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The Impact of Social Media Algorithms on Society

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1. Abstract

The rise of social media has transformed how individuals consume information, interact, and form opinions. At the core of this transformation are complex algorithms that organize content, personalize user experiences, and influence digital engagement. This analysis explores the impact of social media algorithms on society, focusing on their role in shaping public discussion, reinforcing echo chambers, and influencing behavior. It examines how these algorithms prioritize engagement-driven content, often amplifying misinformation, polarization, and mental health concerns. Additionally, the study discusses the ethical implications of algorithmic bias and the responsibility of tech companies to mitigate negative societal effects. Finally, we propose regulatory and design strategies to promote a more balanced and ethical digital ecosystem.

2. Introduction

The rise of social media has fundamentally reshaped communication, information consumption, and societal interactions. Central to this transformation are social media algorithms, complex systems designed to personalize content, maximize engagement, and influence user behavior. While these algorithms enhance user experience by curating relevant content, they also raise significant concerns about their broader societal impact.

In this analysis, we begin by exploring the evolution of social media algorithms, from early chronological feeds to advanced machine-learning-driven recommendation systems. We then examine the key consequences of these algorithms, focusing on three major areas: misinformation and echo chambers, mental health effects, and ethical concerns surrounding algorithmic bias.

We start by analyzing the role of algorithms in spreading misinformation and reinforcing ideological echo chambers. By prioritizing content that maximizes engagement, social media platforms have inadvertently contributed to the rapid spread of false information and deepened societal polarization. These algorithms are designed to keep users engaged for longer periods, often by recommending sensational or emotionally charged content that aligns with their existing beliefs.

We then delve into the impact of algorithm-driven content on mental health, particularly its role in fostering addiction and promoting negative content, anxiety, and self-esteem issues. We also discuss how certain content trends, such as appearance-focused filters and negative news cycles, can amplify stress and mental health struggles.

The final issue we explore is ethical concerns, including how algorithms can influence democratic processes. We examine the growing calls for algorithmic transparency, accountability, and regulatory oversight to mitigate these risks. After evaluating these issues, we provide a personal critique of each issue and propose regulatory and technological solutions to mitigate harm to foster a safer experience for users. These regulatory and technological solutions include increasing transparency in algorithmic decision-making, implementing stricter content moderation policies, and designing algorithms that prioritize user well-being over engagement. As a whole, this analysis serves as a call to action for policymakers, technology companies, and users to critically examine the role of social media algorithms in shaping society. The information in this essay is drawn from scholarly research, news sources, and reports from technology experts to provide a comprehensive understanding of the challenges and potential solutions surrounding algorithm-driven social media platforms.

3. Background

3.1 - The Evolution of Social Media Algorithms

Social media refers to digital platforms that allow users to create, share, and interact with content and with each other in virtual communities. These platforms have become central to modern communication, entertainment, and information-sharing. They allow users to interact with information by liking, commenting, and sharing it, as well as posting updates, pictures, videos, and messages. Over time, social media has evolved from a tool for personal connection into a powerful force shaping public opinion, culture, and mental health.

In the early days of social media, platforms like Facebook, Twitter (now X), and Instagram used a simple chronological feed to display posts, showing users content in the order it was published (Miller V and Scott-Briggs). This system gave users more direct control over what they saw. However, as the user base expanded and content volume increased, platforms began introducing algorithms to personalize the user experience and manage information overload. By the mid-2010s, most major platforms had shifted to algorithmically curated feeds. These algorithms prioritized content not by recency but by predicted user interest, based on past behavior such as likes, shares, watch time, and interactions. Machine learning techniques began playing a central role, allowing platforms to update feeds to maximize engagement dynamically (Muhammad Tuhin).

As platforms refined these systems, the algorithms grew increasingly complex, learning from user data to determine what content would most likely keep users scrolling. This marked a turning point where social media no longer just connected people, it began actively shaping what they saw, thought about, and interacted with daily.

