

The Economics of Social Media

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Social media plays an essential role in society

4.76 billion social media users worldwide

- 60% of the population; **90% of internet users** (Kemp, 2023)

Internet users spend **2.5hrs/day** on social media

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The image shows a Facebook post by Fawaz Rashed (@FawazRashed) and a screenshot of a Facebook event page. The post, dated 12:04 AM on Mar 19, 2011, contains the text: "We use Facebook to schedule the protests, Twitter to coordinate, and YouTube to tell the world." #egypt #jan25. The event page is for "يوم الثورة على التعذيب والفقر والفساد والبطالة" (Day of Revolution against Torture, Poverty, Corruption, and Oppression), scheduled for 25 January from 00:00 to 23:30. The event location is listed as "كل محافظات مصر ابتداء من الساعة 2 ظهرا في القاهرة: دوران شعرا - دوران المنيرة - جامعة القاهرة - شارع جامعة الدول العربية". The event is created by "كنا خالد سعيد" and has 97,666 attendees. A list of attendees includes "محمد المرسي" and "Ali Boukris".

...but it brings new challenges

The New York Times

Facebook Admits It Was Used to Incite Violence in Myanmar

Give this article



Rohingya refugees after crossing the Naf River, which separates Myanmar and Bangladesh, in 2017. A report commissioned by Facebook found the company failed to keep its platform from being used to "foment division and incite offline violence" in Myanmar. Adam Dean for The New York Times

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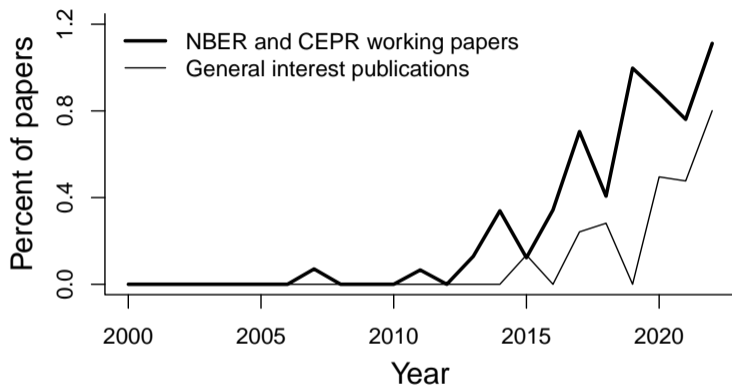
Social media is driving teen mental health crisis, surgeon general warns

Advisory calls attention to growing concerns about the link between social media use and depression and anxiety in children and adolescents.

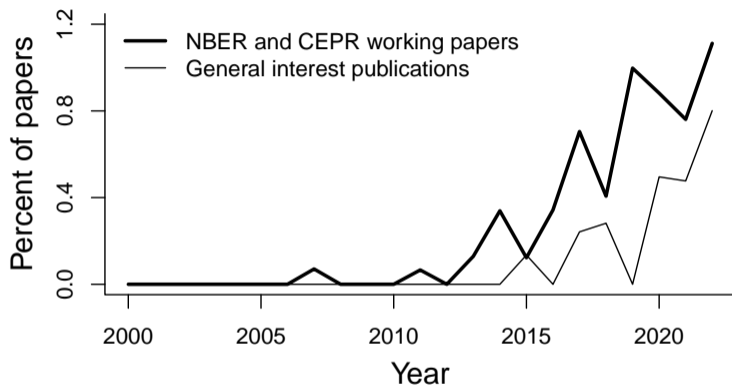


The surgeon general's warning about social media comes as the rates of teenage depression, sadness and hopelessness have skyrocketed over the past decade. Carol Vezos / Getty Images

There has been an explosion in the social media literature



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Growing supply of research + policy relevance **generate demand for a synthesis**

This paper

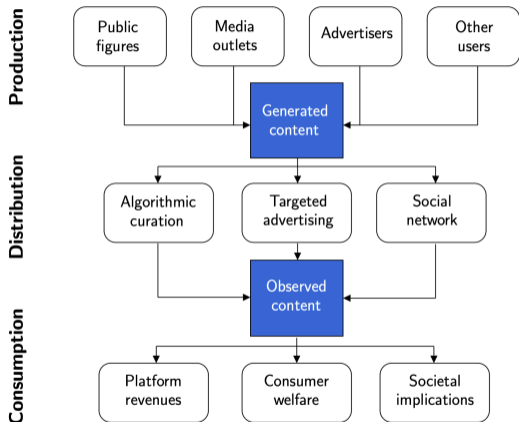
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- We define social media platforms and highlight their unique features
- We organize the literature around the 3 stages of the life cycle of content

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Questions we ask

1. Content production

- How do incentives affect content produced on and off social media?
- How can platforms deter the production of misinformation and “toxic” content?

