Advanced analytics redefines banking

Innovators are using big data and analytics to sharpen risk assessment and drive revenue.

In the 1980s and 1990s, IT systems transformed virtually every single bank process. Today, banks have that rare opportunity to reinvent themselves again—with data and analytics. "Every single major decision to drive revenue, to control costs, or to mitigate risks can be infused with data and analytics," says Toos Daruvala, a director in McKinsey's New York office. "[This] will be a differentiator for some period of time." In a new video, on mckinsey.com, Daruvala explains how three diverse banks are using analytics to gain an edge in a cutthroat environment—by improving risk assessment and predicting customer behavior. What follows is an edited transcript of his remarks.

Drive revenue, reduce risk

Data and analytics provides a few very big opportunities for banks. At some level, actually, you can think of it as a way to transform the institution, much the way in the 1980s and 1990s and early 2000s IT and systems basically transformed every single bank in terms of how you apply IT to different business processes from a cost-reduction standpoint, from a revenue-generation standpoint, et cetera. I think in the same way, you'll find data and analytics transforming institutions.

What you see is that almost every single major decision to drive revenue, to control costs, or to mitigate risks can be infused with data and analytics. Typically, the near-end applications that we see are in marketing and customer-sales leads and lead generation and on risk management. Both are disciplines that have historically used information pretty well. But I think we are now at the next frontier in terms of using both data and analytics to drive revenue generation through marketing, through next-product-to-buy, through lead-mining models like that, as well as to drive better risk decisions.

Three examples

Let me give you a couple of examples of real-world situations where I've seen this applied quite powerfully. There was one large bank in the US, which had not refreshed their small-business underwriting models in several years. Certainly not post the crisis. And they were getting worried about the discriminatory power of these models.

The Gini coefficient of their models—which is just a measure of how powerful a model is in terms of its ability to discriminate between good risks and bad risks—was down in the sort of 40- to 45-percent range. What these folks did was developed a 360-degree view of the customer across the entire relationship that that small business had with the bank, across all the silos. Not easy to do; easy to talk about, not easy to do.

And then what they did was selectively append third-party data from external sources, trying to figure out which of those third-party pieces of information would have the most discriminatory power. And they applied the analytical techniques to redo their models and essentially took the Gini coefficient of the models up into the 75-percent range from the 40- to 45-percent range, which is a huge improvement in the discriminatory power of those models.

Another bank that we were working with was in the developing markets, where data to begin with is pretty thin on consumers. And they decided that they would try to actually get data from the local telco. The paying behavior for the telco is actually a great predictive indicator for the credit behavior with the bank. And so they bought the data, appended that to the bank data, and again had a huge improvement in underwriting.

Another institution, a marketing example, where we ended up using, again, that 360-degree view of the consumer and then appending some external data around social media to figure out what's the right next product to buy for that consumer and then equip the front line to make that offer to that consumer when they walk into the branch or when they call into the call center. And the efficacy of their predictor models on next-product-to-buy improved dramatically as well.

So these are examples of things that you can do. And part of the reason why this is so important is that in the banking world, of course, in the current regulatory and macroeconomic environment, growth is really, really, really hard to come by.

'A huge differentiator'

I think the advanced-analytics opportunity quite simply is an opportunity to redefine the playing field. I think some banks will seize that opportunity and will be able to truly differentiate themselves using data and analytics. Examples I would use are some banks that in the early days used ATMs to truly create competitive advantage for a few years. Some banks in the early days of the Internet truly created a differentiated position online for themselves.

I think that's the way to think about it. Data and analytics will be a differentiator for some period of time, with other banks playing catch-up. So there's an opportunity here if you choose, as an institution, to be thoughtful about where you make some smart, targeted investments. Do you use data and analytics to drive growth in the business, to drive better risk behaviors in the business, and to reduce costs across the business? And that can be a huge differentiator. ☐

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