

THE PROGRAMMATIC REVOLUTION

How technology is transforming marketing and the daily lives of marketers.

2016

TABLE OF CONTENTS

5	The times, they are a changin'.
7	Data continues to transform digital marketing.
8	Why everyone hasn't yet joined the revolution.
9	The future of audience engagement.
10	Inside a programmatic campaign.
12	Why this is good news for you.
14	The glorious future.

“Change is neither good nor bad. It simply is.”


That’s what Don Draper says in the third season of the TV series *Mad Men*.¹ The fictional creative director of an advertising firm in New York could have been speaking about any number of seismic shifts in his industry. And yet, if he’d known the extent of the upheaval caused by the technology boom of the early 21st century, there’s a good chance he wouldn’t have sounded so nonchalant.

Could Mr. Draper ever have imagined a machine that makes millions of personalized ads based on where someone shops, what car they drive, or which city they live in? Probably not. After all, he worked in an era when advertisers negotiated deals on cocktail napkins. The thought of automated advertising—known as programmatic—where social, search, and display ads are bought and sold through machines was a long way off.

But as the reach and influence of programmatic expands across channels and covers a greater swath of available inventory, marketers everywhere will be compelled to adapt. After all, programmatic already is responsible for a majority of digital display buys, comprising more than two-thirds of all display-ad spending in 2016, according to eMarketer.² Research predicts that by 2019, global programmatic ad spend will reach US\$37 billion, accounting for half of display and video expenditures.³

“I think we’re always going to be faced with evolution and change both from the tools landscapes and also an ecosystem point of view,” says Rob Jackson, managing director of DBi UK, a digital analytics company. “I don’t see the emergence of programmatic as any different than when pay-per-click bid management tools first came out, or when ad exchanges first launched. It means you have to evolve on a personal level in line with the industry.”⁴

By 2019, global programmatic ad spend will reach US\$37 billion, accounting for half of display and video expenditures.



"Some view programmatic as the new shiny thing that creates complexity when we're actually trying to simplify. Personalization at scale...needs an algorithmic, data-driven approach."⁶

ROB JACKSON
Managing Director
DBi UK

Tim Waddell, director of product marketing for Adobe Media Optimizer, says it's no longer possible to do advertising the way we used to. "Today, with so much data, so much granularity in targeting, and so many choices in engaging a user across devices and channels, there's just no limit to what you can do with all of that, which is spectacular," he says. Yet because of all the data and variables at play, "it's not humanly possible to manually manage a campaign in the modern day of advertising."⁵

So instead of trying, you hand it over to the machine. And once that's done, you're able to slow down and step back and take an unharried, critical look at the big picture. Then you make changes as needed.

In other words, the computer gets to do what it does best, and so do you.

"Some view programmatic as the new shiny thing that creates complexity when we're actually trying to simplify," Jackson says. "Personalization at scale can't be done by basic human campaign management. Personalization at scale—millions of potential customers and millions of placements across web and devices—needs an algorithmic, data-driven approach."⁶

So business as usual is off the table. But for advertisers who understand that industry sea changes and fast adaptation are business as usual, the shift to programmatic buying is full of promise. Saving time by passing the hassle of in-the-weeds ad buying to a machine and saving money by buying and placing ads with incredible precision and efficiency, well, those are good things.

The times, **THEY ARE A CHANGIN'.**

Programmatic may spell doom for manual insertion orders, but it's hardly a bad thing for advertisers. For advertisers, programmatic enables greater precision as well as more time to be precise. Because much of the buying and optimizing process is automated, the life of advertisers and marketers becomes more focused and decluttered. Sure, there's an uneasy moment when you first take your hand off the throttle and trust your campaign to the advertising equivalent of autopilot. But it quickly becomes clear how effective these machines can be at executing your orders, and how much strategic perspective you gain when you're able to take a step back.

With algorithms and automation handling much of what once comprised busywork, advertisers are able to devote more time and focus to higher level tasks such as developing new and interesting strategies, identifying audiences with granularity and deep understanding, and reaching customers with a precision and transparency that was unimaginable in the era of the opaque marketing mix or the three-martini lunch. When you automate media buying decisions instead of doing it manually, you increase productivity.

