

# Date Optimization Watch

The tech and tools you need to make the right decisions for your organization, in real time

**T**he ability to sort through data sets, find the right targets and present them with messaging and content where and when they are most likely to see it is essential for marketers in 2015. Thankfully, technology solutions are more readily available—and more affordable—than ever before to make this a reality and help marketers stay on the leading edge.

“Marketing has always had to drive insight from data, but today it is essential to discover the best customer experience and create the most effective marketing strategies to drive revenue,” says Andrea Ward, vice president, Oracle Marketing Cloud. “We’ve all heard that ‘big data solves it all,’ but if the data is incomplete or fragmented, it can lead a marketer to the wrong decision.”

Tools can help marketers craft a cohesive profile of their customers and prospects, she notes. “Data optimization solutions help marketers manage first, second and third-party data so that it is actionable, and kept up-to-date. Without this level of quality of data, marketers will struggle to engage customers, optimize the experience or demonstrate how their activities impact the bottom line.”

## MORE FOR LESS

The cost of data optimization solutions

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## A NEW FAMILY

### BEHIND ANCESTRY.COM'S HYBRID USER DATA TEAM

Ancestry.com has tons of user data from its 2.7 million subscribers, and it created a new marketing infrastructure group within its organization to handle all that info, tapping team members who have the IT expertise, marketing skills and analytics know-how.

In the past, Ancestry.com tried to solve its data issues by buying lots of new software solutions, but that led to staff training problems, difficulty in reporting success and ultimately resulted in a lot of untimely, messy and unreliable data, according to Ancestry.com architect/data manager Spencer Curtis, who presented on the topic at the Teradata ONE Marketing Festival.

"Inside our organization, we had marketing, analytics and IT groups, but we wanted a separate, hybrid IT-like group with marketing and analytics skills," Curtis said. This marketing infrastructure group is charged with making sense of Ancestry.com's huge volume of customer data so that the marketing, analytics and IT teams can better leverage the data.

The team maintains the data infrastructure for the organization, including the initial and ongoing building and enhancement of the restructured databases, said Curtis.

"It really helped us bring everyone together."

When it comes to the data itself, Ancestry.com's various team were having trouble accessing data in ways that made sense for their particular applications, and in a timely manner.

"We created a wiki knowledge base of data attributes that everyone can understand, we keep it very accessible and up-to-date," he noted. "Everyone knows what data is available and what they can have."

A quality assurance workflow process was also put in place to ensure that every time a team put a data project in motion, there is adequate time for QA. "We have a workflow in place that controls that and enforces

that it happens. Every request goes through the same process," said Curtis.

Another difficult task for Ancestry was setting out a structure for the data architecture/IT relationship to ensure that all of the data the organization was using was coming from one source, as opposed to a variety of sources. The team worked with IT to figure out an official source of data, how it is collected and how it is stored.

"We have one location where this is stored together, where it's easily accessible and where it's in the right place," he said.

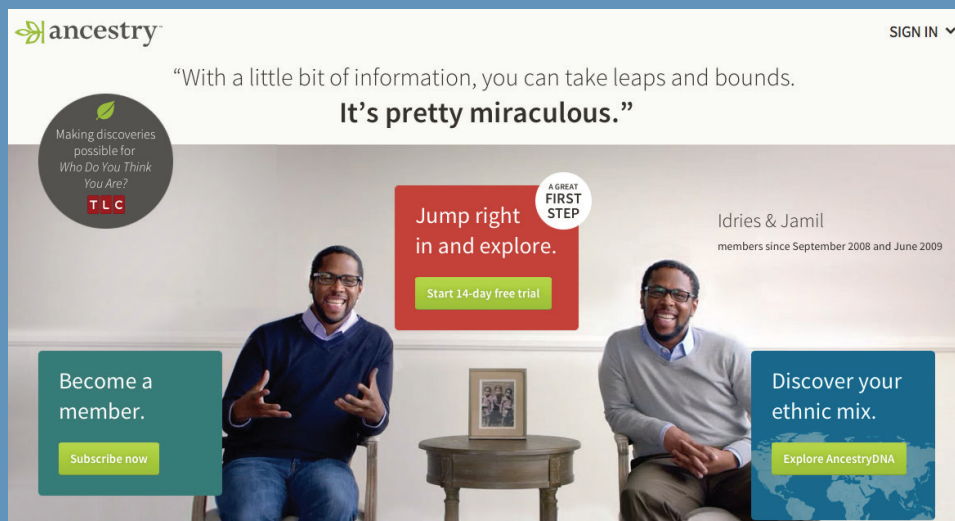
Addressing the team's data challenges from an organizational standpoint as well as a data standpoint was one of the keys to success for Ancestry.com.