3.2 - How Social Media Platforms Use Algorithms

Today, social media algorithms are foundational to platforms like TikTok's "For You" page, Instagram's Explore tab, and YouTube's autoplay and recommended videos. These algorithms collect and analyze massive amounts of user data, clicks, dwell time, comments, shares, and even pauses in scrolling to predict and serve content tailored to individual preferences. For example, TikTok's algorithm rapidly adapts to user behavior, promoting videos that users linger on, interact with, or watch to completion. YouTube recommendation systems are based on metrics like Click-Through Rate, watch time, likes, comments, and satisfaction surveys (Flintzy). According to Brookings, "...YouTube's recommendation algorithm drives around 70% of total views on the platform," (Brown et al.). Instagram and Facebook's

algorithms prioritize content that obtains emotional responses such as having a personalized feed that the user is most likely to engage, which increases the likelihood of engagement.

While this personalization enhances user satisfaction and advertising revenue, it also means that users are often placed into “filter bubbles,” where their beliefs and preferences are reinforced, potentially at the cost of exposure to diverse viewpoints.

3.3 - The Commercial Incentives Behind Engagement

The evolution of these algorithms has been driven largely by commercial incentives. Social media platforms rely heavily on advertising revenue, which is maximized to target specific audiences with ads that are more likely to resonate with users. Social media apps such as Facebook, Instagram, Twitter, YouTube, and TikTok generate a significant amount of their revenue from ads (Neufeld). This has incentivized the development of algorithms that promote attention-grabbing content, often regardless of accuracy or impact. Algorithms serve not just as neutral tools but as powerful forces that shape public discourse and attention in pursuit of profit.

4. Issues

4.1 Uncertainty:

Social media users often navigate their digital environments with significant uncertainty about how content is selected for them and the consequences of their engagement. Much like privacy behaviors discussed by (Acquisti et al.), uncertainty stems from a lack of clear information. Platforms do not typically explain how their algorithms prioritize content, nor are users fully aware of the data being collected or how it shapes their feed. In the same way that people often feel unsure about how much of their personal information is being tracked and used online, social media users experience a comparable lack of transparency when it comes to algorithms. While platforms like Facebook, Instagram, TikTok, and YouTube personalize content feeds using sophisticated machine-learning systems, they provide little to no explanation about how this personalization works. Users might know that their “likes” or search history influence what they see, but the specifics of how much weight each action holds, which data points are prioritized, or how past behaviors are interpreted remain hidden. Users are left to speculate about the mechanics underlying their feed as a result, which makes them uncomfortable and confused about whether their experiences are genuinely their own or significantly manufactured.

This uncertainty is intensified because algorithmic processes are largely invisible. Users might believe they are encountering content organically when in reality, a complex web of data-driven predictions determines what appears. Consequently, individuals may misjudge the representativeness or importance of what they see, reinforcing false perceptions of consensus or relevance. Unlike traditional forms of media, where editors make content curation decisions that are relatively transparent and rooted in human judgment, social media platforms deploy black-box algorithms that are invisible by design (Longo). Users believe that the content they come across is a natural reflection of popularity or reality because of this lack of visibility. The same viewpoint being repeated throughout a feed, for instance, could be mistaken for a widespread agreement when it's the product of algorithmic amplification specific to that user's data profile. People's understanding of public opinion, social standards, and the popularity of particular viewpoints may be distorted by this misconception. Consequently, this can strengthen echo chambers and filter bubbles, in which people are continuously exposed to information that supports their preexisting opinions while competing viewpoints are suppressed, giving the impression of unity and strengthening skewed worldviews.

Additionally, uncertainty is heightened by users' limited understanding of algorithmic goals. While many people believe algorithms are unbiased or only "show what's popular," they are thoroughly calibrated to optimize interaction rather than variety or accuracy. This leads to the spread of misinformation, where consumers might not be aware of engaging with skewed or inaccurate narratives. According to Oxford Academic, “There are many interrelated causes of the misinformation problem, including the ability of non-experts to rapidly post information, the influence of bots and social media algorithms” (Butcher). It's a popular misperception that social media algorithms are objective, reflecting what most people are connecting with or acting as mirrors to societal trends. In actuality, these algorithms are created with goals in mind, specifically the need to increase user engagement and promote more clicks, shares, and comments. According to Forbes, “As these companies strip away safeguards, journalism faces an existential crisis–one where facts struggle to compete with viral falsehoods” (Jones). Content that provokes strong emotional responses (such as outrage, fear, or sensationalism) tends to outperform more nuanced, fact-based content in terms of engagement metrics. As a result, the algorithm can end up prioritizing emotionally charged or polarizing material, even if it’s misleading or false. This dynamic has contributed to the rapid and widespread dissemination of misinformation and conspiracy theories, which can influence public opinion, undermine trust in institutions, and even affect democratic processes before users realize they’ve been misled.