So, yes, the win-win-win promise of programmatic media buying sounds like a fantastic 1950s marketing pitch: You'll save time and money, skip the hassle, and be more effective than ever! Yet advertisers who've embraced programmatic say the new technology really does deliver on its promise.

"Programmatic has become essential for us," says Rachel Rambo, marketing manager of customer acquisition at eHealth, an online insurance broker. "It's helped us find and understand our customers, instead of just making assumptions. And it's constantly providing more and more insights for us to glean and learn from."

The early days of digital advertising were a strange amalgam of low and high tech. Marketers were flinging banner ads all over cyberspace with a reach that was unimaginable only a few years earlier. Yet even as the placement of those ads became automated, the process through which they were purchased and delivered remained very much analog. Insertion orders were still placed with a fax machine and manual ad tracking.

That was destined not to work. Not only because fax machines are the epitome of transitional technology, but because the universe of digital advertising was so clearly headed in a direction that rendered traditional orders obsolete.

For one thing, the number of publishers exploded. In the era when a few dozen key players controlled virtually all the premium inventory, it was plausible to make all of your deals on a face-to-face basis. Now millions of publishers offer access to highly targeted, highly valuable audiences. There isn't enough time in a year to shake hands and clink glasses with all those potential partners.

Second, the number of channels continued to blur and swell, making the process of attribution ever more complicated as consumers interacted with multiple channels en route to a purchase. Even legacy, pre-digital channels such as TV, radio, and outdoor display are heading inexorably toward a digital marketplace.

As the depth at which marketers could identify highly specific audiences and conditions increased—along with a corresponding increase in the number of variables and data sources in play—it became less tenable to manage the buying process manually. Add to that the value of instantaneous, midstream campaign optimization, and the ad-buying universe was inevitably going to be automated.

That shift doesn't reduce the marketer's role, but it does alter it. Creative is still king, but the assets and messages are more specialized than ever, designed to appeal to pinpointed audiences over a variety of devices and contexts. This is where dynamic or programmatic creative is becoming the new norm—to deliver targeted, custom messages to these granular audiences based on recent interest in real time.

This means that the new critical skill is algorithmic strategy. Optimizing your system to deliver the best results possible once you turn it loose and then capitalizing on the patterns, trends, and opportunities that emerge as your programmatic campaign unfolds—these are the fruits of programmatic.

"I'm anticipating that in five years, my role and the focus of my business will have changed completely," Jackson says. "And I don't look for that with concern or fear, just opportunity. If you're a person willing to stand still and let things pass by, you'll face challenges. But if you keep your eyes open for trends and innovations, you'll be well set to succeed."⁸

"If you're a person willing to stand still and let things pass by, you'll face challenges. But if you keep your eyes open for trends and innovations, you'll be well set to succeed."

ROB JACKSON
Managing Director
DBi UK

Data continues to **TRANSFORM DIGITAL MARKETING.**

The term “programmatic advertising” refers broadly to any automated data-driven and transparent media purchase. If a machine buys something without a human clicking a mouse to trigger the transaction, then a programmatic purchase has occurred. That means if you’ve instructed eBay to bid on your behalf up to a certain threshold, you’ve dipped your toe into the programmatic sea.

In practice, however, many more factors affect a programmatic purchase than just an item’s availability and price. In the eBay example, you selected the item and your top price. The only variables your system had to react to were additional bids. In the universe of programmatic advertising, the algorithms that control your system’s decision-making are influenced by myriad variables and by blending data from several different sources.

The display marketplace where programmatic purchases are made is called a demand-side platform (DSP). It’s where your automated, electronic ad buyer scans the available display inventory from publishers, presented through a supply-side platform (SSP), and decides whether it likes what it sees enough to make a purchase, via either a bid or a direct sale. Your ad buyer makes its decisions based on an array of factors that combine to indicate whether a given purchase represents strong value—whether it promises the opportunity to show the right message to the right user on the right device at the right time. The system makes those determinations by following strategic priorities set by marketers and by analyzing customer data that it accesses through a connected system called a data management platform (DMP). If everything looks good, the system pulls the trigger.

