



SPOTLIGHT ON FIBERTOWER

**DAVE HOLMES-KINSELLA, DIRECTOR OF ANALYTICS,
OFFER MANAGEMENT GROUP**



FiberTower is one of the largest alternative backhaul providers in the United States, serving six of the top eight wireless carriers. As Director of Analytics for FiberTower's Offer Management Group, Dave Holmes-Kinsella is responsible for analyzing market data to help ensure successful offers to the large cell phone companies FiberTower serves. Tableau interviewed Dave at the 2010 Tableau Customer Conference. Talking about the benefit of Tableau, Dave said "It really boils down to the speed of information."

TABLEAU:

What's the business problem you're trying to solve with Tableau?

DAVE:

Informed, effective decision-making is the big reason why we use Tableau, and there are really two parts to that. Certainly, when the information is being presented to the stakeholders that need to consume it, it's important to get the information in front of them as quickly as possible. The more quickly the information is assembled, the faster it drives decision-making. That's the first reason.

The second reason is that Tableau makes it very easy for us to understand what's in and what's out of the data being considered. We can see outliers, we can see noisy data, and in particular, we can know definitively, and indeed display, what's not being considered as part of the decision process. That's very important because, in a company like ours, where necessarily we're dealing with a lot of large data and occasionally impure data, for people to know what we have – to be able to visualize the information that is in and is out – is pretty appealing.

TABLEAU:

What kind of data are you looking at, and what kinds of decisions are you making?

DAVE:

There are a number of different dimensions. Our business is serving the large wireless carriers with backhaul services, so a big part of our decision process is geographic analysis – where are these sites, what is their proximity to each other, and so on. Then we layer in dimensions of information about who the prospective customers are on these sites, how often they buy from us, how long it takes them to buy from us, and so on. Being able to take this multidimensional approach and roll it up makes it pretty attractive to people who need to feel confident that we are looking for the right sorts of answers.

TABLEAU:

What's an example of a decision that you've made based on your Tableau analysis?

DAVE:

One pretty useful example of how Tableau drove our business decision-making was when we were investigating the opportunity to provide service to poorly-served households as part of the national broadband initiative's NTIA grant program through the summer and fall of last year. It required us to look, literally, nationwide to see where there were opportunities to extend our markets in places that were traditionally unattractive to us. Being able to do that visually was new for us, where previously everything had been done in spreadsheets, or the result of painstaking GIS analysis and map-creation by specialized engineers.

TABLEAU:

Tell me more about the difference in time and process when you're using Tableau, versus the old way of doing analysis.

DAVE:

Tableau has really transformed our analytical approach. Once upon a time, a data set would be handed over to an engineer or an analyst. He or she would go away for a week or two and come back with some well-scrubbed maps, presenting information in summary

form, with recommendations for decision-making. With the Tableau tools today, both the desktop product and the web server product, we do that analysis interactively, right there with the stakeholders in the room. We can perform the what-if analyses and look at the different scenarios and come to decisions in real time, as opposed to days or weeks.

TABLEAU:

Many of our customers would be interested in hearing more about how you use Tableau in a real-time meeting. How do you do that effectively?

DAVE:

The first thing you have to do is assemble your information. You have to start by understanding what your data are, and you have to have some sense of the nature of the decisions you're going to be trying to make.

One of the things you're going to want to have some sense of walking in to the meeting is: what sort of story are you looking to tell with this information? You may find yourself going down a path that is not what you would expect, but in more scientific terms, you have to have some hypotheses that you're prepared to test. Assemble the data, and the happy thing about Tableau is that it makes it simple to add information to the data set that you're considering, and iterate on that information as you go.

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TABLEAU:

How many people use Tableau within FiberTower? And what are their roles?

DAVE:

The number of people who create Tableau workbooks is of the order of 5 to 10 people inside the organization. People who consume it are different people at different times – 20 or 30 more.

It's really in three distinct groups. There is the IT organization, who uses it for their internal reporting and to support certain initiatives we have inside the company. There is the Offer Management Group, which in many ways is analogous to a classic marketing organization in other organizations. And then, importantly, Tableau is used as part of our Network Operations Center – our NOC. The ladies and gentlemen who are charged with managing and overseeing our network performance use Tableau to ease the creation and distribution of all sorts of reports that any 24/7 NOC will do.

TABLEAU:

How large is the data that you work with?

