

# Department of Marketing



Research Seminars Series | December 12th, 1-3 pm | AD 0.090

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### Managing Churn to Maximize Profits

**Abstract:** Customer defection threatens many industries, prompting companies to deploy targeted, proactive customer retention programs and offers. A conventional approach has been to target customers either based on their predicted churn probability, or their responsiveness to a retention offer. However, both approaches ignore that some customers contribute more to the profitability of retention campaigns than others. This study addresses this problem by defining a profit-based loss function to predict, for each customer, the financial impact of a retention intervention. This profit-based loss function aligns the objective of the estimation algorithm with the managerial goal of maximizing the campaign profit. It ensures (1) that customers are ranked based on the incremental impact of the intervention on churn and post-campaign cash flows, after accounting for the cost of the intervention and (2) that the model minimizes the cost of prediction errors by penalizing customers based on their expected profit lift. Two field experiments affirm that our approach leads to significantly more profitable campaigns than competing models.