ON LOVE AND DATA.

Use algorithmic attribution to define the relationship with your customers.

December 2015
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In love and marketing,
you’ve got to know where you stand before you can hope to move forward. Defining the relationship is often a delicate business in a romance—and in the past, marketers have felt similar angst when trying to understand the nuances of their relationships with customers. But with new technologies that integrate algorithmic attribution capabilities, it’s a whole lot easier for today’s marketers to take control of their customer relationships. (Sorry, lovers: you’ve still got to figure it out the old-fashioned way.)

With algorithmic attribution, you can determine the complete sequence of events that leads a customer to buy your products, choose your services, and fall in love with your brand. Instead of settling only for attribution metrics based on the first click or last click, without any understanding of the interactions in between, you can use algorithmic attribution based on advanced statistics and machine learning to measure the precise impact of each marketing touch along a customer’s journey to conversion—from display ads to social media to blog posts to videos. It even allows you to account for influences beyond your marketing control, like an unexpected price slash from a competitor or word-of-mouth recommendations passed between customers.

This isn’t as complicated as it may sound, or as impossible as it may have been just a few years ago. While ever-growing mountains of data and a never-ending stream of new channels have made it difficult to measure and attribute all customer interactions in the past, new technologies have emerged that now make it easier to track customers wherever they go. These days, you don’t need a data scientist to look deeply into the hearts, minds, and actions of your customers. In fact, you may not need to rely on analytics consultants at all.
Attribution modeling 101.

There are many ways that digital marketers can begin to determine which marketing channels are most effective—and which ones are failing. All of these attribution models have their uses. None of them are without limitations.

**Single-touch, rules-based attribution**—includes last-touch and first-touch attribution models, which assign all credit to a single event based on pre-established rules.

**Useful for:**
- Starting to think critically about customer behavior
- Serving as a baseline for comparison with other more sophisticated models

**Limited because:**
- There’s no insight into the complete customer journey across multiple touchpoints

**Multitouch, rules-based attribution**—includes even, linear, and starter-player-closer attribution models, all of which assign credit to multiple marketing touchpoints based on pre-established rules.

**Useful for:**
- Beginning to understand customer behavior across channels and throughout the entire sales cycle

**Limited because:**
- The analyst must decide on the rules, so they’re inherently subjective—and introduce flaws and bias to the different touchpoints along the customer path

**Multitouch, advanced rules-based attribution**—includes time decay, position-based and custom attribution models, which use more sophisticated rules for weighting credit across multiple touchpoints.

**Useful for:**
- Understanding relationships across different touchpoints
- Analyzing the length of time between each touch and conversion
- Identifying high-value audiences

**Limited because:**
- Results are still derived from arbitrary values set within pre-established rules

**Multitouch, data-driven attribution**—includes algorithmic attribution models—both fractional and marginal impact—which use advanced statistics and machine learning to objectively compute the precise impact of each marketing touch along a customer’s journey toward conversion.

**Useful for:**
- Testing and targeting to drive improved customer experiences
- Understanding and managing marketing performance across all channels
- Informing media mix decisions and programmatic ad buying

**Limited because:**
- These advanced strategies require integrated customer data and a break down of traditional organizational silos. They can only work when organizations have executive buy-in and a shared data approach
As a marketer, you have better insight than anyone into your customer channels, from how much you’re investing in banner ads to what you’re spending on Facebook. That’s why you—not your analytics consultants—should take the lead in exploring how your customers interact with every channel where you’re spending ad dollars.

“Organizations must look internally,” says Andrea Fishman, an advisory principal with powerhouse consulting firm PwC. “There must be a team or individual who has both the responsibility and authority to shift investments based on performance.” And when the right people are empowered to make these shifts quickly and strategically—without waiting for consultants to deliver insights—returns can grow quickly, too.

Fortunately, it’s never been easier. As attribution models evolve to become both more precise and automated, you have new opportunities to take success into your own hands. This starts by fully understanding—and truly owning—your customer data.

With the new levels of insight that algorithmic attribution brings, for example, you’ll begin to see how your marketing channels are working together to move customers from liking to loving, and from browsing to buying. This, in turn, allows you to make better decisions for future campaigns, so you can ensure that your marketing investments continually produce measurable business results.