"You can spend a lot of time throwing money at these problems, but what we found was the best

way to do this was to step back and get the right organization in place," noted Curtis. "Get the right people that can drive success and make sure the right technology and the data is there."

Once the marketing infrastructure group and the revamped data setup was in place, the team was able to readdress its approach to data segmentation projects, which were taking the organization hours to complete in some cases. By using persisted segmentation processes, or finding a target audience through data and capturing their information in a temporary table that excludes unnecessary information, the team saw significant time improvements in executions.

"We went from hours, in some cases, to minutes," he said. "We're extremely flexible now—as long as we build the segmentation in a better way, we're not bogging down the system."



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has dropped over the past several years, making once-expensive tech more affordable and thus more accessible for a wider range of marketing organizations.

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— ANDREA WARD, ORACLE  
MARKETING CLOUD

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"When you see what massive data centers used to cost in order to run databases, and the software we run on our machines, it's no comparison," says Chris Penn, vice president of marketing technology, SHIFT Communications. "Five to ten years ago, to have a one terabyte database server would have cost tens to hundreds of thousands of dollars. Now for the same amount of data it would cost between 23 and 30 cents a month. It's amazing the way in which the tools have evolved."

For example, IBM's new big data Watson analytics software is available for \$30 per month.

"Think about it," notes Penn. "For less than what I pay for coffee per-month, I can buy access to a supercomputer that has millions of nodes and for \$30 a month I can have it deliver insights that 10 years ago were not even possible."

Marketers also want to import clean, accurate data into their nurture tracks as quickly as possible to help streamline the customer experience and the sales process. Getting the data right *before* it gets into the database is key.

"If you get it right before it goes into your system, not only does it improve customer experience but it also doesn't slow down salespeople with bad information," says Scott Vaughan, CMO, Integrate. "Ultimately what you see is higher conversions, and decreased cost per opportunity because your data is accurate."

For example, Integrate's data solution validates and verifies data for relevance to a campaign, and verifies the contact's email, phone and mailing address data before it is cleared to enter a database.

"Think of it as the bouncer at the front door to verify that you get what you pay for before it moves into databases and automation tracks. We find that 39% of data has incorrect information at some level—either it's invalid or incomplete or

doesn't meet the right criteria," Vaughan says.

Of course, Penn says, now that the tools are within reach, the knowledge *to use* the tools is something that marketers need to acquire.

## THE SOCIAL EVOLUTION

"The gap used to be resources—you couldn't afford it. Now it's what to do with all of these tools. The fastest way for a marketer to get ahead today is to start learning how data works," he notes. "Learn what data is, how to use it. Learn the basics of statistics and data storage, reporting—remember, if you're not good at small data, you won't be good at big data either."

Gleaning insights from social media data is an ever-changing space, and tech solutions are slowly making strides to keep up.

The first step to success lies in learning what data is available to you from social networks already. If you go into Twitter's analytics portal you will see a few stats here and there, but when you download your own data there are 30 or 40 different fields, many of which aren't readily available on the interface, says Penn.

"We've written our own software internally to do some of this work because it simply doesn't exist yet," he adds. "Yes you'll have to write some code to do that but once you do, you can pull all of the data out of your social networks, put it into your own master analytics database and from there extract analysis and insights, and come up with an improved strategy."

## PERSONALIZATION & INTEGRATION

Marketers need accurate information so that they can personalize communications that are more engaging to customers. Getting the data right from the get-go is an important step that will result in fewer headaches down the line.

"If your data isn't clean, formatted and standardized, that's a problem," Vaughan says. "With marketing automation, targeting and retargeting and CRM tech solutions helping marketers personalize campaigns, accurate data is critically important," Vaughan says.

Marketers also need to make sure that core systems are integrated so that the data can be integrated, and to standardize processes for data, he adds. "If you have data coming in from multiple points and it's not standardized, it's going to come in bad or wrong or different, which will cause conflict."

