

Data-driven Marketing Today

What's New, and What's Working

By Ruth P. Stevens

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Data-driven marketing is exploding today. With access to vast new data sources, new tools like artificial intelligence, and the insatiable demand for data to support digital marketing communications, data has become an essential resource for modern marketers. In fact, you might argue that every marketer today needs to become something of a data scientist.

This paper reviews the new developments in data-driven marketing to consumers, to get you up to speed with what's new and what's working. Let's look at each topic in turn. Some are tools. Some are applications. All are worth knowing about.

Prospecting

Finding new customers is a perennial objective for marketers. Traditionally, mass marketers tried to target audiences based on demographic factors like age, income, gender and geography. But direct marketers long ago found a more effective method, namely looking at past buying behavior. In the 1990s the mail order catalog industry, recognizing the predictive power of past buying behavior, developed cooperative databases and shared customer transaction data among themselves.

These days, transactional data is no longer the exclusive province of insiders. Consumer buying history, by product category, is accessible to all through commercial databases like Marketing Genetics from Infogroup. It's been proven again and again that behavioral data is far more effectively predictive of future buying behavior than is demographic data. Today, marketers can now access behavioral data on millions of consumers to improve their prospecting through countless channels such as email, direct mail, telephone, display advertising and social media.

Predictive Analytics

Predictive analytics deploys a variety of tools—data mining, modeling, machine learning and artificial intelligence—to assess past behavior patterns and predict future events. As a category, it's booming. [Gartner predicts](#) that by 2020, predictive analytics will absorb 40% of enterprise spending on business intelligence.

Predictive modeling, a longtime mainstay of data-driven marketing, is usually structured as follows: A large set of customers is divided in two. For one half, a regression model is developed to identify the characteristics of the population that took a particular action such as clicked, downloaded, subscribed, bought, returned, or defected. The other half is used to validate the model: Did customers in the other half, with the same characteristics, also show a higher propensity than average to take that action? If so, the model is sound.

For decades, predictive modeling has helped marketers select the most likely targets for campaigns. With new advances in statistics and new sources of data, marketers are applying machine learning and artificial intelligence to enhance their modeling capabilities. Even "unstructured" data, like text from call center notes and social media posts, can be added into the mix for additional predictive power.

Machine learning is arguably the most exciting new development in predictive analytics. In machine learning, the desired outcome, like the click or the purchase, becomes the focus. The computer is asked to identify all the actions or characteristics in the past that led up to that action. With that information, your predictive model can be more accurate, and also be set up to improve automatically over time.

The next frontier of predictive analytics is AI, or artificial intelligence. Infogroup's Marketing Genetics team, for

example, is working to help a publisher increase its webpage engagement levels by the most relevant articles to serve. The artificial intelligence engine observes the consumer's reading behavior on the site, identifies interests, and suggests additional articles to read. According to Heather Winnicki, VP of product management, the goal is a two-fold increase in time spent on the site, as well as creating cross sell opportunities to other vertical interest areas. "What is exciting about this project," says Winnicki, "is using AI analytics from real time readership and the integration of offline behavioral data points to feed into the AI suggested articles. By combining classic predictive analytics techniques with offline behavioral data, real time AI is now converting readers to paid buyers, maintaining stories of interest and generating more opportunities for advertisers to sell affinity products and services by pairing online with offline interests." The AI models are already delivering a 70% attention rate for click through to articles of interest.

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Lookalike Modeling

One of the most widely used modeling strategies, lookalike modeling applies linear regression to analyze customer records and identify the characteristics that shape the customer's behavior. Then, marketers can go out to the larger population and find similar customers—lookalikes—who share those same characteristics. This technique works well in prospecting, where the characteristics of your best customers can help identify top potential prospects; and those of your weakest customers can be used to suppress marketing investments in less productive areas.