Even with the clear business benefits of algorithmic attribution—from justifying your marketing spend to understanding the customer journey to optimizing your media mix—only 54 percent of businesses use any kind of attribution at all. And of those who do, just more than half are only looking at the last click customers made before purchase. With so many businesses lagging behind the attribution curve, forward-thinking brands have a real opportunity to leap ahead. And it all starts by defining and then deepening the relationship with your customers.

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Digitally mature firms are 250% more likely to do attribution modeling.

Source: Adobe Digital Marketing Survey Results

9 in 10 brands that use attribution say it has a positive impact on their business.

Source: Econsultancy Quarterly Briefing: Making Sense of Attribution
Building brand love starts by mastering customer data. And the most digitally mature companies use advanced attribution strategies to do it. Here are five common characteristics that the leaders in attribution all share—and that you should build into your own practice, too.

1. They reject the cookie-cutter approach.

You have to know what you want from a relationship before you can define it. The leaders in data-driven marketing understand this well, which is why they start the attribution process by pinpointing exactly what they want to measure, then customize an attribution strategy that’s focused on those specific goals. This isn’t always easy. One of the biggest obstacles organizations face when getting started with attribution is getting all stakeholders to agree upon a common definition of success.

Algorithmic attribution is a great tool for strategically aligning your team around your company’s ultimate success metrics. By understanding how your customers interact across all your channels, and beginning to see accurate measures of metrics like customer lifetime value, you can start building specific goals to boost the metrics that are most important to your business, whether it’s about attracting new customers, maximizing mobile conversions, boosting average order value, or something entirely different. Once your organization determines the specific metrics it wants to measure, you’ll start getting the kind of meaningful insights that can drive real business results.
2 They don’t rely on guesswork.

Healthy couples don’t try to read each other’s minds. They listen carefully and communicate deeply. Marketers who want to really understand their customers must do the same. “The era of the gut is over,” says Shaina Boone, SVP of Marketing Science at Critical Mass, a global experience design agency. “Marketers cannot expect to increase their overall marketing budget or know how to mix their existing budget properly without [some form of attribution modeling].” This requires using data—not guesswork—to understand the relevance of every interaction.

Multitouch algorithmic attribution makes this possible. When you can see your customer’s journey across display, social, paid search, and email, as well as direct mail, radio, billboards, and television, you can understand exactly what delights them—and what doesn’t. This goes beyond simply measuring conversion. Algorithmic attribution also gives you the power to examine which channels build awareness, which drive deeper consideration and which build brand loyalty and, ultimately, advocates.

To get to these deep insights, marketers must dig into the data themselves and be personally involved in the analysis, instead of simply waiting for consultants to deliver reports. It’s the only way to know for certain which channels are having the greatest impact—and it’s easier than ever with technologies that integrate algorithmic attribution and offer reporting and analysis tools. Equipped with deeper customer intelligence, you can optimize your marketing spend for greater ROI. “Marketers may be buying media where they would get the sale or the same customer anyway,” says Todd Crawford, co-founder and vice-president of strategic initiatives at Impact Radius. Instead, when you know what’s inspiring new interactions and generating new customers, you can put your money precisely where it counts.

Channels of contact just keep evolving.

Customers interact with your brand in a dizzying variety of ways, each and every day. And their journeys rarely follow a linear, predictable path.
3 They see the whole picture.

People don’t usually fall in love based on a single coffee date. And customers don’t typically make purchase decisions based on a single interaction. But with first- and last-click attribution models, that’s all of the customer relationship that marketers get to see. "As the sheer number of digital channels and formats has rapidly expanded to include social, video, content marketing, and more, reliance on last-click is now considered bad practice," says eMarketer Analyst Lauren Fisher.

Multitouch, rules-based attribution can begin to help marketers see more of the customer relationship picture. However, rules must still be assigned by marketers and analysts to “weight” the value of each touchpoint and give appropriate credit for its impact. Once the rules are created, they remain static until someone goes back into the system and changes them. A further limitation is that rules-based attribution models typically only follow the path of customers who convert. But as anyone who’s been through a tough breakup knows, there’s often as much to be learned from losing as there is from winning.