In a programmatic campaign, machines do the buying and selling, but their success is entirely dependent on the quality of the strategy and the data, not to mention the creative that ultimately is served to the customer.

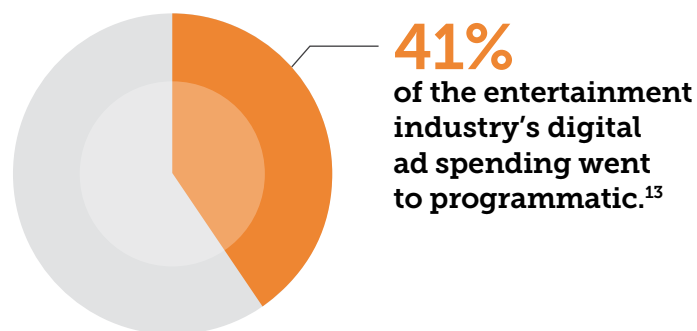
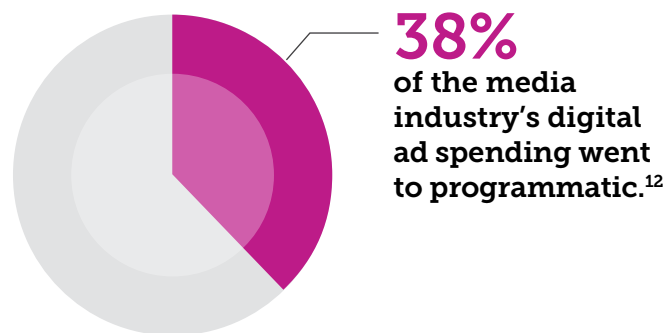
“If you put poor quality data into that system, you’ll get rubbish out. We have a responsibility to maintain our ecosystem by putting good quality data in that system and to personalize at scale,” Jackson says.⁹

Quality data is what informs good programmatic decisions. It’s how you know what you know about your customer—their traits, their history with your brand, the contours of their customer journey, how similar customers are responding to various iterations of your campaign. The more you know, the more on-target your ads can be.

So, the process involves a lot of data from a variety of first-, second- and third-party sources. There are simply too many variables at play to make individual, manual decisions for each conceivable customer and circumstance, which is one reason why automating the process makes so much sense. Another reason is that by handing those tasks over to a computer, marketers are able to devote more of their time to a strategic role—designing the flight plan and then monitoring progress and making adjustments.

Why everyone hasn't yet joined **THE REVOLUTION.**

Although programmatic ad buying already accounts for a large and growing share of the digital advertising market, most marketers haven't yet adopted the tools. Instead, a minority of early adopter advertisers—just 23 percent, according to Forrester—are buying programmatic in bulk and have given automated buying its robust market share within digital display.¹⁰ Also, certain industries have been quicker to adopt the new technology. The entertainment industry used programmatic for 41 percent of its 2015 digital ad spending and the media industry for 38 percent, according to CMO.com's State of Digital Marketing report.¹¹



There are a handful of reasons why many advertisers have been slow to go programmatic. For one, embracing programmatic not only means entrusting your campaigns to an automated process, but it also may require reengineering your marketing team. Organizations with channel-based teams, for example, typically assign fixed budgets to the display, search, mobile, and social teams. An automated buying system that optimizes its purchases among channels based on in-the-moment performance can play havoc with the culture and structure of channel-based teams.

Then there's the issue of learning to gather and analyze the data necessary to power an effective programmatic system. It's not easy to unify the first-, second- and third-party data you collect across different channels, especially if you've been relying on different point solutions to address each channel independently.

A third barrier to programmatic adoption is the reputation of supporting low-end remnant inventory that programmatic buying acquired when it was new. The tech was interesting, but for some marketers it was hard to dissociate the method from the product, which often was an uninspiring garage sale of bot-infested Internet leftovers. Now that premium inventory and sources outside of display are available in programmatic, the perception is changing.