Finally, just as individuals are uncertain about their privacy preferences (the "privacy paradox"), users often express concern about the influence of social media algorithms yet continue to rely on these

platforms for news, social interaction, and entertainment. This creates a behavior-attitude gap that fuels the ongoing power of engagement-driven algorithms. The “privacy paradox” refers to the phenomenon where individuals express concern about their online privacy but don’t take corresponding actions to protect it, such as adjusting settings or reducing data sharing. According to ResearchGate, “...individuals reveal personal information for relatively small rewards, often just for drawing the attention of peers in an online social network” (Kokolakis). Regarding algorithmic influence, users may admit that social media sites alter their experiences or spread bad content, yet use these platforms daily. This behavior-attitude gap can be attributed to several factors: the convenience and pervasion of social media, the lack of viable alternatives, the difficulty of resisting habit-forming platform designs, and the general opacity of algorithmic processes. As users continue to engage despite their misgivings, platforms receive reinforcement for their engagement-driven design, further incentivizing the use of attention-maximizing algorithms. This feedback loop entrenches the dominance of algorithmic curation, even as it raises ethical, cognitive, and societal concerns.

4.2 Context Dependence:

The impact of social media algorithms is highly context-dependent. What users see, believe, and share can vary dramatically based on the design and framing of platform environments. Social media does not operate in a vacuum, its effects on user behavior and belief formation are shaped by the broader context in which users engage with it. This includes not only the specific platform being used (e.g., TikTok vs. LinkedIn) but also the design choices embedded in that platform: how content is displayed, how users interact with it, and what feedback mechanisms are in place (likes, comments, shares, etc.). The same user might encounter and respond to the same piece of content in vastly different ways depending on whether they see it presented as a breaking news headline, a humorous meme, or a viral TikTok challenge (Kallio and Mäenpää). The surrounding environment, such as user interface, tone of comment sections, or accompanying hashtags, can subtly influence interpretation and reaction, making algorithmic influence highly dependent on both situational contexts.

For example, the presentation of information, whether a news article, a meme, or a video, is not neutral. Algorithms tailor content to emotional cues, personal interests, and prior engagement patterns. A user feeling isolated may be algorithmically steered toward different content (e.g., self-help videos or extremist communities) compared to the same user in a different emotional state. Algorithms are highly adaptive systems that respond dynamically to user signals. They don’t just respond to static preferences; they adapt to temporal states such as mood, attention span, and even recent activity. “At times, the computer sometimes seems more in control of our choices than we are,” (Chayka). For example,

someone who has recently engaged with content about loneliness or anxiety might be exposed to more content that appeals to those feelings, sometimes in a positive way (e.g., videos about mental health) and other times in a negative way (e.g., conspiracy theories that offer belonging through radical ideologies). Crucially, individuals might not be conscious that this is how their online activity is being read and used. “Almost every other major Internet platform makes use of some form of algorithmic recommendation,” (Chayka). Thus, algorithmic recommendations can nudge users into very different digital spaces, ranging from supportive communities to harmful echo chambers, depending on transient emotional or psychological cues.

Moreover, platform design can influence perceived credibility. Just as (Acquisti et al.) noted that "cheesy" website designs could paradoxically make people reveal more sensitive information, low-quality but emotionally charged content often outperforms sober, fact-based journalism on social media. The context, the interface, surrounding recommendations, comments, and trending status can all nudge users toward certain behaviors or attitudes without them consciously realizing it. Visual and contextual design plays a crucial role in shaping how users evaluate and respond to information. Content with strong visual or emotional appeal, regardless of factual accuracy, tends to be more engaging and widely shared on social media, according to research by (Acquisti et al). which shows how people are frequently more influenced by the emotional comfort of a digital interface. “In comparison to exposure to and engagement with regular news content, the public’s consumption and interaction with fact-checking posts is much lower,” (Xue et al). A clickbait headline on a colorful image can outperform a nuanced investigative report simply because it triggers a faster, more instinctive reaction. Further, the context in which content appears next to a “Trending” label, alongside positive comments, or embedded within a visually familiar interface can lead users to perceive it as more legitimate. This means credibility itself can be algorithmically constructed, making users susceptible to manipulation based not just on content, but on how and where that content appears.