Algorithmic attribution, in comparison, allows digital marketers to see the whole picture, from who bought and what drove them to purchase to who dropped off and where they lost interest. Because the attribution is based on actual live data, not arbitrary weights assigned manually, the credit to each touchpoint can shift dynamically as the algorithms learn from information that’s feeding into the system. The result? A science-based approach to assigning fractional credit across touchpoints—which gives marketers more freedom to focus on the art of building customer relationships.
4 They give credit where credit is due.

Relationships are complex, and no single individual can take full credit for their success or failure. So it goes with marketing. Digitally mature companies don’t just understand which online and offline channels contributed to their marketing results, they also know exactly how much credit each touchpoint deserves. This is where advanced algorithmic attribution tools are critical, because they integrate customer data from all channels into a single system, making it easier than ever to see how all your marketing touchpoints—including unpaid touches like product reviews—impact a customer’s journey.

Beyond just measuring the fractional impact of interactions across channels and dividing credit between paid touchpoints, digitally mature companies also measure the marginal impact of all incremental purchase events. This means understanding how much your brand sells without any marketing—just by merely existing in the marketplace—and using this as a baseline from which to measure all incremental success. “Marketing can only control so much,” says John Bates, senior product manager for predictive marketing at Adobe. “By understanding the precise margin of influence it has on your sales, you get a much more realistic measure of what drives the conversion journey.”

Once you’ve established a baseline for non-marketing influences, you can analyze a wide range of fluctuations in marginal impacts, whether it’s a macroeconomic shift like the 2015 financial crisis in Greece or a simple change in the weather. By understanding what percentage of influences are out of your control, you can make much more precise budgeting decisions on the marketing touchpoints you can control. “Without an accurate understanding of the marginal influence marketing is having in driving incremental sales, you’ll always under-predict budget needs and over-predict sales,” says Bates.

In an effort to better understand the impact of our display advertising, Adobe used a marginal attribution model to analyze the viewability of Adobe.com ads served to individual customers through a variety of media partners. We called this customized algorithmic attribution methodology “Project Iceberg” because we went below the surface of our marketing attribution to identify the out-of-view ads that customers weren’t ever seeing, but that were being incorrectly attributed to our success metrics. The results were startling—two of our media partners were contributing nothing to our bottom line, because our displays ads weren’t ever being seen by our prospects. The worst part? We were spending 26 percent of our budget with them.

26% wasted spend.

With Project Iceberg, we found that we’d allocated 26 percent of our Adobe.com display ad budget to two media partners who had made no measurable contribution to the bottom line.

By identifying these out-of-view ads and excluding them from our attribution model, we were able to focus our display advertising spend on partners who were contributing to our success.”
5 They know the way to each customer’s heart.

Just because your ex loved flowers doesn’t mean your next sweetheart will. The same holds true for your customers. Marketers know that one channel doesn’t fit all. And the most successful data-driven marketers know how to determine which ones do fit best. Using advanced analytics to tie together all of a customer’s experiences across devices and channels, marketers can create enriched customer profiles that delve deeper into customers’ hearts, minds, and behaviors. Add algorithmic attribution to the mix, and they’ll also know precisely which touchpoints and customers to test and target.

Once you understand the trends your data is revealing, you can create highly personalized messages across any channel, at any time. These messages can then be measured algorithmically on the fly, so you can continually gain new insights and optimize your campaigns based on the most current data. And because this data can easily be shared across teams, you can eliminate the silos that often keep personalization efforts—and results—from gaining company-wide traction. By synchronizing insights across departments and business units, higher-performing marketing experiences can be automatically promoted to the right customers, on the right channels, at the right time.

As you acquire new customers, you can even go back in time and associate previously unknown data about their past actions across multiple channels and over a broad time span. This enables even deeper customer analysis, including the ability to understand whether multiple devices and interactions actually represent the same customer.

“We can’t test everything,” says Drew Burns, principal product marketing manager for Adobe Target. “Attribution highlights the audience segments and channels where we should be focusing our efforts.” Add real-time analytics, and you can understand trends when they’re happening—whether it’s a boost in Michael Jackson sales on iTunes on the anniversary of his death or a downturn in online credit applications on the heels of an interest rate hike by the Fed.

“The real power lies in having algorithmic attribution, testing and targeting tools synced in real time,” says Burns. “This is how we uncover areas of friction and opportunities for success.”

