



Princeton University Office of Development Sees "A Paradigm Shift" with Tableau

Princeton University, the fourth-oldest university in the United States, attracts the highest caliber of faculty, staff and students. The Office of Development at Princeton—the fundraising arm of the university—supports this legacy of excellence through a number of giving programs. The Office of Development wanted to overhaul time-consuming, error-prone manual reporting processes and develop a more data-driven culture. After adopting Tableau, the Princeton Office of Development has:

- Cut time-to-insight in half for campaign performance
- Minimized the risk of human error
- Improved communication throughout the department
- Developed better understanding of international alumni community

"We're able to produce results much faster thanks to Tableau—so we're answering more questions."

-Heather Campbell, Associate Director, Development Research Analytics, Princeton University



Princeton University Princeton, NJ www.princeton.edu 150 staffers & administrators interacting with data using Tableau Server.

Up to 8 million rows of data visualized for at-a-glance insight.

Insight sped from 2 days to "just a couple of clicks."



Potential for Significant Impact

One of the oldest and most respected universities in the United States, Princeton University boasts a generous financial aid program. The Office of Development plays a significant part in that effort, initiating and nurturing donor relationships. Its work also supports other crucial aspects of Princeton's mission.

"We raise money for scholarships, for fellowships and for professorships," says Heather Campbell, Associate Director, Development Research Analytics, Princeton University. "Our capital projects and important annual unrestricted funding comes from the support of our alumni, family and friends, organizations and foundations."

Support Staff in Need of Support

While the Office of Development maintained in-depth transactional giving data and relationship management data, staffers often had to dig through several different reports to answer questions—a time-consuming, manual effort with potential for mistakes.

"They were downloading five different reports and then putting them into Excel and merging them together, manipulating them a bunch of different ways to get the information," explains Campbell. "There's absolutely going to be human error whenever you start doing a lot of data manipulation in Excel."

Viewing data in Excel also made it difficult to notice results that didn't quite make sense—data entry errors or outliers that could indicate significant risks or opportunities. The volume of work posed another, more subtle issue for staffers.

"It can be easy to get into a mindset where you're simply checking off finding different data elements, rather than trying to understand the overall business question," says Campbell.



Manual Processes and Hunches

Members of the major gifts team each manage a pool of approximately 200 prospects—far too many people to rely on memory to manage contacts. With no dedicated tools to visualize overall engagement, the office has relied on large list reports and manual review of individual records to make sure prospect and donor relationships were adequately tended.

The research analytics team was responsible for reporting high-level campaign metrics to university trustees and other top executives, but this was another time-consuming, manual effort.

"We would run list reports or custom SQL extracts every other week and then manipulate the data in Excel; then we would put the graphical results into PowerPoint," Campbell says.

The process took at least two days to complete. Not only did this take two full days of employee time, it also meant that executives were making decisions based on stale data.

Finally, the international team had a difficult time finding reliable information about how Princeton alumni across the globe were interacting with University groups in general or the Office of Development, specifically.

"They used their hunches a lot and they were often very good. But we wanted to use data to validate those hunches."



Taking a Fresh Look at an Existing Tool

The Office of Development didn't realize it, but it already had the solution installed: Tableau. "We started using Tableau on our desktops in 2008," says Campbell. "We just used it for maps." In 2012 the Development Office made the decision to purchase several professional licenses providing direct access to the Oracle database.

"I think one of the reasons we didn't proceed sooner was a lack of understanding of the full benefits of the tool and a wariness of how much database support would be needed. In the end the benefits are far outweighing the cost. Although we are still playing catch up with our database architecture and optimization to best support this direct query access, it's a paradigm shift in the right direction.

Today, the Office of Development has 3 employees authoring data visualizations in Tableau Desktop and approximately 150 staffers and administrators consuming vizzes through Tableau Server.

In addition to visualizing data from their Oracle database, Campbell's team also blends data stored in Excel. They have begun experimenting with blending data from the university's Exact Target digital marketing automation platform. Typically, the team visualizes approximately a million rows, although some dashboards have included up to 8 million rows of data. For security they use Active Directory.



Benefits

"Today, it's all about the marriage between the art and the science of fundraising. With Tableau as a tool we're able to take some big steps in moving the science in field of fundraising forward," says Campbell. In particular, with Tableau the Office of Development has been able to:

• Minimize the risk of human error. Now that the Office of Development is using Tableau dashboards, a great deal of the data the team needs is available in one place, up-to-date, and pre-formatted. This not only saves time but also preserves data quality.

The major gifts team uses a Tableau dashboard to track interactions with prospects. "It allows them to quickly spot who they haven't seen in a while, or who might be a promising contact based on contextual information we are able to present on the same screen," says Campbell. "It actually might be a fairly simple bar chart, but for them that dynamic visual is important relationship management."

• Halve time-to-insight for campaign performance. Instead of requiring two days' worth of effort to access and format data for senior administrators and trustees, the Office of Development is able to access same-day data almost instantaneously through dashboards published to Server. "That was a huge step forward," says Campbell. "We're able to produce results much faster thanks to Tableau—so we're answering more questions."

Producing the original dashboard takes Campbell's team about a week, but once that is complete the team can simply refresh the data—which takes a matter of seconds—for an updated view. "Once the dashboard is published," Campbell says, "the analysis continues to live on."



• Communicate information more effectively. Campbell believes everyone from senior administrators to fundraisers absorb and connect with the visualizations better than with data in spreadsheet form. "What we're able to do with the numbers in Tableau—it's more impactful," she says.

The office's support staff and analysts alike have begun to think more holistically about the information they gather, a change Campbell attributes to Tableau.

"Tableau encourages people to think about the entire question, not just check off that they've found the different data elements—it brings in the overall context," she says. "It encourages a deeper level of thinking and learning rather than just confirmation."

Campbell says, "Tableau has given me a communication tool to speak with fundraisers. We're not just handing them a table of numbers—something people that are really great at managing relationships are not necessarily comfortable with. We're giving them a way to see their business."

• Support better engagement with international alumni community. The Office of Development is now mapping international alumni engagement, helping the frontline staff improve its prospecting efforts. The international alumni dashboard not only shows the number of alumni in a particular location, but also tracks event attendance, connection with the alumni association, and how many contacts alumni have had with the Office of Development.

"It was very easy to use Tableau to put all of this on a map and provide our staff with a visual sense of engagement. And it helps them verify that they're making realistic choices about where to focus their efforts."