Another important contextual factor is social influence. Algorithms frequently amplify content based on what "others" are engaging with, leading users to perceive certain ideas as more popular or accepted than they are. This can reinforce echo chambers where beliefs are validated not through deliberation but through visibility. “These echo chambers are amplified by algorithms prioritizing engagement over factual accuracy, leading to political polarization, misinformation, and social fragmentation,” (Goswami). Social proof, one of the strongest psychological drivers of behavior, is deeply embedded in the logic of algorithmic amplification. Content that garners a lot of engagement (likes, shares, views) is pushed to more users, giving the impression that the content is not only popular but also credible or widely accepted. This dynamic can distort perceptions of consensus, making fringe beliefs

seem mainstream and controversial opinions appear dominant. For example, a video promoting a conspiracy theory may gain traction not because it reflects reality, but because early engagement triggered an algorithmic feedback loop. As users are repeatedly exposed to similar content, they may begin to internalize the associated beliefs as more normal or acceptable. This leads to the creation of echo chambers algorithmically reinforced environments where one's existing views are amplified and opposing views are filtered out hindering critical thinking and cross-ideological dialogue.

Finally, political and cultural context matters. During election cycles, for example, algorithmic influence intensifies as users are exposed to politically charged content, often with little regard for accuracy. According to AP, "Overall, 97% of the political news sources on Facebook identified by fact-checkers as having spread misinformation were more popular with conservatives than liberals," (Klepper). In non-election contexts, algorithmic recommendations might shift toward consumer trends, viral entertainment, or appearance-based social comparisons, influencing behavior differently. The goals and effects of algorithms shift depending on the surrounding political and cultural climate. During election periods, platforms may be flooded with politically motivated content, both organic and artificial (e.g., bot activity, disinformation campaigns). There have been issues of extremist groups utilizing social media platforms to spread propaganda. "...IS uses X and Telegram to foster a sense of belonging among its followers, often publishing emotionally proactive content aimed at radicalizing people, " (Awasthi). Political ads, partisan news, and ideological memes may all receive boosted exposure based on engagement patterns, regardless of accuracy or source credibility. In contrast, during more apolitical times, the algorithm may favor different types of content such as viral challenges, lifestyle trends, or curated beauty content which can influence users' self-perception, spending habits, or social anxieties. These shifting priorities demonstrate how algorithms are not static entities they are deeply intertwined with the cultural moment and user behavior, continually recalibrating to optimize engagement in ways that can have profound social, political, and psychological impacts.

4.3 Malleability:

Perhaps the most concerning aspect of social media algorithms is the malleability of user behavior they exploit. Companies with insight into psychological processes intentionally design their algorithms to nudge user actions toward greater disclosure, engagement, and even ideological shifts. Social media platforms have a deep understanding of human psychology and behavior, which is harnessed to shape user interactions. Algorithms are designed not just to predict user interests but to influence them, pushing users toward greater engagement through subtle manipulations. According to Scientific American, "...people who are spreading political misinformation leverage moral and emotional

information - for example, posts that provoke moral outrage - in order to get people to share it more," (Brady). For instance, algorithms can direct users toward content that triggers strong emotional reactions whether positive or negative because such reactions lead to increased engagement. Over time, this can encourage users to share more personal information, participate in more discussions, or engage with content that reinforces certain ideas or behaviors. These actions are often the result of intentional design, with companies leveraging sophisticated knowledge of psychological processes to fine-tune their algorithms. This raises ethical questions about the extent to which companies are responsible for how they manipulate user behavior and whether users are fully aware of how they are being influenced.

Algorithms learn not only from what users like but also from what provokes outrage, sadness, excitement, or curiosity. This feedback is used to fine-tune future content exposure. As (Acquisti et al.) describe in privacy contexts, users' behaviors are malleable because they rely heavily on environmental cues and can be easily influenced without fully realizing it. Algorithms are not just passive systems that reflect user preferences; they are dynamic entities that actively shape future behavior by learning from the emotional reactions they provoke. Algorithms then prioritize this emotionally charged content, reinforcing patterns of engagement that lead users deeper into certain emotional states or ideological perspectives. In a similar vein, (Acquisti et al) research on privacy highlights that users are often unaware of the extent to which their behavior is being shaped by these cues. Just as individuals may unknowingly share more personal information due to design choices on websites, they may also find themselves drawn into emotional content on social media platforms without fully realizing the extent of its influence on their actions or beliefs.