Marketers know that one channel doesn’t fit all. And the most successful data-driven marketers know how to determine which ones do fit best.
Take the relationship to the **NEXT LEVEL.**

Marketing attribution isn’t just about understanding where you are now—it’s about predicting what might happen next. While attribution is a necessary tool for proving past results, it’s also a future-focused solution for improving your personalization efforts, optimizing media budgets and buys, and developing long-term, profitable relationships with customers. “The ultimate goal is to use attribution, personalization, and optimization together to build an adaptive content strategy that ensures your marketing is always engaging and relevant,” says Burns.

Multitouch, data-driven attribution models like algorithmic attribution can be a step toward that goal. You’ll have the data you need to predict ROI, but it’ll be up to you to use the information wisely. For instance, algorithmic attribution can help you intelligently shift budgets from lower-performing channels to those that are performing better. But these shifts must be handled carefully and strategically, warns Dr. Sid Shah, director of Analytics at Adobe. “Marketing channels should work together like friends,” he says. “Attributing and analyzing performance by channel can decouple this cooperative process,” says Shah.

The solution, he says, is to take it slow. “Don’t make huge shifts based on any attribution model. Instead, make small, tactical shifts on a frequent basis.” And remember: while algorithmic attribution strategies can guide your budgets in the right direction, they won’t magically guarantee the perfect media mix. “When you shift the budget of one channel significantly, it will have an effect on the performance of your other channels,” says Shah. Use algorithmic attribution to make directional shifts to your media mix, and over time these incremental changes will converge to create an optimal solution.

When your digital maturity has evolved to the point where you’re using attribution to inform future marketing investments and strategies, you’re what Forrester calls a “measurement expert.”

“Attribution helps you build the strategy so you can uncover opportunities across channels. Then, it’s like bang! You know exactly which touchpoints to focus on in order to really move the needle.”

**DREW BURNS**
senior product marketing manager
Adobe Target
Are you a “measurement expert”?  
Want to know if your data-driven marketing capabilities are as mature as they possibly can be? Ask yourself if you’re using attribution modeling to do any of the following:  
- Measure the entire customer journey  
- Personalize marketing messages  
- Shift budgets  
- Inform future marketing strategies  
- Build media plans  
- Optimize marketing campaigns  

Gaining this level of expertise won’t happen overnight, but there are steps you can take to speed the pace of your data-driven marketing maturity.  

1. **Know where you are on the journey**—Take a close look at your current practices. If you’re just starting to dabble in attribution and haven’t yet experimented with advanced measurement frameworks, you’ll need to pick up the pace to catch up with your competitors.  

2. **Pinpoint your measurement priorities**—Work together with the stakeholders in your organization to determine exactly what you want to get out of your attribution model, and then customize a methodology that meets your business’ unique needs.  

3. **Gain leadership buy-in**—Once you’ve determined the best attribution model for your business, you’ll need to sell the benefits to senior leadership. To do this effectively, talk about how algorithmic attribution can prove the value of each touchpoint—so your organization can make more informed budgeting decisions and develop truly data-driven strategic plans.  

Once you’ve integrated algorithmic attribution into your marketing process, you’ll find that much of your old customer relationship stress has lifted—and what’s left is a deeper, stronger connection between your brand and your customers. From there, all you have to do is keep measuring every interaction and making your messages more relevant—so you can continue to nurture each individual customer.
ADOBE can help.

With the algorithmic attribution capabilities in Adobe Analytics, it’s easier than ever to understand the complete sequence of events that lead to conversion, from web visits to email campaigns to display impressions and beyond. With advanced statistics and machine learning, algorithmic attribution can help you objectively determine the impact of each marketing touch, so you can get a better understanding of campaign effectiveness—and make smarter marketing investments for future campaigns.

Combine this sophisticated attribution model with the advanced personalization solutions in Adobe Target, then add the dynamic ad buying tools in Adobe Media Optimizer, and you can turn deep customer insights into truly actionable campaigns—while always ensuring you’ve got the most profitable mix of ads to meet your marketing goals and keep customers coming back for more.

To learn more about how you build stronger relationships with your customers through data, visit 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 touch points. 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 304 trillion transactions a year.