Innovation in Marketing Analytics and Data

White Paper
2015

Response Modeling 101

The incredible growth in "consumerism" in America, which began in earnest just after World War II and the Great Depression, shows no sign of permanently slowing down. Aside from the occasional recession (and an overall dip in the 1970's), consumerism and Americans' desire for goods and services has led to an untold number of opportunities for businesses to sell their wares to the general public. That rise in consumerism has also spread to most areas in the world, making it a truly global phenomenon. The question, in past years was, "How can a business put information about its product in front of the most sets of eyes?" Today, however, the question is, "How can a business put information about its product in front of the right sets of eyes?"

The Marketing Process

Businesses have always had the challenge of getting information to the public at large. In previous decades, opening a neighborhood business involved setting up a storefront and opening the doors. If a competitor was a few doors down, some printed flyers, "specials", or sales were the order of the day. Consumers responded (if the product or service was deemed worthwhile) and the business found success. Once a business expanded outside of the neighborhood, however, reaching the public became more problematic.

This is where advertising came in. Publishing an ad in the local newspaper, erecting a billboard, creating a radio "jingle", etc. became the norm. As these methods proved successful at increasing consumer response, more competitors joined in, watering down the message and making it once again harder to attract the attention of a busy and distracted consumer market. Direct Mail became the new standard.

By sending a message directly to the consumer, businesses found that their ability to attract new customers and retain existing ones greatly increased. Over time, more "personalized" mail to existing customers went out, cementing the connection between company and customer. Consumers liked the personal connection and responded favorably. As always, when something works, everyone catches on. Before long, consumers were receiving hundreds of pieces of direct mail each year, much of it generic and of relatively poor quality. Worse, consumers realized that they were getting the same mail as everyone else on their street (or in their town). This "junk mail", as it came to be derisively called, was immediately thrown away by most people, and response rates plummeted.

Discuss an AnalyticsIQ Data validation for your business!
Anne Smith | 📞 (678) 773-8798 | ✉ annes@analytics-iq.com

AnalyticsIQ
Innovation in Marketing Analytics and Data

🌐 www.Analytics-IQ.com

The Advent of Response Scoring

As response rates dropped and costs of direct mail increased, businesses questioned the viability of mailing a letter to every household in their area (especially if "their area" was the entire United States). For years, some companies were able to use demographic data and mail lists to focus in on their customer base. For example, a company that worked with senior citizens could narrow their mailings to homes with older residents. Gardening companies could send mail to subscribers to gardening magazines. Although these strategies helped, it still missed a large percentage of the population that defied direct description.

Eventually, marketers looked to the credit industry for help. For years, creditors had been developing statistical models that could predict which applicants for credit would pay back a new loan vs. which would become delinquent and charge-off. Marketers felt that they should be able to see similar results if this methodology was used in their business.
Below is a simple example of a credit scorecard: Open rates are assessed across each segment;

The "champion" for each segment is the winner.

Variable	Range	Points
Constant		500
Years on the job	0 to 1 year	-50
	02 to 3 years	0
	4 to 7 years	35
	8 years or more	75
# of charged-off loans	None	0
	1 to 2 years	-60
	3 to 4 years	-100
	5 years or more	-280
# of loans paid on time	0 to 2 years	0
	3 to 8 years	25
	9 to 14 years	75
	15 years or more	120

Discuss an AnalyticsIQ Data validation for your business!
Anne Smith | 📞 (678) 773-8798 | ✉ annes@analytics-iq.com
🌐 www.Analytics-IQ.com

AnalyticsIQ
Innovation in Marketing Analytics and Data

There are only three variables (plus the constant that all applicants get) in the scorecard. An applicant who has been on the job for 8 or more years, has no charged-off loans over time, and has 15 or more loans/credit cards that he pays on time each month will get the maximum number of points, 695. The lowest possible score in this example is 170. The higher the score, the greater the likelihood that the applicant would pay back his loan as agreed. Creditors would look at the score for each applicant and make a decision as to whether or not to approve the loan.

By creating a model as above, but for response rather than repayment, a business could conceivably send out a fraction of the mail it was currently, but maintain the same response rates and number of new customers. Unlike the credit industry, marketers do not have access to an individual's credit history. However, there are several valuable tools available. Demographic data (including census information, mailing lists, publication subscriptions, survey cards, and questionnaires) can be very powerful. Credit data at the zip+4 level has proven very useful is identifying areas of high response rates.

In the credit arena, most creditors are looking for the same group of people (i.e.- applicants who will pay back their loans). In marketing, however, each business is looking for a slightly different group. A company that sells tractors is trying to identify a much different group of consumers than a hair-care business. The statistical models that these two firms employ will look vastly different, yet each will be based on the same idea–identifying those in the general public most likely to respond to their product.

