KNOWLEDGE IS POWER.

Data-driven marketing success is built on accountability.

Part 1
A step-by-step guide to data-driven marketing

2016
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In a popular television series dramatizing a changing 1960s America, a pocket protector-equipped techie wheels a massive punch-card computer into an advertising agency while a displaced creative department looks on, none too pleased.

Half a century later in the real corporate world, the revolution heralded in that scene is finally hitting the pivot point. Technology and creativity are fusing to make marketing campaigns exponentially more effective than they were just a decade ago.

One real-life business guru, the late Peter Drucker, said the goal of marketing is to know your customer so well your product sells itself. Today, marketers can do just that, thanks to technology that makes it possible to collect, understand, and use customer data. With data-driven marketing—that is, mining customer data and using it to inform marketing decisions—you can now track a shopper’s entire journey. From the moment they discover your brand, through their purchases, and on to their loyal evangelism, you can know in incredible detail if the campaigns you’re aiming at them are working. And if they’re not, you can adjust them on the fly.

Done right, data-driven marketing is more than just a tool you can use to boost sales. It’s a methodology and a mindset that can dramatically increase your company revenue and shareholder value. This three-part, step-by-step eBook series explains how to make it work for you:

- **Part One (this eBook)** covers the importance of accountability and attribution—knowing what’s working and what’s not—and what data-driven marketing can help you accomplish. It also explains how to get started.
- **Part Two** discusses how to merge data from disparate sources to create a complete view of every customer and use that understanding to deliver a seamless customer experience.
- **Part Three** explains how to use data and software to predict what customers will do, and how to turn that capability into a business advantage.
There’s an old advertising saying often attributed to John Wanamaker, the 19th-century department-store pioneer. Supposedly, he said that half the money he spent on advertising was wasted—he just didn’t know which half.

Wanamaker died in 1922, but the problem of figuring out whether marketing dollars were being spent effectively persisted into the next millennium. Even during Madison Avenue’s heyday, the best a company could do was put a clever catchphrase or image out into the world and hope for the best. If sales improved, marketers didn’t know for sure if it was the ad campaign that made a difference or something entirely unrelated. The result was advertising that often missed the mark.

Then came the Internet, and marketers could track clicks and page views. They could see what grabbed attention and start to understand customer behavior—but these radical changes were just the beginning of the digital marketing revolution.

Today, many business leaders have yet to fully embrace the power of information. Their companies collect plenty of customer data, but use it only as a report card to judge past performance. With the right investment in people and technology, they could do much more.

So far, there’s still a big gap between what’s possible and what most marketing teams are actually doing. The retail and financial services sectors are relatively advanced, according to Jeff Allen, senior director of product marketing at Adobe. But in most other industries, the level of sophistication varies widely from company to company. That’s changing as marketers recognize just how crucial technology is to what they do.

In a 2015 Adobe survey of more than 1,000 marketers, only 20 percent described themselves as being “tech savvy.” But 52 percent said they believed the ideal marketer would fit that description—meaning a significant number of those surveyed were aware they had a knowledge gap to close.

To truly compete today, you simply can’t remain in the dark about campaign effectiveness. It’s essential to know what works—and what doesn’t. If you can’t attribute your successes and defeats to their true sources, you’ll have little to build on when it comes to putting a data-driven marketing plan into action. Fortunately, unlike Wanamaker and his contemporaries, we can now analyze customer data from every point along the path that leads to a sale and beyond. That makes it possible to establish attribution, thus holding you accountable and demonstrating your contribution to business results.

The successful company also has to be able to create a more fluid, compelling customer experience than its competitors, and data makes this possible too. Your marketing teams must be able to look at customer behavior, instantly put it in context, and immediately react with a customized response. They have to be able to do this across multiple channels at once. Those channels include the ones we’re familiar with—like websites, mobile apps, and social media feeds—and others that haven’t yet gone mainstream: smart cars, wearable devices, and the increasing number of objects that connected to the Web as part of the “Internet of Things.”

If a company can’t master these channels, its competitors will likely beat it to the punch. A 2014 eMarketer survey of marketing leaders found that, over the next year, a full third planned to start deploying technologies for website optimization, marketing automation, social media monitoring, and online campaign management.

In the coming years, the degree to which marketers embrace technology will make a significant difference in whether their companies succeed or fail.

