The Hong Kong University of Science and Technology

Department of Information Systems, Business Statistics and Operations Management

Seminar Announcement

How Do Product Recommendations Help Consumers Search Products?
Evidence of from a Field Experiment
By
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Date	:	**Tuesday, 30 August 2022**
Time	:	**2:30 pm - 4:00 pm (Hong Kong Time)**
Zoom Details	:	**Click here to join Zoom**
		Meeting ID: 958 4477 2626 (Passcode: 384273)

Abstract: Although conventional wisdom suggests that product recommendations should benefit consumers, there is a lack of evidence on how they help consumers, specifically, whether product recommendations can algorithmically identify products aligned to consumers' preferences and thus help them find higher-value products. We estimate the benefit of the collaborative filtering (CF) recommendation system by conducting a randomized field experiment on a US apparel retailer's website. We collect unique data on the affinity scores computed by a CF algorithm to estimate how product recommendations help consumers search for higher-value products that are lower-priced, fit their tastes better, or both. We show that the discovery of lower-priced and better-fit products are the underlying reasons for higher purchase probability (lower likelihood of failed search efforts) of consumers under recommendations. We further find a higher benefit of recommendations in product categories with higher price dispersion and heterogeneity in consumers' tastes, which provide additional evidence for these underlying reasons. Finally, we find that consumers substitute other search tools on the website with product recommendations when available. Our findings have implications for online retailers, policymakers, regulators, and the design of recommendation systems.

Bio: Dr. Xitong Li is an Associate Professor of Information Systems at HEC Paris, France. His primary research interests are in the economics of information technologies, including social media, crowdfunding, digital marketing, online education, algorithms and AI. His primary research methods include applied econometric analysis, field and laboratory experiments. Xitong's research appears in leading international journals, such as Information Systems Research, Management Information Systems Quarterly, Journal of Management Information Systems, and various ACM/IEEE Transactions. Xitong's research has been granted by ANR AAPG France (solo PI), equivalent to National Science Foundation (NSF) in the U.S., 124 k€, for 2018-2023, and Hi! PARIS Research Fellowship, 180 k€, for 2021-2025. Xitong currently serves as an Associate Editor for Information Systems Research, and has reviewed over a hundred of submissions in total for Management Science, ISR, MISQ and JMIS. He was given Reviewer of the Year by MISQ (2021) and Management Science Distinguished Service Award 2019. Xitong won the Best Paper Award at the Hawaii International Conference on System Sciences (HICSS) in 2013. Xitong served as a Program Co-chair of the 42th International Conference on Information Systems (ICIS) 2021, and a co-chair of Symposium on Statistical Challenges in Electronic Commerce Research (SCECR) 2019. He received a Ph.D. in management from MIT Sloan School and a Ph.D. in engineering from Tsinghua University.