

The Hong Kong University of Science and Technology
Department of Information Systems,
Business Statistics and Operations Management

Seminar Announcement

*Improving Target Marketing via Overlapping
Customer Segmentation*

by

*Mr Rong Zheng
Stern School of Business
New York University*

Date: 3 February 2009 (Tuesday)

Time: 11:00 am – 12:30 pm

Venue: Room 4379, ISOM Conference Room (L17/18)

~~~~~ All interested are welcome ~~~~~

Abstract

In this paper, we study how to partition the customer base into various overlapping segments and build predictive models on these segments to optimize the overall predictive performance across all the segments. We show that the optimal segmentation of the customer base is NP-hard and propose three suboptimal tractable overlapping segmentation methods. We empirically compare them with the previously proposed non-overlapping segmentation methods and show that they significantly dominate these methods across most of the experimental settings. We also empirically compare the three methods among themselves and show that one of them (Sequential updating) outperforms the others. Thus, the paper demonstrates the power of the overlapping segmentation.

Biography

Rong Zheng is expected to obtain his Ph.D. in Information System in Spring, 2009 at the Stern School of Business at the New York University. He earns bachelor and master degrees in Computer Science from Northeastern University in China. His research interests include data mining and text mining in business intelligence. In particular, he studies prediction-based customer segmentation, query languages for recommender system, social networks and writing style features in text mining applications.