Companies collect plenty of customer data, but use it only as a report card...they could do much more.
So what can data-driven marketing do for your company? Five things:

**Understand the sale.**

Data-driven marketing helps establish attribution—the process of giving appropriate credit to each marketing action that contributed to a sale. When customers are targeted on multiple platforms, it can be hard to tell which communications ultimately influenced the decision to purchase. Now, though, we can see and understand every step of their journey.

In the early days of digital marketing, attribution models only accounted for a few data sources—such as the company website, display advertising and email. Today, data sources may also include online audio or video, mobile Web, mobile apps, social media—even data from retail stores and geolocation. As the number of platforms available expands—say hello to your talking fridge!—attribution will become even more complex. Good analytical tools must be able to combine every source.

Until recently, marketers often relied on “last-click attribution,” a method ascribing a sale to the customer’s last point of contact with the brand. For instance, if a customer received a promotional email and made a purchase within the hour, the email campaign got all the credit. Intuitively, though, we know that the email probably didn’t do all the convincing. The customer might also have seen a television ad, walked past a billboard, or noticed a company social media post. To really understand whether campaigns are effective, you have to take all those points of contact into account.

That may sound challenging, but it isn’t as difficult as it may seem. Today’s software takes every interaction between company and customer into account, determining which was most influential. Businesses—at least the more advanced ones—have moved from last-click attribution to multi-touch attribution models that give credit where credit is due. Using fractional attribution, they give the right amount of credit to each factor that influenced a customer action. And whereas most attribution models used to be based on simple rules, today’s more sophisticated models rely on statistical algorithms. When properly applied, these models show which campaigns are working and weed out fruitless initiatives, giving management the opportunity to shut down the latter instantly before spending spins out of control.

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Prove your worth.

Data helps prove marketers’ contributions to the bottom line. Technology is changing the role of the marketing department, so that increasingly it is seen less as a cost center and more as a moneymaker. With the latest attribution software, that role is evolving even further.

Consider the results of a Georgia State University study⁴ V. Kumar and Denish Shah, marketing professors at the university’s J. Mack Robinson College of Business, found companies can raise their stock price by using marketing analytics to determine a customer’s expected lifetime value and then allocating marketing funds accordingly.

They studied two Fortune 1000 companies, one business-to-business and one business-to-consumer. Looking at five years of customer information, including such data points as previous purchasing behavior and responses to campaigns, Kumar and Shaw came up with a lifetime value for each customer—calculated as the net present value of expected cash flows over three years. The companies then used that information to guide their marketing investments and the researchers observed the company stock price over a nine-month period. The business-to-business company saw a 33 percent jump in stock price compared with a 12 percent rise for its top three competitors. The business-to-consumer company’s stock price rose 58 percent, compared with a 15 percent rise for its top three competitors.

Senior managers will get behind anything that lifts share price. They also tend to be especially impressed when marketing data reveals untapped business opportunities (Part Two and Part Three of this three-part series go into more detail about how to make that happen.) “Marketing is now actively engaged in business discussions at the executive level because we bring data to the table,” says Rick Maddox, a senior marketing manager for Adobe Analytics. “It’s foolish to argue with data.”

How do you bring data to the table? First, use it to show which efforts are most effective and thus deserving of recognition and continued funding. Second, as the Georgia tech study showed, it can direct efforts towards discovered opportunities. And third, it can hold marketers accountable to goals. One way to encourage accountability is to ask teams to both look at their own performance and share it with others. If your team discovered that a well-timed email campaign led to an unusually high number of conversions, that’s something to crow about, both to management and colleagues who can build on what you learned. Establishing a shared document that can be collaboratively edited—in which teams share their achievements, failures and insights—both educates and encourages everyone to meet performance goals.
Make it automatic.

Data-driven marketing allows for highly effective automation, which is pretty much what it sounds like: the process by which software recognizes a customer and performs an action without human involvement. "It could be sending them an email. It could be sending them a postcard," says Adobe's Jeff Allen. "It could be that, if you download the mobile app, a tailored experience happens in the app."6

Successful automation is based on marketers’ ability to group customers into segments. Most marketers are familiar with the concept of segmentation, or dividing consumers into subsets that will likely respond to particular messages or products. Data-driven marketing goes further, creating richly detailed audience segments, helping determine the best approach to each one and enabling rapid responses. It also lets the marketer know which customers a campaign should target, and just as importantly, which to avoid.

