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Social media, artificial intelligence (AI), and one burning question: How to balance problems and progress?

Anthony Furnelli, Phil Hart and Kimberly Sherman

Anthony Furnelli, Phil Hart and Kimberly Sherman are all based at the Department of Management and Marketing, Westfield State University, Westfield, Massachusetts, USA.



Earlier in 2023, other debates around TikTok were already simmering. Congressional members raised questions about teen usage and China's influence (Kerr, 2023). Over about five hours, chief executive officer (CEO) Shou Chew fielded questions from a U.S. House Committee. During the opening statement, Chew said:

Two years ago I became the CEO of TikTok. Today, we have more than a billion monthly active users around the world, including over 150 million in the United States. Our app is a place where people can be creative and curious and where close to 5 million American businesses, mostly small businesses, go to find new customers and to fuel their growth (Chew, 2023).

The testimony addressed concerns and emphasized the broad appeal that the social media application (app) had with Americans. However, not everyone in the room agreed with TikTok and some congressional members called for an outright ban on the app (CSPAN, 2023). Eventually, TikTok was banned on US Government devices and faced similar restrictions in other countries (Maheshwari and Holpuch, 2023). Social media bans were common around the globe. For example, some of the major social apps from the USA were also blocked in China at various points in time (Binns and Reeves, 2023). By 2024, U.S. lawmakers called on TikTok to divest from its parent company or face additional restrictions (Guynn, 2024).

Industry issues

Regulation was not the only issue social media faced. Other platforms, such as X (formerly Twitter), were called out by users for being too slow to address war-related information concerns for which the company quickly responded with a commitment to improve their "Community Notes" program (Goggin, 2023). According to Reuters, some vocal observers also argued that X was not doing enough to "moderate content" in the "trust and safety" area, as the company's leadership changed in 2022 (Dang, 2023). However, stronger top-down content moderation was only one corporate solution. X's new leadership seemed to re-position toward open dialogue, free speech and a more bottom-up user approach to



Disclaimer. This case is intended to be used as the basis for class discussion rather than to illustrate either effective or ineffective handling of a management situation. The case was compiled from published sources. content moderation (X Help Center, 2023). In October 2023, Meta was sued by US states, from across the political spectrum, which claimed the social media giant's platforms were negatively impacting American youth (Ortutay, 2023). However, Meta had user features and tools that were designed to set time limits and provide more parental control (Meta, 2023).

Despite negative press, social media was considered a space where marginalized people found support and oppressed people had a voice. In addition, social media democratized the process of starting a business for countless citizens around the globe. However, positive impacts were often overshadowed by the next big headline (Figure 1).





Artificial intelligence in social media

Artificial intelligence (AI) had a long history in the technology industry. The concept of recommendation algorithms was pioneered by Amazon, published in a paper in 2003 and integrated into their e-commerce business (Linden *et al.*, 2003). The technique was part of an AI approach that helped marketers feed content that had a higher probability of matching user interest. Understanding customer needs and wants programmatically contributed to Amazon's success and was adopted in social media. In a social media video investigation, the *Wall Street Journal (WSJ)* found that *WSJ* test bots were "driven deep into rabbit holes of content" through recommendations (WSJ, 2023). Critics argued that some users ended up in an echo chamber. The opposing argument was that the short-form format, infinite scrolling design and recommendations were highly relevant to users.

Generative AI was a separate area that came into focus in 2022–2023 after OpenAI released ChatGPT. During ChatGPT's meteoric rise in 2023, a proliferation of other AI tools made it easier for users to create images, videos and text, which significantly reduced content creation costs. Public access and interest in AI-generated synthetic content grew rapidly among influencers and marketing agencies. In a blog, a content creator demonstrated how to build a TikTok video using an AI Search Engine Optimization (SEO) tool, ChatGPT and an AI video editor in about 10 min (Santiago, 2023). Creative tasks such as ideation, keywords for SEO, writing and image or video generation were easier than ever before. AI had the potential to accelerate content creation exponentially, especially in videos and images. In September 2023, Google required political ads to have a "disclosure" or label if AI was used (Chapman, 2023). Avoiding deepfake content in election advertising and social media were industry-wide concerns.

By the end of 2023, some social media companies announced AI initiatives ranging from chatbots to large language models. The announcements suggested additional convergence between the two industries and users were highly engaged at all levels (Figure 2). The convergence between AI and social media offered a challenging path ahead.

Balance

In 2023, the U.S. Surgeon General published an advisory outlining some of the positive and negative aspects of social media. The report raised a warning about the serious negative impacts on American youth and their mental health. It focused on "excessive use and content as the two primary areas of concern" for young people and suggested that one solution was more collaboration among the various stakeholders which included "kids, parents, companies, researchers, and the government" (U.S. Surgeon General, 2023). Social media apps and AI touched every aspect of society from health and wellness to war and peace. How effective was society at balancing the need for progress without exacerbating the problems?

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Corresponding author

Anthony Furnelli can be contacted at: afurnelli@westfield.ma.edu