Name: Shan Huang
Email: shanh@mit.edu

1. Coursework

I am currently a fifth year PhD student in the IT Group at MIT Sloan. My major focus of the study is economics of information technologies. My minor is in econometrics. My coursework is mainly on economics, econometrics, computer science, experimental designs, and IT and economics/management.

Economics
Microeconomic Theory (Harvard)
Game Theory (MIT)
Information Economics (MIT)
Industrial Organization (MIT & Harvard)

Econometrics
Statistical Methods in Economics (MIT)
Econometrics (MIT)
Advanced Topics in Applied Econometrics (MIT)

Computer Science
Statistical Learning and Data Mining (MIT)
CS Programming in Python (MIT)

Experimental Designs
Behavioral methods for business (UBC)
Experimental Designs and Analysis (UBC)
Individuals, groups and organizations (MIT)

IT and Economics/Management
Seminar in Information Technology (Social Networks) (MIT)
Economics of Information Technology (MIT)
Social Perspectives on Information Technology(MIT)
Topics in Information Systems Management (UBC)

2. Research

My research is focused on social influence, network marketing, and motivations to generate and diffuse information in social networks. I am fascinated by designing and analyzing field experiments in massive social networks to understand social behaviors and generate business insights. My dissertation is on social influence in social ads.

Essay One: Social Influence in Public and Private Behaviors: Evidence from Social Ads

I propose that motive and degree of peer influence are likely to differ between public and private

behaviors. To compare peer influence between public and private behaviors quantitatively, I designed and analyzed a large-scale field experiment involving more than 37 million users on WeChat Moments ads. In the experiment, I randomized the number of social cues (i.e. peers' endorsements of ads) and identified the effects of them on consumers' public (i.e. liking) and private (i.e. clicking and following) responses to ads. The results show that public responses were associated with significantly more positive effects of social cues than private responses, while both of them were susceptible to a significant peer influence. Tie strength generally facilitated more on public responses than on private responses. Relative to homophily, influence explains more of the temporal clustering of public behaviors than private behaviors. This is among the first papers comparing peer influence in different behavioral settings.

Essay Two: Social Influence by Product Types: Evidence from Social Ads

It is well believed that social influence drives product adoptions and sales. Network marketing is becoming increasingly more important in practice. However, social influence may be working very differently for different products. To identify the heterogeneous effects of social influence across products, I analyzed and designed a large-scale field experiment with randomizations at (ad, user) level. More than 37 million users of WeChat Moments ads participated in the experiment, in which I randomized the number of social cues (i.e. peers' endorsements of ads) and identified the effects of them on users' clicking of the ads. Peer influence of 73 different products and 23 product categories was causally estimated. The peer influence was very heterogeneous across different products and product categories. Product uncertainties, social risks and intangibility of products all positively affected peer influence in social ads.

Essay Three: Viral Design for Viral Products: A Large-scale Networked Experiment

This is an ongoing research project. Specifically, I want to examine whether the viral design of social ads works more effective for viral products - the products with greater peer influence. A 2 (viral design or not) * 2 (viral product or not) experiment will be conducted. This paper aims to apply the results from essay one and essay two into a real network-marketing design for social ads and test its effectiveness in a field experiment.

Committee Members:

Erik Brynjolfsson (MIT)

Sinan Aral (MIT)

Jeffrey (Yu) Hu (Georgia Tech)