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Putting big data and advanced analytics to work

In a video feature, McKinsey director David Court explains how companies can improve their decisions and performance by getting powerful new tools in the hands of frontline managers.

Big data and analytics have climbed to the top of the corporate agenda—with ample reason. Together, they promise to transform the way many companies do business, delivering performance improvements not seen since the redesign of core processes in the 1990s. As such, these tools and techniques will open new avenues of competitive advantage.

Many executives, however, remain unsure about how to proceed. They're not certain their organizations are prepared for the required changes, and a lot of companies have yet to fully exploit the data or analytics capabilities they currently possess.

In this video, McKinsey director David Court describes a way forward, with insights that also appear in a recent *Harvard Business Review* article written together with McKinsey's global managing director, Dominic Barton. Court advises companies to focus on the big decisions where better data and models will improve outcomes. Leaders also need to transform their organizations so that frontline managers are comfortable using the potent new tools.

The video and the edited transcript below are excerpts from Court's September 2012 conversation with McKinsey Publishing's Frank Comes.

Getting leaders' attention

Big data and analytics actually have been receiving attention for a few years, but the reason is changing. A few years ago, I thought the question was "We have all this data. Surely there's something we can do with it." Now the question is "I see my competitors exploiting this and I feel I'm getting behind." And in fact, the people who say this are right.

If you look at the advantages people get from using data and analytics—in terms of what they can do in pricing, what they can do in customer care, what they can do in segmentation, what they can do in inventory management—it's not a little bit of a difference anymore. It's a significant difference. And for that reason, the question being asked is "I'm behind. I don't like it. Catch me up."

I get asked, “Who’s big data for?” And my answer is it’s for just about everybody. There are going to be data-based companies: Amazon, Google, Bloomberg. They’re great companies, and they have a lot of opportunity. But just because you’re not going to be a data company doesn’t mean you can’t exploit data analytics. And the key is to focus on the big decisions for which if you had better data, if you had better predictive ability, if you had a better ability to optimize, you’d make more money.

Finding better answers

So where have I been seeing data analytics recently? Well, the answer is in many places. Let me focus first on efforts to do better things with your customers. An airline optimizing what price it charges on each flight for any day of the week. A bank figuring out how to best do its customer care across the four or five channels that it has. Allowing customers to be able to ask questions and get better answers and to direct them. All of that is on the customer side of things.

And then in operations, think of an airline or a railway scheduling its crews. Think of a retailer optimizing its supply chain for how much inventory to hold versus “What do I pay for my transportation costs?” All of that lends itself to big data—the need to model—but frontline managers have to be able to use it.

Changing the organization

So what’s the formula or what’s the key success factor for exploiting data analytics? From our work—and we’ve probably talked to 100 people—it always comes down to three things: data, models, transformation. Data is the creative use of internal and external data to give you a broader view on what is happening to your operations or your customer. Modeling is all about using that data to get workable models that can either help you predict better or allow you to optimize better in terms of your business.

And the third success factor is about transforming the company to take advantage of that data in models. This is all about simple tools for managers—doubling down on the training for managers so they understand, have confidence in, and can use the tools. Transforming your company to take advantage of data and analytics is the hard part, OK?

I always describe both a short-term problem and a medium-term problem. The short-term problem is that if you’ve developed a new model that predicts or optimizes, how do you get your frontline managers to use it? That’s always a combination of simple tools and training and things like that. Then there’s a medium-term challenge, which is “How do I upscale my company to be able to do this on a broader scale?”

The question then is how to build what I'm going to call the "bimodal athlete." And what I mean by this is, imagine that we go to a retailer and meet its buyers, or to a technology company or consumer company and meet the people that make the pricing decisions, or to somebody doing scheduling. Here you need people that have a sense of the business, and they need to be comfortable with using the data analytics. If you're good at data analytics but you don't have this feel for the business, you'll make naïve decisions. If you're comfortable with the feel of the business but you never use analytics, you're just leaving a lot of money on the table that your competitors are going to be able to exploit. So the challenge is how to build that bimodal athlete and how to get the technical talent.

Executing big data

There are several things you just have to do. The first is you need to focus. And what I mean by focus is, let's take a pricing manager in a consumer services company or a buyer in a retailer. They have 22 things they do. Don't try and change 22 things; try and change 2 or 3 things. Focus on part of the decision and focus, therefore, where the greatest economic leverage is in the business.

The second is that you've got to make a decision support tool the frontline user understands and has confidence in. The moment you make it simple, understandable, then people start using it and you get better decisions. For a company, if you have 100,000 employees and you've got only 14 that actually know this stuff and how to use it, you're not going to get sustainable change.

You don't have to have 100,000. But you might have to have 10,000, five years from now, that are comfortable with analytics. So, again, link it to the processes, get the metrics right, and make sure you build the capabilities across the company. □

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