Exacerbating the problem was poor transparency: Marketers struggled to see exactly what their machines had bought, as well as all the details of the associated transaction. Advertisers worried that they were paying for fake views and that referral fees among publishers tainted the process. Yet as programmatic has matured, publishers have increased the premium inventory available through a variety of public and private programmatic exchanges and have begun to sell off this inventory both through auction and direct sale, while also offering greater visibility.

The future of **AUDIENCE ENGAGEMENT.**

What's really pushing programmatic into the mainstream, though, is performance. Organizations that use programmatic successfully are seeing exceptional results across a wide range of quality inventory, channels, and devices.

Robust programmatic enables marketers to understand their customers better than ever before. It offers a granular view and a fast, clear picture of behavior, enabling marketers to better anticipate the appeal of their messages to different audiences. The result is simple: better performance.

Textbook rental company Chegg, for example, used programmatic buying to perform extensive audience testing to compare different types of students. The company's data management platform optimized around groups that were most responsive to various campaigns, and it took advantage of one of programmatic's chief selling points—the ability to target highly specific audiences. The result was a new understanding of Chegg's most valuable audiences.

The strategic refinements that followed yielded a 22 percent reduction in cost per acquisition and a 100 percent increase in lifetime value per customer. "Automating our programs enabled us to reach a higher-value audience at a lower cost. We now know more about our students and their needs," says Gary Tsang, marketing director at Chegg.¹⁴

And as programmatic campaigns gather information about best-performing audiences, they also produce insights about potential new customers.

At DVD renter Redbox, one of the primary goals of its programmatic advertising efforts was to identify and reach new audience segments, using second- and third-party data to target audiences such as soccer moms and music junkies. The company's data management platform monitored the behavior of its existing customers and then used that information both to identify promising new audiences with similar traits and to empirically predict the messaging to which those new audiences would respond.

That's a success story in its own right, but it's not the whole story: Redbox also saved time by employing programmatic, requiring eight fewer hours of human attention per week. Redbox's return on campaign ad spend jumped 300 percent.¹⁵

"Automating our programs enabled us to reach a higher-value audience at a lower cost. We now know more about our students and their needs."

GARY TSANG
Marketing Director
Chegg

Inside a **PROGRAMMATIC CAMPAIGN.**

Digital insights and delivery mechanisms make possible a more timely and intimate relationship between brand and consumer than ever before. Programmatic buying, because it is so fast and so targeted, facilitates a highly personal and timely conversation between brand and consumer.

Programmatic campaigns like Redbox's often start with identifying a brand's existing customers and core audiences, blending online data (such as how that customer interacted with your website) with offline data (such as their purchase history or call center records).


Marketers feed that data into a data management platform, where they combine it with second- and third-party data. Second-party data is data collected directly by a partner company—say, a credit card company that's partnering with an airline—and possesses a level of detail similar to your own first-party data. Third-party data is available for purchase from specialized data aggregators and is often used to provide audience- and trait-level information. When information from all three sources is gathered and unified by a data management platform, marketers can create more granular views of their customers and identify specific high-value audiences.

Those audiences then become the focal point for the ad-buying algorithms, which will weigh the value of each available ad according to the value of the customers who will see it—a value based

in part on the audience to which they belong. As campaigns evolve, the fun really starts because a data management system gets smarter as it goes, feeding new data back in and using it to refine its performance.

The machine will note which groups are responding well to various messages and can make adjustments to the campaigns based on those results, pushing more spending toward a high-performing audience or adjusting the content that's served to a lower performing one. In a prospecting campaign, the machines are able to identify and target look-alike audiences composed of people with traits similar to high-performing audiences. In a retargeting effort, the system can tweak its purchases based on the effectiveness of similar ads shown to similar customers.

Additionally, a platform can employ statistical techniques, such as predictive analytics and audience clustering, to identify new audiences based on shared behavior patterns or other characteristics through look-alike modeling within the data management platform. This extends a customer's audience reach through acquisition campaigns. The longer the campaign runs and the more data it gathers, the greater its efficiency and accuracy, not to mention its ability to turn up unexpected insights. For example, it can make subtle adjustments to the value of a certain audience based on the conversion propensity of a particular trait associated with that audience.



