

The End Game of Predictive Modeling for Direct Response Marketing

Incremental Behavior Model

Joshua A. Smith, NeoFusion®

Abstract

The ability to identify individuals that drive incremental sales in direct response marketing promotion is the “holy grail” for Database Marketers. This document outlines the methodology and steps necessary to build and implement a series of predictive models that are specifically designed to accurately target those **individuals** that will produce **Incremental Sales** above a statistically relevant control group.

- A desire to drive incremental sales and traffic within their organizations using optimized, highly targeted marketing campaigns resulting in a superior ROI for Direct Response programs

For this sophisticated database marketer, the ultimate question is who should I promote? Who is going to give me more lift? How do I know that the promoted customer is responding *because* of the promotion and wasn't just planning to shop regardless of the stimulus?

The Problem

Common Traits of the Successful Database Marketer

- A prerequisite & sophisticated knowledge of historical customer data
- An intrinsic ability to utilize statistical algorithms and models to predict customer and/or prospect probability to respond, spend, churn, etc.
- A comprehensive understanding of multi-channel, multi-offer, multi-segment campaign strategies and their effects on an overall marketing strategy when measured across multiple campaigns in an organization
- An acceptable understanding of the consequence of relevant Exogenous Factors within a marketing strategy, for example; point in time, business cycle, seasonal consideration, economic condition, or governmental regulation
- Possession of the right tools to build and evaluate models

The end game of Direct Response Marketing is to be able to identify those individual customers, pre-campaign, that will not shop without the stimulus of the campaign when compared to a control group.

For those Database Marketers that have a solid/robust equation for calculating Incremental Sales against a control group you may be thinking; “Correlation does not mean causation”

Meaning, calculating incremental sales for a campaign or segment is not the same as knowing whether an individual responded only because of the stimulus.

As database marketers know, nearly all of their efforts to drive sales and traffic are not based on the understanding of causation. However, they are still successful because of the cost associated with deploying their campaigns usually have a consistent or controllable margin. In other words, they do not need to be correct 100% of the time, hardly. Often, Database Marketers are extremely

pleased to run a profitable program on 5-10% response rates (depending on channel, cost, etc.).

The methodology to follow is aimed at increasing a Database Marketer’s understanding of the “correlation” for those individuals that demonstrate the behavior that would lead us to believe they responded only because of the stimulus.

Methodology

Random Test (Pre-Campaign)

It begins, ideally, with an organization’s willingness to randomly test a representative sample of customers of interest in a typical campaign. Perhaps the most significant benefit from this activity is understanding and identifying those customers demonstrating incremental sales within a campaign that had no extraneous segmentation or targeting efforts. This provides a platform to simply study how the organizations’ customers react to stimulus compared to a statistically relevant control group.

This campaign must contain 2 essential components.

1. A segmentation scheme robust enough to accurately categorize your customer whilst not diluting the statistical significance of either the test and control groups/segments
2. A Predictive Response Model whose dependent variable is aimed at predicting those customers who are likely to respond to the campaign

Part 1 – Identifying the Incremental Spend Population

NeoFusion® pragmatic approach allows us to logically reason through which customers have

spent incrementally compared to their controlled counterpart. The quality of the segmentation created in the Random Test reveals its’ purpose in this step. It is the basis for the equation that is used to identify those customers that spent incrementally compared to their controlled counterparts. The result of this activity is a simple binary classification; 1=incremental spenders, 0=everybody else.

Part 2 – Identifying the Incremental Traffic Population

NeoFusion® approach now utilizes the predictive response model that was built for the random test. Essentially, in a Venn Diagram like approach the dynamic interaction between the following elements (shown in Figure 1) identifies those that are likely to have shopped only because they received the stimulus.

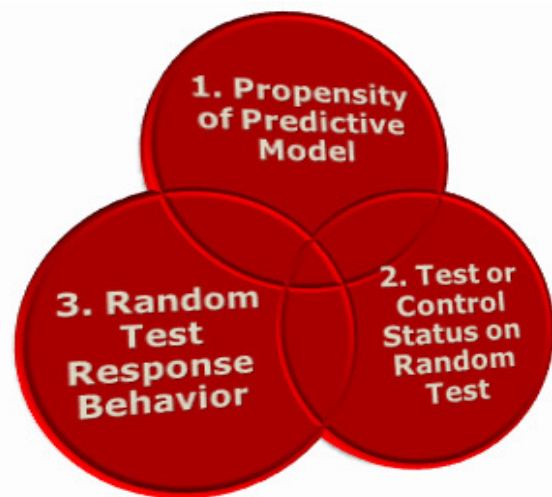


Figure 1

It should be noted that the quantity of customers positively identified from this activity is usually much smaller than those customers positively identified from Part 1. This is typical and also fortunate because between the two methods Part 2 is more commonly associated with a higher difficulty of identification or larger margin of error.

The result of this activity is a simple binary classification; 1=incremental traffickers, 0=everybody else.

Solution – Targeted Population

The result of Part 1 and Part 2 is a population of customers that have been identified as responders that have demonstrated Incremental Behavior during a campaign.

Part 3 - Incremental Behavior Model

Industry standards for predictive modeling are then used to build the Incremental Behavior Model that can then be scored for future campaigns to deliver higher incremental sales. This methodology is capable of being tweaked and tune to deliver a variety of results. Additionally, the business is able to tune the model to deliver a different percentage of Incremental Sales vs. Traffic (or trips). This often culminates in a simple to use matrix that resembles a dashboard so a Database Marketer can remotely control the composition of the model.

Conclusion

The world of Direct Response Marketing is a complex environment that can challenge even the most sophisticated organizations. Certainly, few have mastered its full potential. The content discussed in this paper is aimed at those Database Marketers that have a sophisticated understanding of their trade and are looking to take Direct Response Campaign results to the next level, perhaps even the final level.

The NeoFusion® approach to building and deploying an Incremental Behavior model is pragmatic, logical, and utilizes industry leading statistical algorithms & tools to deliver unprecedented results.

Your comments and questions are valued and encouraged. Contact the author at:

Joshua A. Smith
Principal Consultant
21 4th AVE N #104
Minneapolis, MN 55401
Mobile: (612) 353.7377
jsmith@neofusioncorp.com



Copyright © 2008, NeoFusion, LLC. All rights reserved.