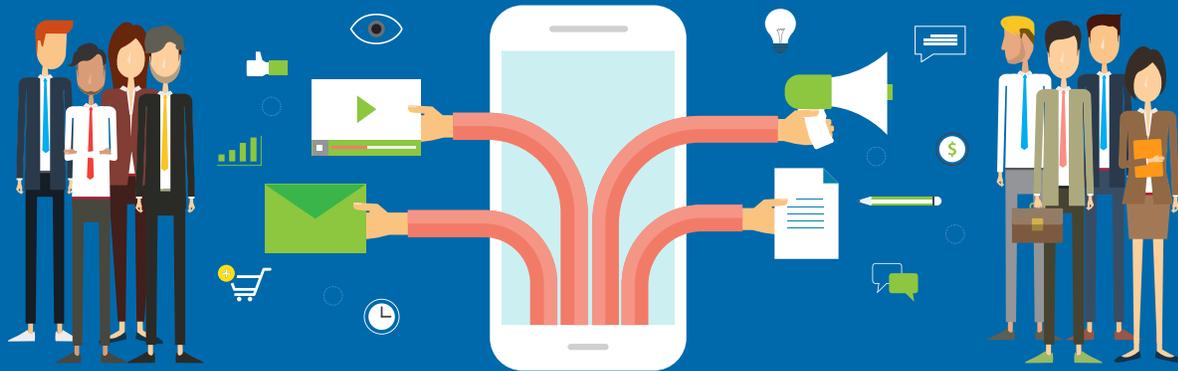
As an example, a not-for-profit asked the Marketing Genetics team to model their higher dollar donors, in this case meaning above \$10. The entire Marketing Genetics database was then scored for similarity to these top donors and divided into 20 groups, ranked from highest to lowest. The marketer was then able to campaign to the top groups with considerable improvement in response rates.

Cross Sell and Upsell

A classic application of data-driven marketing is finding ways to sell more products and higher margin products to existing customers. One standard approach is looking at past purchases to identify the "next best product" or upsell behaviors, and then offer current customers the products their lookalike counterparts bought in the past. This technique has worked well for decades.

But what's new is the ability to broaden the power of your model beyond just your current customers. Infogroup's Marketing Genetics database can add more useful data elements to the mix to improve the model's effectiveness. Their analytics group will also build the model for you.

Bob Anderson, Director of Analytics, explains how this works: "We take a client's donor or subscriber file and look at past responders to cross sell campaigns. Then, we add additional buying characteristics that the client itself didn't have. Finally, we model the responders and score the client's file to identify the most productive campaign targets for cross sell."



Customer Insight

Customer and prospect data can be a treasure trove of insight into customer needs, attitudes, and behaviors as part of your market research efforts. While many researchers conduct original, or primary, research via surveys, interviews and focus groups, they should also look at how their customer data—especially behavioral data—can provide rich insights and answers for market research questions.

Answers can be found to such questions as: What are my customers' demographics? What are their purchasing patterns and frequency? What are their key product and lifestyle interests? What purchase channels do they use? How do their buying habits compare to typical buying households? What are their current spending levels?

Publishers, for example, use MRI data (which is based on surveys) to help describe their readership to advertisers and for circulation management. But when publishers run their subscriber files through the Marketing Genetics database, they often come up with a different, and much more accurate view of their reader profile. Heather Winnicki, VP of Product Management at Infogroup, shares a story of a typical incident: "A publisher called with an understanding that his readers were in their 40s, mostly male, and at the 1% level in household income. Mgen data showed they were 10 years older, vastly more female, married with children, and with income around \$75k." Plus, Marketing Genetics was able provide plenty of lookalike names to the publisher for circulation marketing.

Data Append

All marketers have holes in their data—it's inevitable. But they can both fill in the gaps and enhance existing customer information by appending certain data elements purchased from third-party data vendors. Owners of large databases often make their information available for appending to your house file. You can overlay your file with such important data fields as gender, income, education, and—most importantly—buying behavior. Append is priced very reasonably, usually pennies per element, depending on the number of records input, matched, and appended.

Compared to collecting the data directly from customers and prospects, data append is a fast, inexpensive, and convenient way to enrich your database for purposes of research, analysis, modeling, and campaign selection.

Appended data can not only fill in gaps, but it can also provide additional insights and predictive information that will help you understand, select and target your customers and prospects effectively. For example, an insurance company could append lifecycle data to its customer file, giving them additional opportunities to offer insurance at particular times like graduation, buying a house, birth of a new baby or retirement. Or, a jewelry retailer could append purchase history like rings and watches, to identify fresh cross-selling opportunities.

Before you begin, you must decide on the fields you want to append. While appended data is cheaper than proactively collected data, there is still a cost associated with it. So only buy the data elements that will drive measurable value.

Segmentation

To create segments representing customers who are internally alike and externally different, a combination of behavioral and demographic data come into play.

An example of data-driven customer segmentation comes from Spirit Airlines. Spirit has millions of customers and prospects in their email database, according to Jessica Best, director of data-driven marketing at Spirit's Kansas City agency, Barkley. To help Spirit optimize the customer relationship through relevant email communications, Barkley's data science team identified five targetable segments in the database: Superfans, those who could become super fans (they're showing early signs), infrequent flyers who take advantage of the cheapest flights, infrequent flyers who pay extra for upgrades, and unhappy fliers or detractors.

