

NYU Stern School of Business
Department of Information, Operations & Management Sciences
OPERATIONS MANAGEMENT RESEARCH SEMINAR

TOPIC: Designing Dynamic Contests
SPEAKER: Kostas Bimpikis (Stanford)
DATE: Wednesday, April 22, 2015
TIME: 11:00 AM-12:00PM
PLACE: KMC 4-110

ABSTRACT

Innovation contests have emerged as a viable alternative to the standard research and development process. They are particularly suited for settings that feature a high degree of uncertainty regarding the actual feasibility of the end goal. Participants race towards completing an innovation project and learn about the underlying environment from their own efforts as well as from their competitors' gradual progress. Learning about the status of competition can alleviate some of the uncertainty inherent in the contest, but it can also adversely affect effort provision from the laggards as they become discouraged about their likelihood of winning. Thus, the contest's information disclosure policy is critical for its success. This paper explores the problem of designing the award structure of a contest as well as its information disclosure policy in a dynamic framework, and provides a number of guidelines with the objective of maximizing the designer's expected payoff. In particular, we show that intermediate awards, apart from directly affecting the participants' incentives to exert costly effort, may also be used as a way for the designer to appropriately disseminate information about the status of competition. Interestingly, our proposed design matches many features observed in real-world innovation contests.

BIO

Kostas Bimpikis is an Assistant Professor of Operations, Information and Technology at Stanford University's Graduate School of Business. Prior to joining Stanford, he spent a year as a postdoctoral research fellow at the Microsoft Research New England Lab. Professor Bimpikis has received a PhD in Operations Research from the Massachusetts Institute of Technology, an MS in Computer Science from the University of California, San Diego and a BS degree in Electrical and Computer Engineering from the National Technical University of Athens, Greece. Professor Bimpikis' research agenda lies in the interface of operations, economics and information technology. Much of his current research is focused on studying the economics of complex social networks and identifying the implications for individuals and businesses. Moreover, he is interested in issues arising in the operations of online markets.