Spotlight On

CREIGHTON UNIVERSITY

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UNIVERSITY

DUEY HEFFELFINGER

Founded in 1878 and located in Omaha, Nebraska, Creighton University provides more than 7,600 professional and graduate students with a rigorous education grounded in the Catholic Jesuit tradition of service to others.

Creighton's admissions counselors use Tableau to get data while on the road. This means they can be more efficient and proactive about student recruitment than ever before. "What I really see with Tableau is how our counselors are able to take charge of their territories and their prospects. They're able to say, 'these are my best prospects and I should be calling these specific students now or dropping them an email.'" says Associate Director of Admissions Operations Duey Heffelfinger.

Do you think that Tableau on the iPad gives you a competitive advantage? If your counselors are out in the field trying to recruit a student, and maybe another university is also trying to recruit that student, does the ability to get data so quickly help them?

DUEY:
Yes, I think you hit the nail on the head. It's an advantage because of the speed of being able to get the information. We are able to respond to any market changes almost immediately.

Students can ask some unusual questions, and we are able to answer some of those questions faster than anybody else. But what I really see with Tableau is how our counselors are able to take charge of their territories and their prospects. They're able to say, 'these are my best prospects and I should be calling these students now or dropping them an email.' We also have student workers assigned to each of the counselors to write letters and make calls. That's the real advantage. We also have two regional recruiters who are able to access all that data remotely.

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TABLEAU:

How do you calculate the ROI of Tableau for Creighton? Is it time? Productivity? Budget?

DUEY:
It so clearly gave us much more opportunity and information than what we had in the past. The return on investment is just laid out there in front of you. This year our counselors actually have access to the data on Tableau Server. It is very obvious that with tools like Tableau, our counselors are much more effective on all levels of student recruitment. They're able to drill right down and determine who our student callers call and who they themselves call. They use Tableau to do that.

TABLEAU:

What problem were you trying to solve when you first got involved with Tableau?

DUEY:
We were trying to analyze our data and figure out where good markets might be for prospective students. We also wanted to do some tracking of how well our counselors were doing related to their goals. We provide a host of analytic data to our president and to our board related to applications and admittance and enrolling students. We also compare ourselves to other schools that our admitted students select. We're watching our competitors– if they're the same or if they're changing. We want to know what the price tolerance is and many other issues related to the admission process.

How were you getting information from all of this data before Tableau?

DUEY:

That was the interesting challenge. Our current process for admissions is based off of SQL servers, a product called R+. You can export data into Microsoft Access and write reports in Access to get to some of this data. One of the problems with that is that we don't have a data warehouse here, so sometimes there are some small consistency issues and you're trying to determine if things changed from one year to the next. So it was a larger relational system that was difficult in a way to really get at everything we wanted to get at.

TABLEAU:

How did bringing that data into Tableau help solve your problems?

DUEY:

For starters, it's much more visual. It's kind of going from the reporting process to an analytic process. With Tableau, we were able to establish worksheets that showed us our admission funnel. It's basically a bar chart that starts from the process of inquiry, and then the student applies, and admits, and so on and so forth through the process.

You can run that in a report, but it's not visually appealing and you can't filter on it. So if I wanted a report of overall and I wanted a report of every counselor and how they were doing in their admission funnel, I'd have to write a ten or twenty page report. With the Tableau worksheets, we could just start filtering by counselor. And then you get into the next question, which is, How are the colleges doing? How's the college of business doing? We could filter and get some answers. I suppose you could look through a stack of reports, but this was a much more convenient and efficient method of getting at that data.

"I've found it much more interactive and much more engaging for the audience to know that I can shift the analysis instantly."
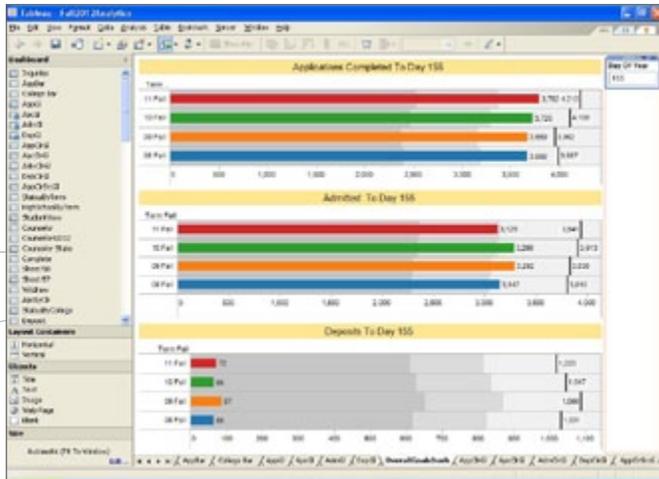
TABLEAU:

Can you give an example of an "aha moment" that came out of seeing all this data visually?

DUEY:

Before Tableau, getting access to that data was simply not quick or convenient. For example, we're recruiting approximately 950 to 1,000 freshmen each year. But at the end of April a couple of years ago, prior to Tableau, there was a discovery that we were running behind. Where are we running behind? How do we get to the end? We were trying to figure it out.

With Tableau, we monitor on a much more active basis. Now, in

November, I already know that I'm down in applications in Minnesota. I know that now instead of in April when you really can't do anything about it. We're able to really pinpoint. It could be by college. It could be the state. It could be a whole host of things that we're able to drill down and say this is where we seem to be having an issue and we can address that issue. It's much more specific than just saying our numbers are up or our numbers are down.

Creighton's Goals to Results dashboard is used by staff to monitor their progress toward their goals and assist in making decisions about where to travel and who to contact. Creighton used the blended data feature of Tableau including a goals spreadsheet and a database of actual results. In addition there are similar analytics that can be filtered by territory manager, demographic and specific high schools for travel and contact decisions.

Duey says, "What makes this analytic unique is the "Day of Year" parameter. Date based analytics don't work well for us as dates don't match up by weekday. The "Day of Year" parameter solves that by adjusting the start of our year to the first Monday before Labor Day. So in this case, day 155 for term Fall 2011 is Sunday, 1/30/2012."

So I think the "aha moment" with Tableau really came with the ability to be monitoring this mountain of data at a very precise level on a very regular basis. And comparing that to a couple of years ago when we were trying to reach that class size that we wanted to reach. Before, we didn't really know until the end. Maybe we gave away a little more financial aid to make sure we got that class, but we might have given some aid that we didn't necessarily need to. We didn't have a strong way of saying, here's the pocket of people that we really need to get involved and get to the next level to enroll.

TABLEAU:
So, your admissions counselors are able to go into Tableau Server and work with the data themselves?

DUEY:
Yes. For example, when a counselor goes to a high school here in Omaha, they can actually look on Tableau Server and see who are the students who have inquired from this school? Who should be coming to see me? They can do it themselves.

*What's another example of analytics you're doing about admissions?*

DUEY:
Our ACT quartiles analysis is used by our staff to monitor the quality of our class by ACT and ensure we are enrolling the proper students. We have this type of box plot for SAT, subscores and High School GPA. I particularly like this analytic as we took the standard Box Plot of descriptive statistics and added our own twists. We call this a "Bubble Box Plot" because in addition to the standard box plot we replaced the line between the whiskers with sized circles to represent the distribution of students by score. We also include a reference line of the mean as well.
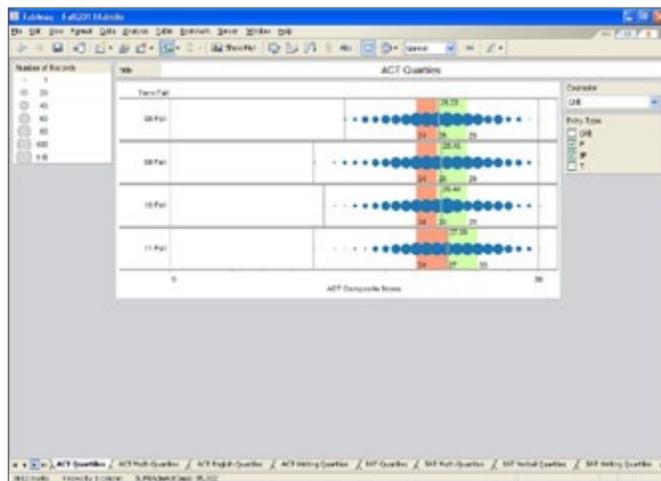
Creighton's ACT Quartiles analysis.