Default settings also play a major role in this manipulation. Platforms often pre-set notification frequencies, privacy settings, and autoplay features in ways that maximize user engagement, subtly shaping habits and emotional dependencies. TikTok's "For You" page, for instance, quickly adapts to fleeting user interests and steers future exposure accordingly, creating highly personalized but often insular content ecosystems. According to Vox, "...the appeal of TikTok for so many people – and what makes it so addicting – is that unending stream of "for you" content," (Morrison). The default settings of social media platforms are often crafted to keep users engaged for as long as possible, shaping not only the content they see but also their overall habits. For example, by setting notifications to "on" by default, platforms encourage users to return frequently to check updates, keeping them wired to the platform. Autoplay features are designed to remove friction from the user experience, making it easier for users to keep scrolling without making an active decision to continue watching content. TikTok's "For You" page is a prime example of this, it quickly learns from a user's viewing history and emotional responses to content, providing a continuous stream of personalized suggestions that often lead to an insular content

ecosystem. This system can become self-reinforcing, narrowing the range of content that users are exposed to and making it harder for them to break out of algorithmically dictated echo chambers. While this personalization increases engagement, it can also limit diversity in the types of content users are exposed to, making them more susceptible to misinformation and ideological polarization.

Moreover, the gamification of engagement through likes, shares, and comments activates reward systems in the brain. Over time, users may prioritize content that garners more approval rather than content that reflects their authentic interests or values. The use of likes, shares, and comments as engagement metrics is not just about measuring popularity these features are designed to tap into users' brain chemistry. The instant gratification provided by receiving likes or shares triggers the release of dopamine, a neurotransmitter associated with pleasure and reward (Danish). This creates a feedback loop in which users are incentivized to post content that will generate more approval from others, even if this means prioritizing attention-grabbing, emotionally charged, or controversial content over what might genuinely reflect their interests or values. Over time, users may begin to internalize this external validation as more important than their authentic preferences, leading them to prioritize content that is likely to get more engagement, rather than content that is personally meaningful or informative. This "gamification" of social media can skew users' behavior, making them more interested in gaining approval than critically engaging with the content they consume.

The malleability of user behavior also has significant societal consequences. By amplifying divisive, emotionally charged, or misleading content, algorithms can shift public opinion, radicalize individuals, and alter the tenor of civic discourse all without deliberate intent by users. This highlights the ethical urgency of algorithmic transparency and design interventions that protect rather than exploit human psychology. The cumulative effect of these algorithmic influences is profound, especially when considered at a societal scale. Social media platforms amplify content based on engagement metrics, which means divisive, emotionally charged, or even misleading content often gets more visibility. This can create a cascade of reactions that reinforce harmful stereotypes, deepen ideological divides, and skew public discourse. For example, extremist ideologies can spread more easily in environments where algorithms prioritize content that generates outrage or shock, leading some users down radicalizing paths without their conscious awareness. This is particularly concerning in the context of political discourse, where misinformation or hyper-partisan content can shape voting behavior or public opinion. The ethical implications of this are significant, if algorithms are capable of shaping user behavior to such an extent, there is a moral imperative for tech companies to ensure transparency in how these algorithms work and implement safeguards to protect users from undue manipulation. Designing algorithms that promote

well-being, accuracy, and diversity of thought rather than exploiting human psychology for profit is essential to mitigating these risks.

5. Personal Critique

The three major issues described in section 4, uncertainty, context dependence, and malleability, reflect the sophisticated design of social media algorithms and the societal vulnerabilities they exploit. Each theme reveals how algorithmic systems manipulate information flows, perception, and behavior in ways that users seldom fully comprehend. There is a need for increased regulation, digital literacy, and ethical accountability in platform design. Without intervention, the issues will only intensify, contributing to a fragmented and misinformed public sphere.

The uncertainty around algorithmic processes raises a fundamental question about informed consent in digital spaces. Although users engage with platforms daily, few are aware of how much of their data is gathered, analyzed, and utilized to influence their experiences. This asymmetry of information parallels the concerns raised in privacy scholarship, people are engaging in activities where the costs are hidden and the benefits are immediate. However, I believe this issue is a systemic design flaw that extends beyond the individual agency. Platforms purposefully hide the internals of their algorithms because they fear that openness could lower user engagement and, consequently, revenue. Users would act differently if they were fully aware that the information is chosen to evoke particular emotional responses, like anger or fear, rather than to neutrally inform or entertain.

