing user autonomy, decision making, or choice” (LLP 2022). RS would fall under this category due to their ability to impact individuals’ autonomy.

In the initial district court ruling blocking CAADCA from taking effect, the judges indicated openness to the idea that some law provisions addressed commercial speech. While the court did not definitively conclude that the Act regulated only commercial speech, it found technology companies’

arguments that the law solely covered noncommercial speech to be unconvincing (“NETCHOICE LLC v. BONTA (2023),” n.d.). The judges evaluate the law under the lightest level of scrutiny theoretically applicable to this case, the Central Hudson test. In doing so, they support our reading of RS-curated content as commercial speech and highlight this premise’s potential in future cases. Furthermore, during their application of the Central Hudson test, the Court agreed that child welfare was a compelling government interest, affirming our reading that RS regulation addressing child safety could pass this prong of the test.

The district court blocked the CAADCA after concluding that the state did not satisfy the requirement of narrow tailoring in its outright prohibition of “dark patterns”. However, the appeals court subsequently overturned this decision, arguing that the district court was too hasty in its rejection of this provision and that “even in applications where the ban on ‘dark patterns’ is likely to impact other categories of protected speech, such as the editorial decisions of social media companies,” legislation may prevail under the Central Hudson Test (Dolen 2024). The appeals court is the improper arena in which to make the ultimate determination regarding whether the dark patterns are commercial speech, and as such, it declines to do so in this opinion. Nonetheless, the court’s ruling validates our argument that RS legislation could undoubtedly pass the substantial interest prong of the Central Hudson Test, and theoretically pass the other two prongs as well. While neither decision completely vindicates the CAADCA, both are immensely promising for our theory and indicate that courts are willing to uphold RS regulation on commercial speech grounds, granted it is adequately tailored.

Our conception of platform curation as commercial speech is legally sound and offers a regulatory pathway for legislators, indicating that future legislation should be crafted to meet the standards set by the Central Hudson Test. However, adopting this approach would require concessions from regulators seeking to pass sweeping bills like the CAADCA. There has been a tendency to pass omnibus bills regulating several different technology-implicated issues simultaneously, causing courts to be unable to untangle individual elements and strike down the entire law, as seen in the initial injunction halting the CAADCA from taking effect. In contrast, smaller and more narrowly tailored bills that specifically address RS – and specific types of RS, such as those targeted towards minors – are likely to be most effective at withstanding litigation. Considering this modification, the prospect of passing legally robust legislation has valuable implications for addressing the numerous concerns that RS pose to users and society.

6. Conclusion

There is a pressing need for a robust regulatory framework to address the challenges posed by RS on digital platforms, as these systems play a key role in shaping user behavior and content visibility, often raising significant risks for privacy, mental health, autonomy, and the promotion of harmful material. Given the limitation posed by the First Amendment protections to regulating RS, we argue for reclassifying RS-curated content as commercial speech. This legal repositioning would enable more effective oversight under the Central Hudson test, enabling legislators to address substantial public interests – like child safety and curtailing disinformation -- without breaching constitutional rights. By rethinking this content as commercial speech, lawmakers can create targeted regulatory measures that hold digital platforms accountable for using RS while balancing the interests of all relevant stakeholders.

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