“There’s a premium on having the right people to be able to pull the levers to make it all work. Creativity and strategy are still paramount.”

TIM WADDELL

Director of Product Marketing
Adobe

All of that happens automatically. Then, based on the results of the campaign in progress—including the adjustments made by the programmatic system—the human marketers monitoring the campaign can step in to make adjustments, emphasizing one channel or another, tweaking the creative, or building a new strategy around a newfound audience. This means that the ability to recognize trends and insights resulting from programmatic campaigns and then to make course corrections is a critical skill for the programmatic-era marketer.

“Once you’ve unleashed the hounds, you need a really focused and intelligent team to execute on the insights generated,” says Adobe’s Tim Waddell. “There’s a premium on having the right people to be able to pull the levers to make it all work. Creativity and strategy are still paramount.”¹⁶

At eHealth, for example, the marketing team monitors the performance of its programmatic ads hourly during its peak season and does a complete, full-team review that includes analytics once a week. At that meeting, the team makes changes to its creative assets or spend guidelines—the rules that guide the automated system’s decision-making engine.¹⁷

One thing that eHealth’s marketers watch for specifically is where the automated system seems to stress itself. If it’s struggling to spend its budget in a certain category, then Rachel Rambo learns that a particular audience may be smaller than expected. Or if a campaign delivers a lower-than-expected cost per impression or cost of acquisition, Rambo might raise the budget for that audience or channel because it has proven to be unexpectedly fertile ground.

“We can truly forecast out what our budget should look like, versus sticking a finger in the air and guessing,” Rambo says.¹⁸

Why this is good news **FOR YOU.**

Advertisers who aren't on board with programmatic will find themselves working harder than ever to process orders of increasing complexity and specificity. More meetings, more calls, more emails, more bug fixing. And all that extra work won't equal better performance. The return will decrease over time, as more of the ad-buying market becomes programmatic. Any decision-making that boils down to simple math—such as, “Does it make sense to buy this ad based on its probability of success?”—is better left to a computer.

But advertisers who embrace programmatic can shuffle off those simple, rule-based tasks and devote themselves to the higher level skills that ultimately determine a campaign's success or failure: targeting, testing, analyzing audience segments and campaign performance, and then adjusting the algorithms to keep the machine's decisions in line with strategic priorities. The result should be a noticeable uptick in efficiency and productivity—both in ad spend and on your marketing team.

THREE KEY BENEFITS programmatic brings to your campaigns.



Clearer data.

The gathering and unifying of customer data makes true programmatic advertising a powerful tool for marketers. It becomes even more valuable when fed through a powerful analytics engine, which provides marketers with an exceptional view of their customers and their campaign performance. With the ability to see which audiences are responding to their message, marketers are able to quickly target more people in those audiences or even prospect among people outside the customer base with similar traits. A clear view of campaign and customer data sets the table for smarter planning and execution.



More strategic planning and analysis.

Automation empowers advertisers to look at various combinations and scenarios across channels and practices instead of cherry-picking practices and analysis by channel. Rambo learned that firsthand at eHealth. The insurer's first attempt at automated buying was isolated by channel, and she quickly saw the limits of the system. If the same customer saw messages on more than one channel, then multiple ad systems would claim the conversion. That meant the data was unreliable and thus diminished the power of programmatic. Also, the different systems varied in their reporting speeds.

Once eHealth adopted a cross-channel programmatic solution last year, Rambo could finally gauge her campaign performance and allocate spend accordingly. She could see what was working, make a plan to capitalize at scale, and take advantage.

"We can just jump right in and start to push," she says.¹⁹

The system, of course, is able to make micro-optimizations while a campaign runs. But the decision to expand a campaign nationally based on a regional finding, go hard after a high-performing audience, or focus on one particular region or product that suddenly shows strong resonance with consumers is one for Rambo and her team to make, enabled by the data and insights generated through programmatic advertising.



Smarter decision-making.

