

Multiple-Goal Scores

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Abstract:

A problem with response scores is that they are very negatively correlated with risk scores. So a prospect with a high response score (this is good), typically has a low risk score (this is bad). As a consequence, organizations often resort to matrix strategies for marketing targeting that involve response and risk scores. While development of matrix strategies allows to trade off competing objectives, I will discuss possible challenges with this approach. I'll present a new solution for this problem, which trades off multiple goals at the time of scorecard development. For example, a multiple-goal score for "risk-adjusted response" gives up a little discriminative power along the response dimension, but it achieves a lot less negative correlation with a risk score. This score targets still responsive, yet less risky prospects. The idea generalizes to other business objectives that stand in trade-off relationships.

This presentation will outline a constrained optimization formulation for multiple-goal score development. We will discuss a life test result of this technique for a mortgage marketing problem, where we developed a revenue-adjusted response score to address particular business needs. Not only did the approach outperform an existing champion matrix strategy in terms of the client's stated objectives, but the resulting mailing strategy proved also very easy to implement.