



The dilemma of social media algorithms and analytics

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The launch of the Netflix 2020 documentary on social media platforms, addiction, and privacy, called *The Social Dilemma*, has created a firestorm of discussions. Comments on the documentary span addiction and privacy, and ethical platform design; the documentary has also highlighted the polarization of opinions on social media. Filmmaker Jeff Orlowski explores modern social media platforms as business models based on algorithms that encourage addiction and privacy breaches as features of social media platforms (Girish 2020; Morgese 2020).

The reactions to the documentary range from consumers deciding to close their social media accounts to oppositional voices calling for freedom of speech and not censoring the media. To summarize some of the comments, we performed a semantic analysis of 8812 Twitter messages discussing the documentary from the beginning of October 2020. The resultant conceptual mapping analysis reveals the themes presented in Fig. 1. The results show that main tech companies, including Google, Facebook, and Twitter, and their level of data and information manipulation are a major focus of consumer comments. The manipulation of algorithms and the resultant impact on society are also among the themes discussed. Interestingly, the topic of books surfaces in relation to censorship, freedom of speech, and knowledge.

In the context of data algorithms and analytics research, this documentary opens up discussion and controversy around how academia, research organizations, practitioners, and policymakers should partake in collaborative solutions (Krishen et al. 2017; Morgese 2020). Previous research on legalized data control shows inconclusive results in the

world of digital ads, for example, with greater legal control lowering advertising effectiveness (Martin and Murphy 2017), and perceived privacy increasing click rate on personalized ads (Tucker 2014). However, the regulation of digital information privacy is dependent on national differences and systems and difficult to implement and enforce across jurisdictional boundaries (Petrescu and Krishen 2018; Petrescu et al. 2020).

Moreover, perhaps not coincidentally, the presence of the underlying theme of books in Twitter consumer discussions emphasizes the difficulty of censoring and manipulating knowledge even from ancient times, when “nonconforming” books were burned in public markets. While some voices call for stricter regulations of social media content, others call for the end of censorship in social media. Those who voice opposition to strict regulations suggest a restructured type of social platform and improved social algorithms that no longer use AI to make decisions about when and what to censor (Morgese 2020). The Persuasion Knowledge Model argues that consumers must be given the necessary opportunities and tools to learn about manipulation and persuasion from social interactions, which would shape how they respond as persuasion targets (Friestad and Wright 1994, 1995; Kirmani and Campbell 2004).

Therefore, we make a call for more research on the models and frameworks that can enhance and improve the business models and algorithms of social media platforms. As social media offerings continue to develop, effective collaboration among all stakeholders can enable a broader, ecosystems view of social media platforms; these discussions can identify a middle ground on privacy, ethical platform design, monetized services, and consumer awareness (Raschke et al. 2014). Additional research on the use of analytics by various stakeholders (e.g., businesses, education organizations, and policymakers), algorithm bias, and legal reform, can contribute to the development of ethical solutions to social media content and platform designs.

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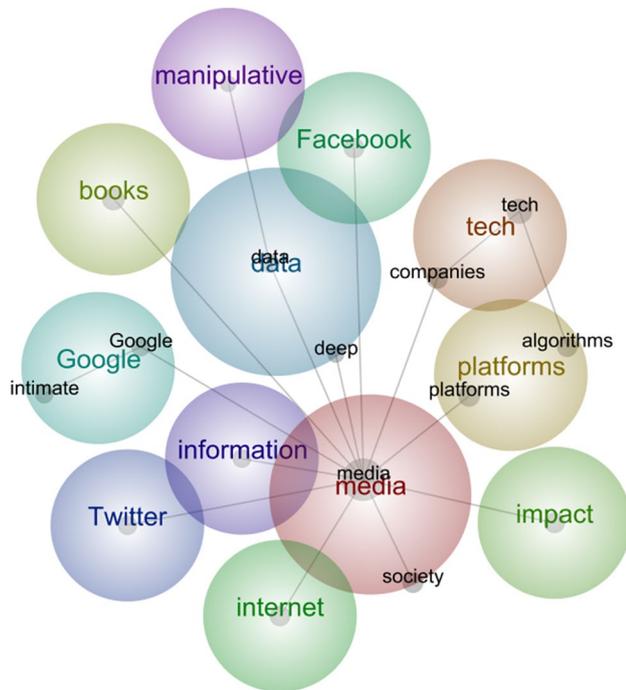


Fig. 1 Twitter themes on the social dilemma

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