For example, an accessories retailer might have a segment made up of women under 40 who live in Los Angeles and recently downloaded the brand’s mobile app. Based on the behavior of others in the segment, the software might know that, after downloading the app, the customer is likely to buy something online within a week. The software could automatically send out a prompt—say, an email announcing a discount—with a high chance of resulting in a handbag sale.

There’s a clear correlation between marketing automation and company revenue. Sixty percent of companies with more than $500 million in annual revenue deploy marketing automation technology, whereas only 10 percent of companies making $20 million to $500 million use it. The percentage declines from there, with only 5 percent of $5 million to $20 million companies using the technology, and only 3 percent of smaller firms, according to the eMarketer survey.8 The impact of data-driven marketing will vary from company to company and campaign to campaign, but your software provider should be able to create return-on-investment models to predict the impact of new analytics tools.
Sell faster.

Data-driven marketing increases the speed at which your company can interact with—and sell to—customers.

Sometimes a response to consumer behavior can occur almost instantaneously. For example, geolocation might tell a retailer that a customer who made a recent purchase is three blocks from its Los Angeles store. Software instantly assimilates this information and sends them a push notification to visit the nearby location.

Data can also increase the speed of ongoing customer communication to make sales happen sooner. Based on data, the retailer knows detailed customer preferences. If a particular customer likes shoes but not handbags, automated marketing software will highlight footwear when she visits the company website. If she never buys shoes that cost more than $100, the software won’t bother to show her more expensive pairs. The company doesn’t waste time—it owns or the customer’s—crafting offers she’ll never respond to. (How this rapid-response automation works is also covered further in Part Two and Part Three.) Meanwhile, the marketing team can use what it learns from the data to quickly craft and test an offer that will work.

We can really define our targets and segments and filter out all the others that aren’t relevant. We do customers a service and don’t damage our company brand by being annoying.9

Keep customers for a lifetime.

Lastly, customer data can improve relationship marketing—that is, marketing that focuses on customer loyalty and long-term engagement. Making and maintaining lifetime customers is fundamental for any forward-thinking business. The CFO of that accessories retailer should ask themselves not just how much the company will make on the sale of a single handbag, but also how much it will make on sales of handbags, shoes, wallets, and belts to a single customer for years to come.

Data is the key to establishing this profitable, long-term customer bond. For starters, software can be used to spot shoppers who convert—turn from browser into buyer—at an above-average rate. Once a group of these customers is identified, marketers can study their behavioral data like anthropologists in the field. Where do they like to shop? How often? Which actions lead to a purchase? Combined with demographic data, answers to questions like these create a complete customer profile. That profile can then be used to identify and target other groups with similar characteristics, automating whatever action is required—such as tweaking emails or presenting special offers—and getting members of those groups to buy. Software also allows marketers to test specific strategies against one another to see which is most effective.
Take the right steps.

In this moment of digital transformation, staying ahead of rivals means holding marketing campaigns accountable to their goals and being able to attribute every customer action. If you can do that, you’ll have a solid foundation for a successful data-driven marketing campaign, one that moves your company away from the gut-instinct calls of the past to decisions in which you can have great confidence.

Getting started down this path may initially look daunting, but it doesn’t have to be. The rest of this eBook—as well as the other two parts of this three-part series—will show you how to do it. Breaking the process down into bite-sized chunks makes it easier. As Allen says, “If I’m missing a bunch of steps along the way, I can really get attribution wrong.”

Step 1: Set your sights.

Throwing money at software without an agreed-upon goal is a recipe for frustration. For starters, the executive team should define its objectives. Most companies share at least a couple. They want to meet their measurable targets on key indicators, such as conversion rates and account registrations. They want to provide a personalized, seamless customer experience across all channels. And they want to steer their business, rather than take a reactive approach.

There are various ways to achieve these aims. Different businesses will make different choices about which channels matter, what information to collect, and how they’re going to measure and define success. The first, crucial step is getting everyone to agree on what they want to do.

Step 2: Assemble your forces.

Next, if a dedicated digital strategy team doesn’t exist already, your company needs to create one. Since effective digital marketing requires a variety of skills, team members might be drawn from all around the company. Once you’ve brought them all together, though, they should have clear-cut roles. The team should be responsible for planning, creating, and deploying content through digital channels; understanding and implementing analytics; developing and running tests; sharing insights; and working closely with colleagues in IT.

Step 3: Take stock with an audit.

Perhaps most crucially, before getting started, your company needs to assess its current capabilities. This kind of self-audit allows marketers to ferret out gaps in infrastructure and data gathering. In short, it shows how “mature” the business is in terms of data use. Conducting regular audits is also a great way to check progress over time.

