

# Finding Order (and ROI) in Big Data's Chaos

By Jessica Hawthorne-Castro



**M**anaged health care company Aetna uses big data to review patient risk factors and focus on treating the one or two issues that will have the most positive impact on the individual's health. American Express uses predictive models to analyze historical transactions and ferret out its most loyal customers—namely, those who *won't* close their accounts in the next four months. And retail giant Walmart leverages text analysis, machine learning, and “synonym mining” to produce relevant search results for its online shoppers—a move that has improved the odds that someone

will complete a purchase by 10 percent to 15 percent.

These three firms have at least one thing in common: They are analyzing huge data sets; picking out patterns, trends, and associations within those data sets; and turning the resulting information into actionable insights that can be used to make decisions, hone business strategies, and even improve their customers' quality of life. The question is, how can marketers effectively harness big data, turn reams of information into useful insights, and then apply it in the business world? Here are seven ways to find order effectively among the chaos, and achieve the highest possible return on investment (ROI) on your big data.



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**Always start with clean data.** In computer terms, the axiom “garbage in, garbage out” refers to the fact that computers, which operate by logical processes, produce undesired and/or nonsensical outputs when the input data itself is undesired and/or nonsensical. This age-old assumption



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holds true in the big-data age, where marketers should work only with information that has been scrubbed and organized in a data warehouse. The key is to generate, collect, and store as much data as is practical, regardless of what you think will happen with the results of the creative or the campaign. Data collection and storage has become very inexpensive—and it's almost impossible to collect data after the fact.

**Leverage pixel analytics.** Whether you're using online media, offline media, or both, you can "pixelate"—i.e., put a tracking device on the website that you're directing buyers to—and track the activity that's taking place at the point of sale (POS), online, via mobile, or at another touchpoint. By creating a Facebook pixel and adding it to the pages of your website where conversions happen, such as on the checkout page, you'll see who converts as a result of your Facebook ads. The pixel will continue to monitor the actions people take after clicking on the ad, and you can see which device they used to view it and which device they ultimately converted on. And by adding a few lines of code to a website, you can also pull data directly from it, using pixels to mine actionable insights.

**Use digital codes to track data.** This is one of the most common ways to track your customers' online activities, and it's also a great source of useable, actionable data. You can browse search histories, for example, and then use the information to create behavioral categories for consumers. This, in turn, allows marketers

to develop specific buyer personas and customize content targeted to their interests and preferred paths of engagement. And while the digital age has made this part of the process extremely easy, you do have to be aware of bots that can throw off your tracking and render your data useless.

**Leverage statistical modeling.** Television continues to be a strong player for both brand advertisers and direct marketers, and it's gaining even more prowess in analytics. For example, you can look at the size of an airing, the stations, demographic information, Nielsen weighting points, and other data points, and use them to create accurate statistical models. Ultimately, you want to collect as much clean, granular data from all response channels to enable as many complementary types of analysis as possible. Interactive and visual analysis can be particularly useful, as each cycle of analysis reveals and suggests further analysis and discovery. The exact path and methods of analysis may not be clear before the campaign, so the strategy is to collect the data to support any possible analysis and simple modeling from regression analysis, cluster analysis, and logistic regression.

**Precisely target specific demographics.** Big data can help target a specific consumer group more accurately by defining the demographic more precisely, the regions in which those consumers live, and the best possible TV, digital, and other media placement opportunities. Whether your audience is the Southern housewife or the Northeastern business owner, you can generate creative that truly speaks to that target. Big

data makes you "smarter," and allows you to get even more granular with creative messaging from one media platform and device to another.

**Tap into mixed-media modeling.** By definition, mixed-media modeling involves analyzing sales and response data to determine the marketing mix's effectiveness. Using technology applications and platforms, marketers try to figure out how much "weight" to give each advertising channel, which platforms are performing best (or worst), and how to effectively allocate budgets among those various options. By performing this exercise, companies hope to determine the proper media mix—a big task in today's highly fragmented digital media world.

**Measure retail response.** Big-data analytics can find correlations and impact across various channels. For example, direct-branded TV creative aimed at generating sales of one product has been definitively shown to lift retail sales of unrelated products under the same brand, and can also provide a segmentation profile of the retail consumer and their purchasing habits to extend the engagement across multiple products. A detailed analysis can measure the efficient cost per acquisition for an unrelated SKU, in addition to direct phone, web, and retail sales of the SKU advertised. Data-driven retail response can help a range of marketers get more out of their media investments. It can help further lift sales on an already successful line or boost a brand that's sitting on the shelves by creating higher levels of demand.

Has any of this made your head spin yet? Don't let it! Using these strategies, you can develop a big-data strategy that leverages analytics and attribution in a very effective manner. Don't let your knowledge and application of big data be happenstance. Use a dedicated, deliberate approach to measure every single campaign, then utilize the data to make the best possible decisions—and you will always find order among the chaos. 