By utilizing the score, a business will identify a certain percentage to which they will mail. For example, let's say that a business has traditionally found that 1% of the mailed population responds to their offers. Let's also assume that that number has been decreasing over the years. The scorecard should be able to separate the most likely from the least likely to respond. Based on this, the firm may feel that by mailing to the highest scoring 20% of the population (who have a projected response rate of 2+%), they will attract enough new customers to pay for the model and make a very nice profit. By ignoring the low scoring 80% (with a projected response rate of well under 1%), they save mailing and printing costs for a huge number of consumers who are not interested in their product.

Discuss an AnalyticsIQ Data validation for your business!
Anne Smith | 📞 (678) 773-8798 | ✉ annes@analytics-iq.com

AnalyticsIQ
Innovation in Marketing Analytics and Data

🌐 www.Analytics-IQ.com

Advantages to Response Modeling

The advantages of a correctly developed response model are enormous. By zeroing in on just those consumers most likely to respond to a product offer, the marketer is able to specifically craft the mailing to each consumer. This harkens back to the days when consumers felt a bond with the company that advertised to them. By carefully segmenting their population, there is less risk of a denture adhesive company sending mail to an apartment complex on a college campus, for example. The "creatives" that a marketing firm uses can be much more specific than ever before. One of the amazing outcomes of specific targeting is that many surveys have been done so that marketers know what colors, fonts, print sizes, and clip art are most preferred in a mailing by hundreds of different consumer sub-groups. Once a company decides on a cut-off strategy, the marketers can design the mailing most likely to catch that desired groups' eye and lead to higher response rates.

This targeting is a huge cost savings for the businesses involved, as they can cut their printing and mailing costs, yet still see a high number of new customers. The time involved in direct mail is also decreased substantially. Another advantage is the ability to fine-tune the marketing message with each succeeding mail campaign. Once a campaign is finished and the results are in, the company can adjust the creatives, the message, or the mailed population to continue to identify the most likely responders.

Disadvantages to Response Modeling

Response modeling, like any kind of statistical modeling, is at the mercy of the "garbage in, garbage out" axiom. Any model is only as good as the data used to build it. If the data is wrong, if the definition of a responder is incorrect ("Who cares if they respond to an offer but still don't purchase the product?"), if the model used is outdated, or if the creatives are bland and uninspiring, response rates will be disappointing. Response models are much more dynamic than credit risk models.

Discuss an AnalyticsIQ Data validation for your business!
Anne Smith | ☎ (678) 773-8798 | ✉ annes@analytics-iq.com

AnalyticsIQ
Innovation in Marketing Analytics and Data

🌐 www.Analytics-IQ.com

In credit risk, whether a person pays their obligations is fairly stable over time, except in cases of job loss or illness. People who have never been delinquent on a loan are likely to continue paying their bills on-time. However, whether a person responds to a mailing is dependent on a vast number of things, very few of which can be captured in a model. Slight shifts in the demographics of an area can greatly affect response rates. Over-use of a previously popular company mascot or catch-phrase can turn off potential customers. For these reasons, marketing models are re-built on a much more frequent basis than their credit risk counterparts.

Response models require the input from a wide variety of people within a business. The statistician, the marketing manager, the financial group, the mail shop, and the artists in charge of the creative aspects are all required to create a successful campaign. This also assumes that the product in question is actually worthwhile for customers in the first place! With this many people involved, bad decisions or compromises can be made, leading to failure before the first mailing is even printed. The coordination of people and production in a response mailing can be huge.

Conclusion

Response modeling will continue to grow as more companies seek out ways to better reach their desired customers. As before, when something works, everybody joins in. This creates a need for better modeling, better targeting, new ideas, new creatives, new technologies, and new products to fulfill the desires of the growing worldwide consumer base.

Gregg Weldon is the Chief Analytical Officer of AnalyticsIQ, Inc.

AnalyticsIQ
Innovation in Marketing Analytics and Data

Discuss an AnalyticsIQ Data validation for your business!
Anne Smith | 📞 (678) 773-8798 | ✉ annes@analytics-iq.com
🌐 www.Analytics-IQ.com

What Makes AIQ Data so Powerful?

High Accuracy

Our data continually outperforms other leading providers

Superior Coverage

Available at individual, household and Zip+4 levels, our match rates exceed 90%.

High Precision

Our data is provided in absolute values instead of broad ranges

Unique Attributes

Much of our data is not available through other data providers.

About AnalyticsIQ

AnalyticsIQ is a consumer marketing analytics company founded in 2007, with a focus on building the best-engineered, most reliable data products to drive better analytical and marketing performance for our clients. Using a combination of analytical expertise, sophisticated modeling techniques and thousands of data elements, AnalyticsIQ has built a highly predictive suite of data products specifically designed to improve analytics and deliver results.

AnalyticsIQ
Innovation in Marketing Analytics and Data

Discuss an AnalyticsIQ Data validation for your business!
Anne Smith | ☎ (678) 773-8798 | ✉ annes@analytics-iq.com
🌐 www.Analytics-IQ.com