Management Department Sustainability Committee Virtual Seminar

Bryan Bollinger New York University

"Visibility and Peer Influence in Durable Good Adoption"

> Friday, April 23, 2021 10:00 am – 11:15 am

https://purdue-edu.zoom.us/j/95537828324?pwd=TTZqUzBBZkVJQUIWSmNPcmllc2dnUT09



Professor Bollinger's research portfolio aims to understand the causal effects of marketing and policy decisions in sustainability domains, and the interdependent reactions by consumers and firms. Examples include drivers of solar adoption and pricing, the role of home-automation and dynamic pricing on demand response, and response to information. His research has been supported by grants from the Department of Energy, National Science Foundation, Environmental Protection Agency, and others. Professor Bollinger received his BA and BE in engineering at Dartmouth College and his M.A. in Economics and Ph.D. in Marketing at Stanford University. His research has appeared in peer-reviewed journals in marketing, economics, and general science, and it has been highlighted in news outlets such as 'The Economist', 'NPR', 'The New York Times', and 'The Harvard Business Review'.

"Visibility and Peer Influence in Durable Good Adoption"

Abstract

The underlying channels through which peer influence operates in durable good adoption can affect the ability of marketers to leverage them. In this paper, we assess whether the visibility of peers' adoption decisions leads to greater peer influence. The context we study is residential rooftop solar panels. We exploit the plausibly exogenous location and orientation of peers' rooftop solar panels relative to proximate roadways and visual obstructions, such as vegetation, in order to determine whether geographically proximate peer installations increase a household's probability of solar adoption more if they are visible from the road. We find that the total angle of visibility of peer installations on the same street positively affects solar adoption decisions at distances of at least 500 meters. In contrast, we only find a positive effect of non-visible solar arrays within 100m, which may be due to causal peer influence via other channels such as word-of-mouth, or very localized unobservable effects. The effect of peer visibility is moderated by the economic value the peers receive from installing solar, providing suggestive evidence of social learning through visual information.