Bringing different silos of data together is also a challenge notes, UnboundID CEO Steve Shoaff. Marketing organizations engaging with

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## TAKING ACTION

### NEW SOLUTIONS TO TRANSFORM BIG DATA INTO A VALUABLE MARKETING ASSET

The tremendous wealth of data created in recent years has the potential to provide companies with highly valuable insights. Big data drives evidence-based decision-making, and the organizations harnessing it effectively with comprehensive analytics programs are twice as likely to be in the top quartile of financial performance in their industries, according to a survey by Bain and Company.

While this alone is a compelling reason for enterprises to increase their commitment to big data initiatives, the benefits could go even further than back-end analytics. Big data is well known for its ability to provide overarching insights into trends and informing strategy and resource allocation, but imagine the exponential value big data could offer marketers if it delivered detailed information about each customer. The value increases even more with the ability to use this data at the point of customer interaction. Instead of existing as a by-product of digital business, customer data could be an indispensable tool for improving customer experience.

### PUTTING YOUR DATA TO WORK

There are ways to unlock big data's potential to improve customer experience and enable customer profile data to be managed securely and delivered at the scale and performance necessary to support multi-channel consumer use cases.

The first step is aggregating a single customer view by unifying data sourced across disparate silos. There are many different ways to accomplish this. Some companies elect to use a master data management (MDM) system, while others rely on a customer relationship management (CRM) solution. However, these systems are not designed to deliver a single view of the customer externally at the scale, performance, and security required to provide a personalized customer experience across multi-channel systems of engagement.

A new category of solutions has evolved to address these needs. With names such as customer identity management, identity and access management or identity and preference management, these systems are uniquely capable of delivering key requirements for using big data to enhance customer experience. They can manage hundreds of millions of identities and attributes and hundreds of thousands of concurrent users. These systems provide millisecond rapid response times meeting customer expectations for fast, convenient digital interactions. They can stand alone serving as both a data store and customer



engagement platform. Or they can integrate with MDM and CRM systems to make the data in these stores actionable at customer interaction points.

Having an actionable customer profile also relies on up-to-the-moment data. In many IT environments data synchronization occurs periodically, and data silos prevent synchronization altogether. Real-time data sync ensures all data, no matter where it is being used, is current and accurate. The right data sync technology will be able to quickly move billions of data points bi-directionally between the customer input point and the data store.

According to the Federal Bureau of Investigation, data theft is the fastest growing crime in the United States. Protecting data is absolutely crucial to being able to use it outside of your firewall. Data should be encrypted as it moves throughout every system, spanning the entry point, when it is in transit, and when it is at rest in the data store. Additionally, IT needs to have a sophisticated alerting system that can immediately notify administrators of an anomaly that could indicate a breach.

Another critical technology capability that ensures data remains secure is the ability to limit the type of data visible to each app, employee or third party service provider. An automated email marketing service should only be able to access email addresses and names, not financial information, for example.

Data is no longer an artifact of doing business; it is quickly taking center stage as the vehicle for customer experience improvement. Analytics have made data an asset, but actionable customer data has the potential to provide value beyond what we've experienced before. The organizations that succeed in the digital era will be the ones who build unified customer data management into their customer outreach DNA.

—Steve Shoaff, CEO, UnboundID

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customers across an ever-growing array of digital channels typically deal with many different data repositories, and the number is increasing. In some cases, data is stored and owned by third parties, such as automated marketing services.

"The problem is data can't be shared between tools, apps and departments so it remains locked away and unusable," says Shoaff. "Siloed data is difficult or impossible to share, and more importantly for marketing efforts, it can't provide a single customer view."

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The unfortunate consequence of not having a single customer view is a disjointed, customer experience—and that leads to unsatisfied or frustrated customers, he says. "A loyal e-commerce customer will experience frustration when he has to create another account profile to access the pharmacy department. Or consider the case of

a customer who tries to access her bank's new mobile app, but the security access code texts are sent to an outdated phone number."

## WHAT'S NEXT

One big trend in marketing data tech is pattern recognition, so that marketers won't need to collect as much personally identifying information on customers and prospects.

"It's about tracking online patterns of behavior—if I know where my company's sales and marketing fits into those patterns, then I can be predictive about the purchases of anyone else who exhibits a similar pattern," says Penn. "I don't need to collect all of that invasive information, I can tell by a pattern of behavior what they're likely to look at next."

Vaughan agrees that predictive analytics is the future of marketing data tech.

"Predictive analytics data based on past user behavior and pushing it through into nurture tracks and sales follow-up is where we are headed. Now, we're trying to predict what's going to happen based on the data sets that we have and what other customers have done."




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