NYU Stern School of Business
Department of Information, Operations & Management Sciences
INFORMATION SYSTEMS RESEARCH SEMINAR

TOPIC: Target the ego or target the group: Evidence from a randomized experiment in pro-active churn management
SPEAKER: Pedro Ferreira (Carnegie Mellon University)
DATE: Thursday, December 3rd, 2015
TIME: 12:30-1:45PM *Lunch will be served at 12:15PM.
PLACE: KMC 3-130

ABSTRACT

This paper analyzes results from a randomized field experiment run at a major telecommunications provider aimed at measuring the effect of pro-active churn management among triple-play households. We used state of the art machine learning algorithms to develop a model to identify likely churners. A random subset of them were selected to be contacted by the call center. In addition, we also used millions of call detailed records to randomly selected connected households to be contacted. We find that proactively listing likely churners to contact reduced their propensity to churn by 2.4% from a baseline of 17.0%. When connected households were also listed for contact the likelihood of churn reduced an additional 1.0%. We find that despite false positives the NPV of likely churners increased 3.3% with pro-active churn management. This statistic becomes 6.3% when connected households were also considered for churn management purposes. This increase in NPV is associated to the increase in the survival of treated households despite the reduction in their monthly bill offered by the firm to retain them. Our results show that managers should consider pro-active churn management and using social network data to improve its effectiveness.

BIO

Pedro Ferreira is an Assistant Professor at the Heinz College and at the Department of Engineering and Public Policy at Carnegie Mellon University. His research work focuses on how people use technology and influence others to do so. These are inextricably linked to how firms behave and how public policies affect market structures. Pedro's work focuses on the application of robust empirical identification methods to the analysis of large datasets obtained from organic in-vivo large-scale network-centric randomized experiments. Most of his research spans two interrelated applied areas: the impact of information and communication technologies on education and peer-influence and consumption in the media industry. His work has been featured in top academic journals, such as Management Science and Management of Information Systems Quarterly, and in top international conferences such as the ACM Annual Conference on e-Commerce and the IEEE Annual Conference on Social Computing.