Call for Papers

Special Issue of Production and Operations Management

Social Technologies in Operations

Guest Editors:

Liangfei Qiu, University of Florida, liangfei.qiu@warrington.ufl.edu
Yili (Kevin) Hong, University of Houston, yilihong@uh.edu
Andrew Whinston, University of Texas at Austin, abw@uts.cc.utexas.edu

Manuscript Submission Deadline: January 15, 2022

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Background

Building on the Internet and mobile services, social technologies are being developed to facilitate social interactions among individuals and between individuals and firms. Recent years have witnessed an unprecedented explosion in social technologies, such as social media, social networks, and the wisdom of crowds (Qiu and Whinston 2017, Kumar et al. 2018, Lee et al. 2018, Hu et al. 2019, Mallipeddi et al. 2021). Social technologies not just created new business models and new industries, they revolutionized the nature of how businesses operate and changed the landscape of industry competition and operations in supply chain (Cui et al. 2018), online retailing (Qiu et al. 2021), and healthcare (Khurana et al. 2019, Huang et al. 2021). The recent GameStop trading frenzy has again illustrated the power of social technologies in the Reddit investing community (MacMillan and Torbati 2021).

On the one hand, social technologies shape consumer behavior. The prevalence of consumers sharing their purchases on social media platforms have substantial implications for online retailing operations (Qiu and Whinston 2017). In addition, emerging technologies such as live streaming have significantly altered the landscape for both offline and online retail operations. On the other hand, social technologies are spurring business innovations and firm operations strategies. Using social media information can improve firms' operational decisions (Cui et al. 2018). Another notable example is the role of the wisdom of crowds in firm operations. Crowd markets leverage the wisdom of individual customers or users to combine diverse ideas, information, and technologies. In the past decade, we have witnessed the growing popularity of prediction markets, in which people place bets on events that they think are most likely to happen, thus revealing their cross-functional and frontline operations knowledge (Qiu and Kumar 2017, Qiu et al. 2017). Big companies like Hewlett-Packard, Intel, Microsoft, and Google have all employed internal prediction markets. Further, open innovation platforms have generated many useful ideas for firms' new product development and production. Companies like Dell, Google, and Xiaomi have

successfully implemented such platforms.

This special issue aims at motivating research and practice to understand how social technologies can help firms build transformational operations strategies and cope with the challenges that arise with social technologies. For example, researchers can quantify the impact of firms' social media strategies on operations and guide the design of future social media strategies. The special issue also aims at enriching the understanding of the relationship between social technologies and other emerging topics, such as healthcare operations, Fintech and blockchain, 5G in telecommunications, and supply network formation. Further, the emergence of big data research provides ample opportunities to analyze the impact of social technologies using data analytics and decision analytics (Feng and Shanthikumar 2018, Guha and Kumar 2018).

Objectives

In this special issue, we call for research that presents relevant, rigorous, and novel work related to the issue of social technologies in operations. We are particularly interested in stimulating research that illustrates how firms can take advantage of the recent advancement in social technologies that revolutionizes business operations. Examples of topics of interest include (but are not limited to):

- The power of social technologies in harnessing the wisdom of crowds in managing demand risk in supply chains, monitoring leading business indicators, and gathering new ideas and business innovations. For example, Ford uses corporate prediction markets to leverage employee knowledge and forecast sales volumes, product features, and release timing (Cowgill and Zitzewitz 2015).
- Social pricing in online retailing. For example, Meituan, a leading food delivery platform in China, encourages consumers to share coupons with their social network friends (Gao et al. 2021).
- Social technologies such as live streaming on retail operations. For example, TikTok, a live streaming platform, is partnering with Walmart: Walmart turns their products into livestream videos that resonate with the TikTok community (Perez 2020).
- How social media platforms or internal social networks within a firm affect a firm's operational decisions and strategies.
- The impact of healthcare platforms (which are rapidly being embraced by patients and professional physicians) on healthcare operations and outcomes.
- The relationship between social media and the upcoming next-generation 5G networks.
- The role of social media and socially-enabled trading platforms in the operations of Fintech. For example, online trading platforms, such as Sharewise and Estimize, enable their users to aggregate other users' opinions and predictions about stock prices.
- Supply network formation and fragility. For example, AT&T expands its supply network by offloading mobile data traffic to third-party Wi-Fi hotspots (Qiu et al. 2019).