2. Content distribution

- What is the role of algorithms on the content that users see?
- Are ads effective?

3. Content consumption

- What are the effects of social media on content consumers and society?
- How do consumer substitute across platforms?

Contribution to the literature

Social media as a source of data (Mosleh, et al., 2022; Aridor et al., 2024b)

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Reviews on: the political effects of social media (Zhuravskaya, et al., 2020; Persily and Tucker, 2020; Campante et al., 2023; Lorenz-Spreen et al., 2023), on misinformation interventions (Kozyreva et al., Forthcoming; Pen-nycook and Rand, 2022; Martel and Rand, 2023a; Blair et al., 2023), on privacy (Acquisti et al., 2016), and finance (Mullins and Niessner, 2024)

- **We cover primarily empirical papers in economics and highlight the key economic forces that they study**

Outline

1. Defining social media platforms
2. Content Production: Deterring misinformation
3. Content Distribution: Do algorithms create echo chambers?
4. Content Consumption: The effects of social media on individual welfare
5. Conclusions

Defining social media platforms

It's very hard to define social media precisely

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We decompose “Social media platforms” into its 3 components

1. “Social:” Content is mostly generated by users and involves interactions
2. “Media:” Two-sided market with users on one side and advertisers on the other
3. “Platforms:” Internet-based applications that use algorithms to deliver content

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Our definition: **Two-sided platforms that primarily host user-generated content distributed via algorithms, while allowing for interactions among users**

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Detering misinformation

Popular interventions that seek to deter the production (re-sharing) of false articles:

- Nudging/Prompting users
- Fact-checking posts
- Digital literacy campaigns providing tips to spot misinformation
- Adding friction to the sharing process

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- **Nudging** users to think about the prevalence of misinformation (Guriev et al., 2023)
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How to implement at scale? Many studies find muted effects at scale (Lin et al., 2024)

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Do algorithms create echo chambers?

Platforms need a way of distributing posts to users

- In the past, network was the main source of content: algorithm based on reverse-chronological-order

Concerns that by promoting like-minded or low-quality content, algorithms may distort beliefs or polarize users (Aral, 2021; Campante et al., 2023)

There is growing experimental evidence that Facebook's **algorithms tend to promote like-minded content** (Levy 2021) although the magnitude of the effect is probably not dramatic (Bakshy et al., 2015; Gonzalez-Bailon et al., 2023)

Evidence is consistent with algorithms seeking to maximize engagement (Beknazar et al., 2022)

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The effects of social media on individual welfare

Several approaches to measure welfare: value of time (Brynjolfsson et al., Forthcoming), WTA to stop using social media (Brynjolfsson et al., 2019,2023; Mosquera et al. 2020; Allcott et al., 2020).

- **Estimates range from \$50-\$160 for 1 month** of Facebook

Documented benefits from using social media could lead to these estimates

- E.g., positive labor market effects from connections (Armona, 2019; Rajkumar et al., 2022)

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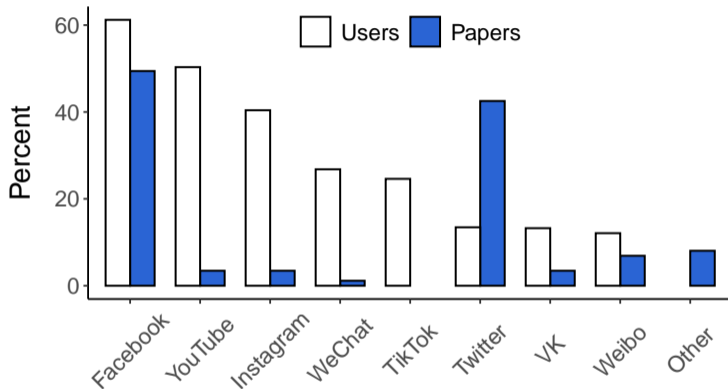
Simultaneous **evidence of a negative effect** on mental health (Braghieri et al., 2022) and some measures of subjective well-being (Mosquera et al. 2020; Allcott et al., 2020,2022)

- **Could be rationalized by product market traps** due to FOMO (Bursztyn et al., 2023)

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Study of social media vs. platform representation



Research mostly focuses on Facebook and Twitter

- More research is needed about other growing platforms (e.g., TikTok)

Open questions

Shift toward new platforms (TikTok), reflects a transition from content personalized by users to content that is completely algorithmically curated

- Does this reflect a technological improvement in real-time recommendations?
- Does it reflect a maturing market with diversification (Aridor, Forthcoming)?
- Does this change entail an increase of entertainment at the expense of news on social media, diminishing political effects?

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There is also a shift in business models (towards subscriptions/decentralization):

- Will the rise in subscriptions decrease the prevalence of harmful content?
- What will the effects be on small businesses that benefit from ads?