Another issue with channel-dependent decision-making is that it often takes a limited view of the customer, focusing on device-specific behavior rather than the broader customer journey. That makes for poor choices, especially considering that 60 percent of adults use at least two screens a day, and 40 percent of those who start an activity on one screen finish it on another, according to a Facebook report.²⁰

In a unified, cross-channel, programmatic world, decision-making is informed not only by more data, but also by a broader context, helping marketers focus on the customer journey in all its fullness and leveraging the channels most likely to be effective in a given moment. It encourages a people-based marketing approach that's likely to increase conversions while also helping marketers to better calculate their true audience size, retention rate, and revenue per person.

You can make decisions with speed, and at scale, and do so with confidence.

The glorious **FUTURE.**

An automation revolution is under way within advertising. Programmatic media buying, informed by complex and varied data sources, is here to stay and will continue to increase in prominence and capacity. Not only will it consume a majority of digital ad spend as we know it, but as more traditional channels such as TV, radio, and even outdoor display are connected to or delivered over the Internet, it's likely that automation will become the default means of buying ads across all media.

The good news for advertisers is that programmatic makes your job more straightforward. You're allowed to focus on the important stuff, the high-level stuff, and leave the repetitive and menial business of placing ad orders to the machines. The result will be a win for everybody. For customers, their relationship with their favorite brands will grow stronger. For executives, they'll see greater productivity and efficiency from their marketing investment and ad spend. And for marketers, they'll be able to concentrate on strategy and decision-making, informed by an abundance of useful, actionable data. They'll learn that in the future of advertising, it's possible to save time, save money, and skip the hassle, while doing their jobs better than ever.

ADOBE can help.

With the programmatic advertising capabilities in Adobe Marketing Cloud, you can manage new technology, growing channels, and shifting customer data and efficiently reach customers. Integrate the following Adobe solutions to strip away the complexity of programmatic advertising:



Adobe Media Optimizer: Search, display, and social campaign management and optimization allow you to run accurate simulations and budget recommendations.



Adobe Analytics: Use engagement or conversion metrics to create models and recommendations to drive campaign performance in Adobe Media Optimizer.



Adobe Audience Manager: Combine all of your data sources in one place and create customer profiles.



Adobe Campaign: Use loyal customer lists to run social retargeting.

To learn more, go to www.adobe.com/marketing-cloud/programmatic-advertising.html

- 1 "Love Among the Ruins," *Mad Men*, directed by Lesli Linka Glatter. AMC, August 23, 2009.
- 2 "More Than Two-Thirds of US Digital Display Ad Spending Is Programmatic," eMarketer.com, April 5, 2015.
- 3 Magna Global, "Magna Global's New Programmatic Forecasts," September 2014.
- 4 Personal interview with Rob Jackson, managing director, DBi UK, May 5, 2016.
- 5 Personal interview with Tim Waddell, director of product marketing, Adobe Media Optimizer, May 24, 2016.
- 6 Interview with Jackson.
- 7 Personal interview with Rachel Rambo, marketing manager of customer acquisition, eHealth, June 9, 2016.
- 8 Interview with Jackson.
- 9 Ibid.
- 10 Richard Joyce and James Nail, "Media Buying's Evolution Challenges Marketers," Forrester, December 8, 2015.
- 11 "CMO.com's 2016 State of Digital Marketing by Industry," CMO.com, March 23, 2016.
- 12 Ibid.
- 13 Ibid.
- 14 "The Power of Good Data," Adobe Customer Story, April 2016.
- 15 Latanya Hodges, "Get the most out of your data with today's technology," Session 201, Adobe Summit, March 2016.
- 16 Interview with Waddell.
- 17 Interview with Rambo.
- 18 Ibid.
- 19 Ibid.
- 20 "Finding Simplicity in a Multi-Device World," March 6, 2014, GfK research report commissioned by Facebook. Survey of 2,018 UK online adults and 2,004 U.S. online adults.



Adobe and the Adobe logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries. All other trademarks are the property of their respective owners.

© 2016 Adobe Systems Incorporated. All rights reserved.
Printed in the USA. 10/16