DAVE:

When we're talking about spreadsheets, it is typically of the order of up to 30 or 40 thousand rows of data. The other place where we have information is databases. We operate, predominantly, SQL Server and Oracle databases in our organization for different parts of the business, and we tend to do quick and dirty ETLs on a lot of information for point-in-time decision-making. We have a set of standard views inside of our organization, which allows people to collaborate across databases and across functional groups.

“It really boils down to the speed of information.”

It is usual that I will do two or three analyses involving 30 or 40 thousand records of data, each of which has more than a dozen attributes. The very largest projects we work on are measured in the dozens of gigabytes range. One of the nice things about Tableau is its scalability. Working with something like Excel, as flexible as it is, once you pass 20 or 30 thousand rows, it becomes painful. You spend more time waiting than working.

TABLEAU:

What kind of business benefits have you seen from Tableau?

“Instead of trying to craft your way through the data, we're able to inspect the output, run multiple scenarios on it very quickly, and figure out the best way to tell the story behind it.”

DAVE:

It really boils down to the speed of information. It really comes in two ways. The first one is that the information is presented more quickly to people, so we can make decisions faster, which brings with it a certain momentum. And the second thing is that because Tableau is so good at working with large data sets, it makes it easy for us to analyze and review and inspect the information, rather than try to assemble it and grind our way through minutes and minutes of waiting for work to be done. Instead of trying to craft your way through the data, we're able to inspect the output, run multiple scenarios on it very quickly, and figure out the best way to tell the story behind it.

TABLEAU:

When you first started using Tableau Server, how did people adjust to the new way of presenting information?

DAVE:

Introducing Tableau's Server product into our organization was relatively simple. Since the very earliest days, we have had an IT strategy of thin clients wherever possible throughout the organization. We run a number of web servers throughout our organization, so Tableau Server was a pretty easy sell: "Here's a URL. Go click on it, and see what it looks like." People were pretty attracted by that, and it was consistent with how we do things. What made it easy was that what they were looking at was very pretty. The information looks beautiful, and the maps are better than anything else we could generate with the tools we had at our disposal. People loved them.

“One of the things that I have been just wonderfully surprised by over the years is how well-focused Tableau is able to be on its customer service.”

TABLEAU:

Do you have executives looking at Tableau dashboards?

DAVE:

Yes. The population of Tableau viewers is really up and down the organization. In particular, when we look at the performance of our network – NOC, SLA reporting and so forth – that's seen in the very highest levels in our organization, frequently assembled with other information, and also on standalone bases.

TABLEAU

How long does it usually take you to get from the point of saying, “Hey, we need to look at this question” to an analysis?

DAVE:

The first step is to determine the nature of the hypotheses that we're going to want to test. It may be about customer growth. It may be about network performance. It may be about new opportunity. As we go through that, then we figure out which data sets we're going to want to work with. They're typically a collection of data we have already in our databases in standardized views. We just pull them into the Tableau workbook, and off we go.

TABLEAU

If you were to look at the ROI of Tableau, what would the buckets of return be and how would you quantify those?

DAVE:

The return on investment that Tableau has provided for us is really in terms of personnel saved. Where before you might have had a dedicated GIS engineer whose job it was to create these maps, perhaps a quarter to a half of their time is no longer required.

TABLEAU:

You mentioned that your IT group is using Tableau. Can you talk a bit more about how IT has received Tableau?

DAVE:

Like a lot of organizations, Tableau came to the company not through the traditional “IT identifies and selects a product,” but rather it was championed by an end-user group – the old marketing group at FiberTower. But, IT adopted it as part of the internal and core systems.

One of the ways in which it has been real easy to use and administer is licensing. The license management – from a technical perspective of installing, upgrading, and maintaining licenses – is very simple. It’s one of the things that could be a painful administrative overhead, but the way that Tableau thought about how people would actually use this thing on an ongoing basis has made life real easy for us.

“All the way along you feel confident that the people stand behind the product, and there’s no problem that’s insurmountable.”

TABLEAU

Any other thoughts you’d like to share with other Tableau customers?

DAVE:

When you buy a product from a company, it’s a relationship that is going to – hopefully, for both of you – endure for years. One of the things that the informed decision-maker will look at when he or she is buying a product is not just what there is today, nor even what there is coming in the future, but the men and women who stand behind the product. One of the things that I have been just wonderfully surprised by over the years is how well-focused Tableau is able to be on its customer service. It starts when you buy the product. It continues through the online forums, where it’s very easy to find people who are solving the same problems as you, and through the support organization. All the way along you feel confident that the people stand behind the product, and there’s no problem that’s insurmountable.

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