I argue that transparency regulations are essential. Just as food companies are required to list ingredients and nutritional values, social media platforms should be mandated to disclose how their recommendation systems work, what data is being used, and what outcomes they optimize for. Algorithmic “nutrition labels” could help users better understand the forces behind their feed and offer more informed choices. These disclosures must be written in clear, non-technical language to be meaningful for the average user.

Context dependence further complicates this issue. While personalization might enhance user experience on the surface, it can also create misleading impressions of credibility and popularity. This is the most dangerous aspect of algorithmic curation. When users see content framed as “trending” or heavily liked, they are less likely to scrutinize its accuracy. This gives platforms immense power to shape public opinion, not through censorship, but through nudges and framing effects. It is especially troubling in times of crisis or during elections, where misinformation can spread rapidly and have real-world consequences.

One solution I advocate for is contextual disclaimers. Platforms should be required to provide visible flags on potentially misleading content, especially in political or health-related domains. Fact-checking labels and context boxes should be expanded and standardized. Additionally, platforms should limit the algorithmic amplification of emotionally charged content during critical periods such as elections or pandemics.

The malleability of user behavior is where I believe the strongest regulatory action is necessary. Social media platforms are not neutral facilitators of communication. They are active participants in shaping what people think, feel, and do. The use of default settings, dopamine-inducing feedback loops (such as likes and notifications), and emotionally charged content is not accidental, it is deliberate, strategic, and profit-driven. This behavioral engineering borders on manipulation and, in some cases, addiction.

In my view, this warrants a reevaluation of how we define ethical technology. Just as we hold pharmaceutical companies accountable for the psychological effects of their products, we must hold tech companies accountable for the psychological impacts of their platforms. I recommend the establishment of an independent oversight body, similar to the FDA but for algorithms, that would evaluate new recommendation systems and digital features for psychological harm. Features found to exploit known cognitive vulnerabilities, such as infinite scroll or autoplay, should be regulated if they are found to significantly contribute to addiction or mental health issues.

Another critical piece is the role of digital literacy. Regulation alone cannot address all the challenges posed by algorithms. Users must also be educated to recognize algorithmic influence and develop healthy digital habits. Schools should incorporate algorithm awareness into media literacy curriculums, and public campaigns should be launched to inform people about how their data is used and how their behavior is being shaped online.

Finally, I want to critique the business model itself. Engagement-driven algorithms exist because the attention economy rewards them. As long as profit is tied directly to time spent and interactions, platforms will have little incentive to promote balanced, accurate, or healthy content. Therefore, any real change must address the incentive structure. We need to encourage alternative business models, perhaps subscription-based or publicly funded social networks that are not reliant on maximizing engagement at any cost.

In conclusion, while social media algorithms provide convenience and personalization, they do so at a profound societal cost. Uncertainty, context dependence, and malleability are not discrete problems;

rather, they are interrelated signs of a broader approach to design that puts profit ahead of people's well-being. Demanding openness, enforcing moral principles, and educating users are all necessary. These platforms will keep influencing society in ways that hurt many people and profit a select few if nothing is done.

6. Conclusion

In conclusion, the evolution of social media algorithms has introduced powerful tools that not only personalize digital experiences but also manipulate perception, influence user behavior, and shape public discourse. As explored in this paper, the three critical issues, uncertainty, context dependence, and malleability highlight how algorithmic systems function beyond user awareness, often reinforcing echo chambers, spreading misinformation, and encouraging emotional manipulation.

Uncertainty stems from the opacity of algorithmic design, where users are left uninformed about how their data is collected and used. Context dependence demonstrates how interface dynamics, emotional framing, and platform design influence the meaning and authority of content. The most worrying aspect of user behavior is its malleability, as platforms purposefully take advantage of psychological inclinations to increase engagement, often at the price of mental well-being and rational decision-making.

We then proposed regulatory and ethical interventions such as transparency requirements, algorithmic oversight, digital literacy education, and the development of alternative platform models. These solutions aim to restore user agency, ensure accountability, and build a healthier digital environment for society as a whole.

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