## DATA STUDY SERIES



# **Predict Marketing Campaign Responses and ROI**

From Consumer Data Using Data Science

#### CHALLENGE QUESTION

What can we learn about existing customers that will help us predict how they respond to a call-to-action?

#### **SOLUTION & PROCESS**

The answer to this question lies within identifying patterns, trends and insights in your consumer data.

We began by analyzing a year's worth of direct mail campaigns, including both responders and non-responders.

Using various statistical methods, we determined that 80+ variables out of the over 500 we analyzed had predictive power around who would and would not respond to the marketing campaigns. We then trained several supervised machine learning methods against a randomly selected subset of the data to generate models.

After testing each of the models against the remainder of our data, we determined the performance of each model and choose the best one.

We used the most ideal model to score all of our potential prospects and apply our learnings to future marketing campaigns.

Scored prospects were segmented into deciles. We learned the consumers that scored in the bottom two deciles had the lowest probability of responding to the single product direct mail campaign.

RGI's data science process allows companies to make more precise decisions based on facts, insights and trends—rather than bias or speculation.

Utilizing a blend of various tools, algorithms, and machine learning principles RGI can help predict various consumer behaviors with the customer decision journey—beyond one product. RGI refers to this as end-to-end data science.

### **DATA-DRIVEN RESULTS**

This data science study took two weeks to perform. The money savings listed below is derived from a year's worth of data, but the client will save money annually.

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