

# Rewards of “Small Data” Testing with Big Data Analytics (Fairies, Pixie Dust, and Shopper Marketing)



## Embrace Small Data

Marketing analytics is too often seen as one big tool. Take the Big Data sledgehammer to your marketing database and see what nuggets of gold appear in the rubble. But analytics are more like a Swiss Army Knife – with a variety of specialized tools to use as needed, depending upon the environment you venture into and the challenges you face.

Analytics are also like a two-sided coin. The popular focus on Big Data analytics ignores the other side of the coin – the value of Small Data. More specifically, the “designed data” you get from proactive in-market testing. Testing may not be one of the cool kids right now, but (1) no amount of big data analytics can give you insight into things you’ve never done, and (2) the science of testing has quietly evolved into a powerful set of tools for both artist and analyst.

## Dumb Data

Numbers (like computers) are really stupid. Computers don’t think – they do exactly what they’re told (even if blatantly incorrect). Numbers are just... numbers. They have no inherent meaning. Only by collecting, grouping, and interpreting numbers can you gain some marketing intelligence. So (to get to a point) data is not inherently valuable. Only when you see differences among data points do you start to see some clues, trends, correlations, and opportunities. Like a shepherd, you need to corral and guide the data to some useful end. But data may not be prepared to tell you what you want to know. Back-end analytics – Big Data – require you to wait until you have lots and lots of data and hope it holds some value within.

## Smart Data

Big Data analytics are valuable. But do you always want to wait and hope for useful insights? Or, do you want to create the numbers that give you the answers you want. Why not plan up-front for the right data as quickly as you can get it. How? By testing. Never a glamorous analytical tool, testing is still the only way to prove what drives response and sales. Big Data gives you clues, but Small Data Testing gives you answers.

## Fairies, Pixie Dust, and Effective Shopper Marketing

Let’s see how it works. After too many fairy movies (don’t ask), I have come to see a direct relationship between pixie dust and data. Think of your customers as fairies (perhaps fleeting and tough to find) and the data they leave behind as pixie dust (useful but indiscriminate). When customers enter your store or search online, they leave a trail of pixie dust behind: page views, items purchased, use of coupons and branded credit cards, feedback and tweets, etc. Big Data analytics sift through all the pixie dust to find a few precious insights within the wealth of datapoints.



= Customer



= Data

With the low cost and efficiency of advanced analytics, Big Data statistical modeling and data-mining should be part of every consumer insights program. But even with a full store room of pixie dust, your top PhD statisticians can only uncover the “jewels” that are larger enough to sift out. They cannot find precious insights that are:

1. Fleeting
2. Focused
3. Fundamental
4. Fluid
5. Future



Fleeting changes are so short-lived that they get lost in the noise. If you only change your coupon discount from 10% to 20% in one postcard out of 8 weekly touches, then “discount” may not be significant when you analyze all data from the campaign. If you have ever-changing creatives or a mix of vehicles – like a weekly newspaper circular, plus daily e-mails, and biweekly direct mail – then it may be difficult to match sales to one specific effort or creative.

Similarly, focused changes that only affect a subset of all customers or stores may be overlooked in a Big Data analysis. New stores or fast-growing markets (or elapsed customers and Internet-only shoppers) may be more responsive to some elements of the marketing mix. But if only a small fraction of all outlets or people fall into this group, then their unique behavior may be overlooked or inconclusive.

Variables that never vary – fundamental elements of your marketing campaigns – cannot be quantified. For example, if your laundry detergent is always priced at \$7.49, then “price” will never stand out as a significant variable. Even if you change to new packaging, the impact may be difficult to see because the one-time package change is correlated with so many other marketing-mix variables: seasonality, pricing, advertising, competitor discounts, etc.

Variables with a fluid effect can be very difficult to measure with unstructured data. For example, the impact of a 30% discount may change depending upon the purchase threshold (i.e., good on all purchases or only orders over \$100). A structured test can control these “fluid” effects to identify interactions where combinations of elements have a different impact.

Big Data analytics don’t work well as a crystal ball. They can’t quantify things you’ve never tried. So if you want to see the impact of a new in-store display, point-of-purchase promotion, direct mail envelope, or online ad, a structured test is the quick, clear, concise path to success.

Like fairies and pixie dust, customers and data fly into your stores and database, but are difficult to capture and see clearly. With pixie dust following every transaction online and in-store, Big Data analytics can quickly look for important customer, product, in-store, and marketing variables. But when you select up-front what you want to see, then you can be sure enough pixie dust falls on those key elements of the marketing mix to illuminate the answers you want. Testing sets the stage for useful data, proven results, and clear insights. It may not magically transform a weak marketing program, but it can often pinpoint a number of small insights that add up to glowing bottom-line results.

## **Your Testing Toolbox (for both Artist and Analyst)**

In the 1990s, marketers thought multivariable testing was simply too good to believe: a magical way to test many variables with no more sample size than a champion-challenger test. But seeing is believing. After a few well-known marketers documented their success, the marketing imagination opened to the idea of new ways to test more variables more efficiently.

The full mosaic of testing options offers your creative directors the freedom to try new things and quickly prove what works. Your analysts get a powerful set of test designs and strategies to customize each test depending upon your objectives and constraints. Whether testing 15 creative changes in a newspaper insert, 10 in-store displays and promotions, or 3 shelf set or pricing variables, new tools for scientific testing give you the power and freedom to test everything at once with greater accuracy, yet a fraction of the sample size required for controlled-store tests.

In-market testing is not idyllic. It takes work to plan tests, control the in-market execution, and analyze results. But the burden of testing should not eclipse the opportunity. When you can test two or two-dozen marketing-mix variables at once, you can prove “which half of your advertising is wasted” and roll years of testing into one fast, focused multivariable test. This effort just might give you a fairy-tale ending in the struggle for market share.