Another analysis we do is a win-loss analysis. This shows our win loss percentage by type of school. The "Creighton Blue" bubble represents the number of times a student enrolled at Creighton (Win) over a competitor school when a student applied at both institutions. The orange bubble represents the number of times the student enrolled at the competitor (Loss). This analytic is used to better determine who our competitors are and to assist in making decisions to improve our "Wins" over our competitors.
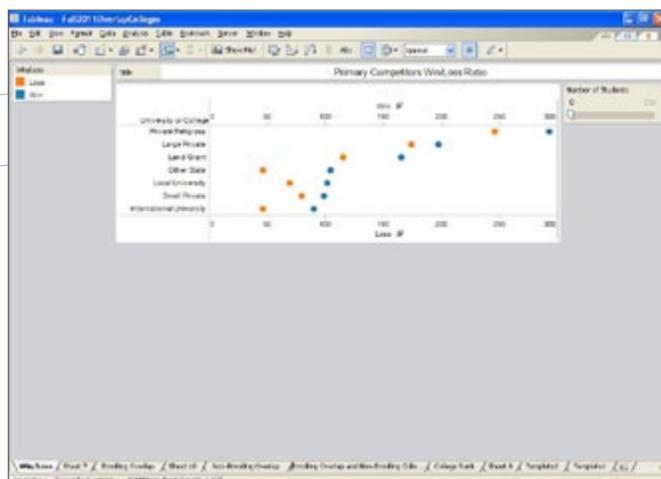
Creighton's win-loss report. Numbers and groupings are fictitious in this example.

TABLEAU:

How much more frequently are you reporting now with Tableau?

DUEY:

We update our data now on a daily basis. Before we were running a visit report maybe once a month. So we're basically utilizing live data on an everyday basis. And the key is not only to have access to that data on a regular basis, but to have access in a way that you want to use it or see it. For example, I may be a counselor in Chicago, and I really only care about my piece of the pie. I want to look at my Chicago data.

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TABLEAU:

And you're also able to get at data you didn't see before?

DUEY:

Yes, a prime example is that in previous years was we couldn't really figure out who our completed applications were without some real challenges. And now because we're doing some new things to load our data into Tableau Server, we're actually able to get some of those pieces that we really want.

TABLEAU:

How many people do you have using Tableau?

DUEY:

We have about 20 licenses on Tableau Server and four Tableau Desktop licenses in the admissions office.

TABLEAU:

How are you using Tableau on the iPad?

DUEY:

About half of our admissions counselors have iPads. They use them for all kinds of different things, including taking videos and pictures of campus. They use those in high school visits and college fairs, right down to how do I get to a school or mapping features and so on. Our iPad users have just been trained to download the Tableau App and utilize Tableau Server from their iPads.

TABLEAU:

Have you heard any reports yet from people using it in the field?

DUEY:

I've used it. The feature that I like the most is being able to highlight the filter, make the filter edits, and then have it automatically update.

The counselors have just started using it. It's so similar to Tableau Server, I don't think they're going to tell me much except that they love the fact that it's mobile. They don't have to carry their laptops

around. From what I've seen, most of the features are very similar to Tableau Server. In fact, I personally think it's easier to use than the web version, primarily because of the way the filters work.

TABLEAU:
So, your counselors on the road will be accessing the same kinds of information they would have been accessing from their laptops. It's just easier now.

DUEY:
Right. It's all directly connected to the Tableau Server software. It's more the mobility of it and the convenience of it.

TABLEAU:
Great. Having been through this process, what would you recommend to another educational institution that was considering Tableau?

DUEY:
The big advantage we have had is the ability to get the data cleaned, so we can utilize it in a very strong way. I think that one of the reasons that past efforts struggled with using Access or other tools is that the data wasn't in a convenient, accessible format. So as you bring Tableau on, as with any other tool like this, you probably need to have access to someone who knows and understands who, what, where, why and when the data is there. I would guess some people love the tool, but they may not really understand what their data looks like and what's really there.

Tableau Software helps people see and understand data.
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