



Banking on big (and small) data to understand customers

By David M. Wallace, Global Financial Services Marketing Manager for SAS

[Editor's note: This article appears in the BAI Banking Strategies Executive Report: *Making a difference with the mass affluent*]

As customers increasingly embrace digital banking, financial institutions have opportunities to better understand and serve them. Seeing how a customer moves through your website or adopts your latest apps can provide tremendous insight. But it also raises a lot of questions about what data to use, how to use it and how to manage it.

Much of the discussion about data in recent years has revolved around **big data**: reams of unstructured and semistructured data, including online comments, notes from call center interactions, transactions and website clicks. This is a tremendous amount of data – 12 billion rows for one large bank mentioned in *Big Data in Big Companies*, a white paper published by the International Institute for Analytics last year. This data has been used to develop customer segmentation, predict trends and anticipate problem areas. Think of it as providing institutions with a macro view.

Seventy-five percent of US banking transactions in 2012 came from digital

channels, according to CEB Tower Group, and the percentage is growing.

But actual personalization of marketing offers came through the “small data” – looking at what offer the customer last responded to in order to draw conclusions on what to offer next. Or pulling a marketing list together based on a specific action – an account opened, or a loan taken out. It’s the micro view of the customer.

As banks move toward understanding customers in the digital world, they need to combine the small data view with large data approaches to get a better understanding of their customers.

Anticipating the next need

Banks understand that they can’t expect to meet customers in person anymore. Seventy-five percent of US banking transactions in 2012 came from digital channels, according to CEB Tower Group, and the percentage is growing. Freed from needing to build and staff branches, banks can turn their attention to enhancing the digital experience.

For a long time the discussion in marketing was about breaking down silos. If a customer had a credit card, a loan and a checking account with your organization, you wanted to have that data all in one place to help decide what to market to the customer next.

Likewise, you don’t want to track customers digitally in an abstract fashion. Yes, it is important to benchmark the percent of customers who abandon a web page, or ignore an email marketing message. But what you really want to do is be able to follow customers as they make their way through your organization to understand the paths on their journey that are well-trodden and what that means.

Think of it as attaching a little GPS to the digital footprint of every customer to help you see how they move through your digital world. Roll the data up to look at major trends, and keep the data at the customer level to figure out the next-best offer.

Factoring in privacy

Customers are very comfortable with the idea that you know them. In a 2013 survey commissioned by SAS, 60 percent of customers expect companies they do business with to understand their needs and preferences. About 59 percent of consumers have noticed improvements in marketing personalization in the past few years. Consumers want you to protect their credit cards and account numbers, but they are fine with you knowing that they might be interested in a car loan. If you've ever gotten a coupon offer on your smartphone for a store you are about to go shopping at, you understand this concept.

Making it personal

Understanding digital movement has been difficult because it has depended on laborious re-tagging of new Web pages by website administrators, which then can be undone by cookie blockers and firewalls. In addition, the activities of possible customers could not be understood until they became actual customers – limiting the knowledge you could obtain of what they are interested in. Finally, it was too labor-intensive to link this customer browsing behavior to other data, like purchases and transactions.

By building a customer-centric data model that structures all incoming data around the customer, there is no need for this constant re-tagging of pages. A single line of HTML embedded within each Web page can automatically obtain page information: what the customer does and sees, the order and timing of elements loading on the page, the hovering of a mouse over a selection, and keystrokes. Privacy, security and data protection issues are rigorously managed using industry-standard encryption.

This detailed level of online behavior can be combined with other, offline sources, and then fed into a decision engine to determine the most appropriate, personalized offer to the customer – in real time. This results in more relevant, targeted communications.

How's this different from looking at traditional metrics like page views, or time spent on a page? Let's assume you've created an ad that pops up for customers whom your analysis suggests might be possible consumers of wealth management services. But the click-through rates are abysmal. Is it the ad? Is it the targeted customers? With customer personalization, a client reaches a conversion page that

could be from a referring site, an email or other sources. The client abandons the conversion page and returns to the home page. More data, from the online behavior and other sources, becomes the input for additional advanced predictive analytics. A specific real-time behavior model then activates a targeted personalization for the client or prospective client.

This type of personalization is within reach. You can gain more meaningful customer insight to develop and deliver personalized offers without breaking the marketing bank.



David M. Wallace, Global Financial Services Marketing Manager for SAS

