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How NBCUniversal is creating 'pull' for analytics

To realize the full potential of data analytics, start with your people and their needs, says Cameron Davies, the company's head of corporate decision sciences.

The most effective data-driven decisions are often the ones in which the users themselves drive data demand. As a general rule, frontline employees know more than data scientists, even the most brilliant ones, about the problems they need help solving. Those same employees are also the ones who must embrace—but sometimes ignore—the data-analysis tools and interfaces companies provide them. Cameron Davies, head of corporate decision sciences for NBCUniversal, recently recently sat down with McKinsey's Kayvaun Rowshankish and David Schwartz and described how these demand-side dynamics operate at his company. To be sure, analytics leaders can and should push employees to stretch their thinking, and they should provide better tools to help generate faster, more insightful solutions. But at the end of the day, says Davies, it's the users' needs that are being solved for. Leaders striving to make data a source of competitive advantage must respect this reality and strive for a culture where people across the organization are driving demand for data, instead of the other way around.

The Quarterly: As the leader of NBCUniversal analytics, how would you define your goal?

Cameron Davies: Our goal is to advance the organization, for competitive advantage, when it comes to data. That shows up in many different forms, including how we create, measure, market, distribute, and price content. Not

just Broadcast and Cable Entertainment; it's parks and studios, too. We've seen this growth across the organization in five major pillars that continues to evolve: data strategy, predictive analytics (how many people are going to watch commercials, watch a movie, or walk through a park?), content advocacy (how can we help our producers make better decisions about creative content?), pricing and yield, and marketing, which is where most big data started and continues to grow.

The Quarterly: How would you define data culture, and how important has it been in achieving your goals?

Cameron Davies: The subject of data culture comes up a lot, and it's hard to nail down. I always think about it in corporate terms: What do you demand? What do you expect? What will you accept? Demand may be, "We treat all people fairly, and we treat them with respect." But do you really expect it? And do you accept it when it doesn't happen?

We think about it that way when it comes to data. What are things we demand be true about our data and how we treat and consume it? For example, we take PII [personally identifiable information] very seriously. We have policies stating what is allowed and what is not allowed. Going against those policies will probably end up in you losing your job.

That's what a data culture starts to be about—about what your expectations of handling your consumers' data is, and then how you expect people to consume it and use it across the organization—less so than this idea of a "data-driven culture." I've never met anyone that truly enjoys being told what to do or not being consulted or given a choice in a matter. Most people like to be *self*-driven. Consequently, we like to think about it as a data-*informed* culture. How do we make sure the information you need is available to make the best decision possible? And how do we augment that at every opportunity?

The Quarterly: It's also a question of mind-set—what can the data do for me?

Cameron Davies: It's a great point. How does working with you, your data, or your new "tool" make me faster, smarter, cooler, or richer? Isn't that what everybody is looking for? If I can't bring that to the table with my solution, whether it's a simple data report or an advanced AI [artificial intelligence] model, then people just aren't interested in talking to me. And, quite frankly, I don't blame them. If a vendor comes to me to offer me a service, I'm asking them the exact same thing.

The Quarterly: So is it fair to say that what you're trying to accomplish as an analytics leader depends on who the users are and what they're trying to accomplish?

Cameron Davies: Yes. I see so many internal consultants, internal data scientists that are so enamored with the science of what they're doing and the technology and the data engineering that they completely ignore what they're trying to solve. In fact, they haven't even had a one-on-one conversation with their end users to really understand what their problems and challenges are. It's really hard to think about this cool, advanced AI thing that can help my creative content and tell me how much violence and sex should I have in a show, or not have in a show, when I don't even know how the show's doing in my distributed environments. Or, "All my viewing doubles in 35 days, and you can't even tell me where it's viewed and who are the people that are watching it?"

In 1962, Everett Rogers wrote a book called *Diffusion of Innovations*. Everybody loved to talk about the early innovators, the characteristics of adopters, the diffusion of information. For whatever reason, nobody likes to talk about the really cool part of the book, which is the characteristics of the products that actually made it and stuck. And I encourage everybody: go

CAMERON DAVIES

Vital statistics

Born 1968, in Salt Lake City, Utah

Education

Received a BS in business and accounting in 1990 from Pensacola Christian College and an MBA in marketing research and operations management in 1994 from the University of West Florida College of Business

Career highlights

NBCUniversal

(2013–present) Head of corporate decision sciences

The Walt Disney Company (1996–2013) Senior director of management science and integration

Fast facts

Was a full-time professor teaching courses in statistics, operations management, accounting, finance, and marketing at Pensacola Christian College from 1989 to 1996. He is an avid golfer and proud grandfather. read that part of the book. Especially if you're an analytics professional, it goes straight to the core of the need state of people and why certain products actually speak to those need states. Most often, we'll try to kick Maslow's hierarchy of needs straight up to actualization. But it's really hard to think about whether or not I like Monet's art when I'm hungry and I have no shoes. Organizations are the same way.

The Quarterly: At the same time, we see users can become so stuck in the ways of solving problems with the tools and data they're accustomed to that they don't know what their challenges are—or, at least, what questions to ask. Do you need to help stretch employees' thinking and broaden their horizons for solving problems?

Cameron Davies: It's hard. How do you overcome the inertia of current tools and processes and habits? For forecasting, our teams had an external tool, and they said, "We use this to forecast." How they really used the tool was to pull historic data; it was an advanced form of a spreadsheet that autopulled numbers they then downloaded and manipulated in Excel, loaded back up to automatically create the file they needed to send off to the Sales systems. "Look, see, it's my forecaster!" No, it's an Excel spreadsheet.

But people really loved that tool. And there were people that had been with the company 15 years and grew up using that tool. We talked to all the users, we brought our team in, and we created a version of the types of tools that have been used for years in yield-management practices in hotels and airlines. But we didn't take it all the way to completion. We took it 80 percent of the way there. Then we let the users take it the rest of the way, so they had ownership in it. We weren't just forcing a tool on them. I said to them, "We're not going to kill the old system. Here's what we're going to go do: we will support you. We're going to go one cycle on it. If it's not easier to use, if it's not more convenient, if it is not transparent, we'll put you back on the old system. We'll walk away." Almost unanimously, people came back and said, "Those things that used to take us a week to do, we just did in three hours. This is amazing."

The Quarterly: Are there ways that you can measure data culture, either to look at results or use as a method of incentivizing people to shift?

Cameron Davies: Measurement at how effective you are is always tough. One of the best ways to measure whether people like a tool or not is, "Did they use it?" If people aren't using it, then they don't like it. We're not doing what we should be doing. If we're really doing what we should be doing, our products should become scalable and more widely adopted.

If you want to know if you're in a data culture, don't look at the ad hoc demands on your team. Look at the adoption of the tools you're putting into daily processes. That's really our goal and, for me, our biggest benchmark: Can we put tools in people's hands that help them make better decisions every day? (Q)

Cameron Davies is the head of corporate decision sciences for NBCUniversal. This interview was conducted by **Kayvaun Rowshankish**, a partner in McKinsey's New York office, and **David Schwartz**, a member of McKinsey Publishing who is based in the Stamford office.

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