The best way to think about an audit is as a series of questions to ask about where your company stands now. You could be starting from scratch or already well on your way, just figuring out how to make your efforts more effective. Ultimately, an audit will serve as a blueprint for your move forward.
An audit in a nutshell.

Ready to launch a company audit? Here are some of the things you should be looking at as you grow your data-driven marketing practice.

Collection

What data is already being collected, where’s it coming from, and how is it being stored? As likely as not, your company is already collecting some customer data—maybe via its websites, existing customer relationship management software or its brick-and-mortar stores. As your company matures, it will collect data from more sources (including third-party providers), merge and store it in one system, and use it to learn more about its customers.

Analysis

What are you already tracking and analyzing? Volume of traffic? Ad impressions? Conversion rates? What benchmarks are you applying and with what goals in mind? As your analysis capabilities advance, you should be able to create very specific customer segments in order to understand and ultimately predict customer behavior.

Decision-making

How are digital marketing decisions made? At the dawn of the Internet, individuals or groups with access to some basic data made marketing decisions based on their opinions. As data-driven marketing practices have become more sophisticated, more companies are using technology to test hypotheses about what ads or placements are most effective. They make calls based on statistical analysis of customer segments and automate some decisions in response to shopper behavior. They also test ideas, designs, and initiatives against one another to figure out which ones work best.

Attribution

Can your company link business results to specific marketing efforts? If so, how? The simplest attribution models look at just a single point of contact between the buyer and seller. More mature models test various experiences and use statistical algorithms for a better understanding of which contact points influenced the customer. By demonstrating what’s most effective, attribution models can also help you figure out how to improve campaigns as your content evolves over time.

Automation

What processes are handled automatically and which still require a slow-moving human hand? What’s the existing process for optimization and how quickly can the company act on data? At the most basic level, data reports automatically go out to the staff members who need them. As a company matures, automated reports become more detailed and comprehensive, providing, for instance, trend data and requested real-time alerts. Ultimately, the goal is for automatic systems to identify segments and rapidly optimize—assimilating and responding to customer behavior in the most profitable way possible.
Once you have a good sense of your capabilities, the next step isn’t to seek out more data, but to make the most of what you’ve got. “Get the data you have in order,” says Axel Schaefer, a senior manager for strategic marketing with Adobe Marketing Cloud. In other words, a company should figure out what to do with what it already has before it does anything else. A small investment in training and technology can provide a nearly immediate leap forward.

The right technology allows marketers to instantly see how customers are behaving and then quickly adjust strategies and campaigns for maximum impact. If a hotel chain can see that Tim Jones visited its website and checked room rates in Dublin, it knows a little. If it can see that he also downloaded the hotel’s mobile app while in Dublin, it has a clearer picture. If it knows that most people who check rates and then download the app while traveling abroad go on to book a stay within three days, it has enough information to respond in a way that could tip Mr. Jones into making a purchase.

It’s not just about how much data you have, it’s about knowing what you have and how to use it.12

Once basic data is collected, crunched, and put to good use, it’s time for the marketing department to decide what additional information it wants to collect. Two broad kinds of customer data need to be brought together. The first—behavioral data—includes past purchases, responses to promotions, preferred channels, and levels of social media engagement. The second—demographic data—includes age, income, education level, gender, and location. Combining the two can yield greater insight into what customers are willing to spend, which devices they use to make purchases and what circles of influence they belong to.

Brought together, all this data helps establish a uniform profile for each customer that can identify him or her across every channel. If the hotel knows Mr. Jones downloaded its app, but doesn’t recognize him as the same person who checked Dublin rates, the puzzle pieces are much less valuable than if they were put together. (Part Two of this series explains how to create a holistic view of every customer, combining all the puzzle pieces for a complete picture.) With it, marketers can see the customer’s whole path to conversion—from keyword search to display ad to social media promotion to advertiser’s website.

Let’s face it. Most of us aren’t data wonks. For every staffer who loves staring down a column of numbers in a spreadsheet, you probably have 10 others who’d rather bench-press a filing cabinet stuffed with spreadsheets. However sophisticated its underlying algorithms, if your data-crunching software can’t provide great visualization tools, it will be of limited use. A compelling, intuitive dashboard—a digital display of key business information—gives managers easy-to-understand snapshots of how their campaigns are doing, enabling them to make swift decisions without needing a spreadsheet junkie around to translate.