In order to apply these segments to marketing, Barkley is working with Spirit to use a real-time algorithm to type their database. As new customers come on the scene, Barkley's algorithm would be able to match 95% of the records to this segmentation model, allowing Spirit to send relevant messages and offers to enhance customer value throughout the customer life cycle.

Profiling

Data is a game-changer for customer profiling, which traditionally was done through demographic segmentation and, frankly, a lot of guesswork. But today you can build a customer profile based on actual facts and, most important, actual behaviors.

The analytics team at Marketing Genetics provides a telling example. Recently, a home improvement company asked for help understanding how to move a prospect along a multi-step sales process. The steps involved generating an inquiry, following up with a phone call to set a sales appointment, and finally closing the sale. The team is developing a series of data-driven profiles that will indicate the most likely prospects to move from stage to stage.

Marketers apply customer profiles across the entire go-to-market process. Profile by segment to gain rich insight into customer needs and behaviors, and to develop product and service offerings that resonate. Use the insights gained to develop more precise and persuasive marketing communications. Apply the profile of an ideal customer to single out top prospects for extra attention and improve the efficiency of your marketing investments. The possibilities are endless.

Defection Prevention

Marketing activities to retain a customer produces the highest ROI among all marketing investments. As Frederick Reichheld has brilliantly [demonstrated](#), a 5-point decrease in defections can lift per-customer profit by 25% to 85%. Data and analytics provide an essential tool in the effort to



prevent defection, allowing you to identify with amazing accuracy a customer who is on the way out the door. Here again, a predictive model is built by analyzing the behavior and characteristics of past defectors, and then scoring current customers on their similarity. An ounce of preventive marketing—like a special offer, or a personalized message—to these at-risk customers can return a pound of profit.

Customer Winback

Despite your best prevention efforts, eventually a tragedy may happen: Your customer lapses. Marketers today know that quick action is important, to attempt to win them back. In the case of defection, a reactivation model can be your best friend.

An example comes from the Marketing Genetics team at Infogroup. For a health newsletter publisher, the analysts built an “expires” reactivation model. To do so, they looked at the expired subscribers who had responded positively to prior reactivation campaigns. These names were matched to the massive Marketing Genetics database (which has more than 140 million consumer records), adding more variables to each record to feed the model.

These enriched records were modeled, and the publisher quickly gained the additional insight that the most likely reactivation candidates were over 50, showed recent mail order buying activity, were book buyers and/or recent movers—information they could use for multiple purposes

including marketing messaging and product development. Then, the publisher’s recent expires were scored so the publisher could select the top groups and suppress the bottom groups to make their winback program far more efficient. The proof of the model’s success came with higher reorder rates.

Mobile Marketing

Mobile marketing is still in its infancy—well, maybe in preschool—but it’s being enthusiastically embraced by marketing communicators everywhere. Compared to other channels, mobile is especially data-intensive. Mobile generates valuable data elements not available elsewhere, like geo targeting and in-app behavior. When Facebook buys WhatsApp for \$19 billion, and Oracle buys Blue Kai primarily to improve their mobile marketing offering, it’s clear there’s plenty of value underneath.

Marketers have already learned that they have to optimize their websites, landing pages and email messages to the mobile device environment. That’s the first step. Then comes the data part. Eventually, marketers will want to connect their customers’ mobile behavior data to their behavior through other channels.

This is a challenge, but tools to make mobile data integration easier are emerging—slowly. In the meantime, workarounds are available, such as building your own app and persuading customers to opt in to SMS messaging.

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Social Media

Social media behavior is providing a world of fresh data with enormous marketing value. The data-driven applications seem endless. One of the basics is social “listening,” which involves analysis of text comments about products and brands. Then there’s data-driven advertising through social sites. Facebook has taken a strong lead, with lookalike modeling that Facebook’s own statisticians provide. Ads to highly targeted prospects can be delivered in several formats, the most popular being messages in the prospects’ news feeds and display ads along the edges.

But there are other exciting data-based techniques emerging these days. Some companies offer social media data append, by which you can add social handles and IDs

to your existing customer file, to communicate with them through new channels. Others offer to “reverse-append” consumer records to your existing Twitter and Facebook followers, allowing you to expand your marketing database. There’s no end in sight of the new opportunities to gain leverage from social media generated data.