For this special issue, we are open to submissions that leverage any rigorous methodological approach, including econometrics with secondary data, analytical modeling, controlled laboratory experiments, field experiments, large-scale surveys, case studies, etc.

Deadlines

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Authors are encouraged to contact the editorial team in case of doubt regarding the fit of the paper to the editorial scope of this special issue. Manuscripts that are submitted prior to the submission deadline will receive immediate consideration.

Please follow the detailed submission guidelines provided at http://www.poms.org/journal/author_instructions/

The paper should be submitted to manuscript central (https://mc.manuscriptcentral.com/poms). While submitting the paper, please be sure to identify in Step 1 that the paper is being submitted for the special issue. In the Department Editor list, please choose this special issue.

References

- Cowgill, B., & Zitzewitz, E. (2015). Corporate prediction markets: Evidence from google, ford, and firm x. *The Review of Economic Studies*, 82(4), 1309-1341.
- Cui, R., Gallino, S., Moreno, A., & Zhang, D. J. (2018). The operational value of social media information. *Production and Operations Management*, 27(10), 1749-1769.
- Feng, Q., & Shanthikumar, J. G. (2018). How research in production and operations management may evolve in the era of big data. *Production and Operations Management*, 27(9), 1670-1684.
- Gao, H., Zhao, H., Tan, Y., Lin, Y., & Wei, L. (2021). Social Promotion: A Creative Promotional Framework on Consumers' Social Network Value. *Production and Operations Management*, Forthcoming.
- Guha, S., & Kumar, S. (2018). Emergence of big data research in operations management, information systems, and healthcare: Past contributions and future roadmap. *Production and Operations Management*, 27(9), 1724-1735.
- Hu, Y., Xu, A., Hong, Y., Gal, D., Sinha, V., & Akkiraju, R. (2019). Generating business intelligence through social media analytics: Measuring brand personality with consumer, employee-, and firm-generated content. *Journal of Management Information Systems*, *36*(3), 893-930.
- Huang, N., Yan, Z., & Yin, H. (2021). Effects of Online-Offline Service Integration on e-Healthcare Providers: A Quasi-Natural Experiment, *Production and Operations Management*, forthcoming.

- Khurana, S., Qiu, L., & Kumar, S. (2019). When a doctor knows, it shows: An empirical analysis of doctors' responses in a Q&A forum of an online healthcare portal. *Information Systems Research*, 30(3), 872-891.
- Kumar, N., Qiu, L., & Kumar, S. (2018). Exit, voice, and response on digital platforms: An empirical investigation of online management response strategies. *Information Systems Research*, 29(4), 849-870.
- Lee, S. Y., Qiu, L., & Whinston, A. (2018). Sentiment manipulation in online platforms: An analysis of movie tweets. *Production and Operations Management*, 27(3), 393-416.
- MacMillan, D. & Torbati, Y. (2021). How the rich got richer: Reddit trading frenzy benefited Wall Street elite. *The Washington Post*, Last accessed on February 9, 2021, https://www.washingtonpost.com/business/2021/02/08/gamestop-wallstreet-wealth/.
- Mallipeddi, R., Kumar, S., Sriskandarajah, C., & Zhu, Y. (2021). A framework for analyzing influencer marketing in social networks: selection and scheduling of influencers. *Management Science*, Forthcoming.
- Perez, S. (2020). Walmart to pilot test livestreamed video shopping on TikTok. *TechCrunch*, Last accessed on February 9, 2021, https://techcrunch.com/2020/12/17/walmart-to-pilot-test-live-streamed-video-shopping-on-tiktok/.
- Qiu, L., & Whinston, A. B. (2017). Pricing strategies under behavioral observational learning in social networks. *Production and Operations Management*, 26(7), 1249-1267.
- Qiu, L., & Kumar, S. (2017). Understanding voluntary knowledge provision and content contribution through a social-media-based prediction market: A field experiment. *Information Systems Research*, 28(3), 529-546.
- Qiu, L., Cheng, H. K., & Pu, J. (2017). Hidden profiles in corporate prediction markets: the impact of public information precision and social interactions. *MIS Quarterly*, 41(4), 1249-1273.
- Qiu, L., Rui, H., & Whinston, A. (2019). Optimal Auction Design for Wi-Fi Procurement. *Information Systems Research*, 30(1), 1-14.
- Qiu, L., Vakharia, A., & Chhikara, A. (2021). Multi-Dimensional Observational Learning in Social Networks: Theory and Experimental Evidence. *Information Systems Research*, Forthcoming.