A good dashboard shows the most important metrics prominently and includes graphics on any variety of data that marketers might want to track. It should be customizable. One retailer, for example, may want to see how many total units are being sold (and at what prices), which locations are performing better than others and how well online sales are doing. Another might want to track how many purchases were made in response to a television commercial for a specific sporting event. “With the dashboard reports, you can figure out attribution,” Maddox says. “You can line up all your campaigns, side by side, showing the investment and return on investment for each one.”13
KNOW what not to do.

Knowing what to avoid can be as useful as knowing what to do. As you move forward, keep common pitfalls in mind.

Keeping information segregated is a big mistake. “Often, audience data stays in silos across the business,” says Pete Kluge, a product marketing manager for Adobe Media Optimizer. Sometimes, he says, different departments in the same company have databases of customer information they don’t share with one another. “It’s important to understand where all the audience data is across the business,” he notes. Databases—like those that track social media usage, loyalty, and customer preference—must be consolidated. If that data is scattered across different departments and controlled by different teams, its power simply can’t be harnessed. (Part Two of this series delves further into why and how to merge disparate data sources.)

Failure to collect mobile data is still a surprisingly common error. Optimizing desktop analytics won’t help if most traffic comes from mobile devices. A 2014 comScore report found that 60 percent of all U.S. digital media time is spent on mobile devices. “Anyone not measuring online activity in apps or in mobile websites has the biggest issue,” Schaefer says.

In the push to embrace data-driven marketing, some companies make the mistake of failing to get all the pertinent divisions of their business—marketing, sales, IT, and management—on the same page before they dive in. Every department has to be on board, and marketing and IT, in particular, will have to work closely together. “There isn’t always a holistic view across the business, so you have to bring the marketing and IT people together,” Kluge says. (For more on getting teams to cooperate, see our eBook IT and Marketing: Finding Harmony in the Yin and Yang of the Digital World.)

Lastly, when companies fail to hire or assign enough skilled people to understand and manage data-driven marketing, it may seem obvious, but digital strategy doesn’t happen on its own. It requires dedicated full-time employees undistracted by other responsibilities. The old staffing model—a lean in-house marketing team working with agencies focused on art and copy—is, quite simply, obsolete.
It’s important to keep in mind that all the data, analysis, and targeting is going toward one goal: creating a smooth, enjoyable customer experience that grows your business. Consumers now expect that every encounter with favorite brands will be personalized. Given the choice between a company that doesn’t recognize them versus one that does so without a hitch (no scrambling for passwords), many opt for the latter.

You can’t create that effortless customer experience without information. With the right data and smart analysis, the marketing department gains the all-important power to hold itself accountable and find out which efforts are responsible for which achievements. Once you’ve established attribution, you have a springboard to make the big decisions on how to engage and influence customers. Getting those decisions right will determine whether your company stands out from the competition.

**Part Two of this three-part series explains how to use data to create a holistic customer view. To continue learning more about the concepts covered here in Part One—like attribution, accountability, conducting an audit and visualization—check out this [link](http://www.adobe.com/go/data-driven-marketing).**

To learn more about how you transform your marketing through data, visit [http://www.adobe.com/go/data-driven-marketing](http://www.adobe.com/go/data-driven-marketing).
Adobe Marketing Cloud empowers companies to use big data to effectively reach and engage customers and prospects with highly personalized marketing content across devices and digital touchpoints. Eight tightly integrated solutions offer marketers a complete set of marketing technologies that focus on analytics, Web, and app experience management, testing and targeting, advertising, audience management, video, social engagement, and campaign orchestration. The tie-in with Adobe Creative Cloud makes it easy to quickly activate creative assets across all marketing channels. Thousands of brands worldwide—including two thirds of Fortune 50 companies—rely on Adobe Marketing Cloud with over 30.4 trillion transactions a year.

1 Jeff Allen, personal interview, June 9, 2015.
2 Adobe, US Marketers’ Research Results 2015 (survey conducted by Edelman Berland), March 2015.
5 Rick Maddox, personal interview, June 25, 2015.
6 Allen interview.
9 Maddox interview.
10 Allen interview.
11 Axel Scharf, personal interview, June 23, 2015.
12 Scharf interview.
13 Maddox interview.
14 Pete Kluge, Personal interview, June 24, 2015.
15 Scharf interview.
16 Kluge interview.