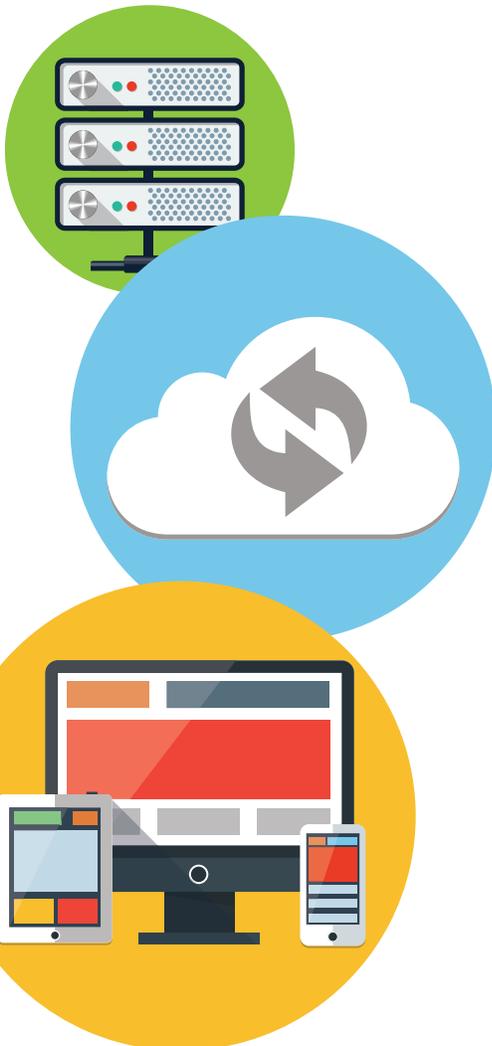
Targeted Display Advertising

As display advertisers shift from print to digital—this year to the tune of [\\$83 billion](#), says eMarketer—they have more opportunity to both target and track results, thanks to new data-based techniques. The targeting is done primarily by assigning a cookie to a web browser, and interpreting that browser’s behavior as the person behind it moves around the Internet. This otherwise anonymous person’s online behavior can also be enhanced with offline information about the individual through a process known as data onboarding.

Onboarded data allows marketers to target their display ads based on both online and offline behavior—like supermarket scanner data, or the marketer’s own CRM systems—as well as demographic characteristics. They can also build lookalike models for wider digital display advertising reach. Conveniently, onboarded data also lets you track multi-channel campaigns more effectively.

As digital advertising grows, data providers are continuing to upload fresh data about individual consumers, stripped of the personally identifiable information (PII), to enhance the value of the medium to marketers.

One of the most productive uses of data-driven digital advertising is retargeting, where consumers who have demonstrated some kind of product interest are delivered follow-up display ads to encourage them to convert to registration or purchase. Click-through and conversion rates are dramatically higher for retargeting than those from ordinary digital targeting.



Where is data-driven marketing headed?

More and better, is the likely scenario. Data sources will continue to expand, as companies find that their data “exhaust” can be put to good use in marketing applications. Marketers will continue to find ways to enhance their customer information and keep it clean.

Companies are also increasing their understanding of the value of customer and prospect data, investing more time and resources in assembling and managing the data, and finding data scientists to extract the most value from it. Very smart people are bringing new analytic and predictive tools to market daily.

But challenges will remain. One of them is developing a coherent “single view” of the customer. Jessica Best of Barkley offers an example from a bank whose customer data lives in twelve different places, ranging from the credit union, to in-person loans, online loans, 3rd party loan approval systems, social media listening and Net Promoter Score records. Barkley is now in discussions with the bank about ways they can help feed data from all relevant sources into a single data management platform. It won't be easy.

Despite the challenges, it's certainly encouraging that the era of big data, digital marketing, and artificial intelligence has ushered in a new appreciation among companies about the strategic value of customer information. The future is a bright one.

Looking for a database marketing partner? Consider Infogroup Data Solutions.

Infogroup has been helping clients benefit from the power of data-driven marketing for over 45 years. A full-service data solutions company, Infogroup is dedicated to the proposition that strategic use of customer and prospect information is the secret weapon in marketing today.

Infogroup's Marketing Genetics (Mgen) database contains over 140 million individuals, 75 million households, and a billion purchase transactions representing \$2 trillion in consumer spend. The data is enhanced by modeling capabilities to improve prospecting, renewal and reactivation efforts.

For a free consultation on how data-driven marketing can benefit your company, please contact Heather Winnicki-Mateus at Infogroup Data Solutions, 402.836.5695 or heather.winnicki@infogroup.com.

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Infogroup Data Solutions empowers business, consumer, and nonprofit marketing professionals. Through our innovative data sets, media management, analytics, brokerage services and marketing solutions, we help lower the cost to acquire new revenue and hold on to current customers.

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