Credit Scoring with Social Network Data

Monday, October 12
MSB Conference Room (CBA 6.420)
10:00 – 11:30 AM

Abstract

Motivated by the growing practice of using social network data in credit scoring, this study analyzes the impact of using network based measures on customer score accuracy and on tie formation among customers. We develop a series of models to compare the accuracy of customer scores obtained with and without network data. We also investigate how the accuracy of social network based scores changes when individuals can strategically construct their social networks to attain higher credit scores. We find that, if individuals are motivated to improve their scores, they may form fewer ties and focus them on more similar partners. The impact of such endogenous tie formation on the accuracy of consumer credit scores is ambiguous. Scores can become more accurate as a result of modifications in social networks, but this accuracy improvement may come with greater network fragmentation. The threat of social exclusion in such endogenously formed networks provides incentives to low type members to exert effort that improves everyone's creditworthiness. We discuss implications for both managers and public policy.

Biography

Chrysanthos (Chris) Dellarocas is Professor of Information Systems and Everett W. Lord distinguished faculty scholar at Boston University’s Questrom School of Business. He is one of the world’s most cited scholars in the fields of online reputation and social media and has consulted on these subjects for corporations and the U.S. Federal Government. As Director of Boston University’s Digital Learning Initiative, Dellarocas leads a special projects team whose mission is to take advantage of the wealth of emerging opportunities for innovation in education and scholarship created by globalization and technological change.

Dellarocas holds Ph.D. and M.S. degrees in Computer Science from MIT. Prior to Boston University he taught at MIT’s Sloan School of Management and at the University of Maryland’s R. H. Smith School of Business. Before pursuing an academic career he was a management consultant with Andersen Consulting (now Accenture) and McKinsey. He serves on the editorial boards of Management Science and Information Systems Research, on the advisory board of the Word of Mouth Marketing Association (WOMMA), and has chaired a number of international workshops and conferences, including the ACM Conference on Electronic Commerce and the Workshop on Information Systems and Economics (WISE). Dellarocas is a recipient of numerous teaching, funding and merit awards, including the National Science Foundation’s CAREER, and awards from Google and Microsoft. He holds 9 patents and is co-founder and advisor of a number of companies in the technology space.