

Analytics for Higher Education Demo

Hello, my name is Aaron Boucher, and I work for IBM Business Analytics, focusing on helping higher-education institutions leverage information to enable smarter educational outcomes. Today, I'm going to demonstrate a high-level introduction to our solutions.

Institutions are under increasing pressure to continue to advance student and staff successes with reduced public funding, continued budget pressures, and stringent compliance and transparency requirements. Achieving this success without trusted information to drive optimal decisions makes the business of managing education a challenge. Many institutions are faced with organizational data silos and a lack of a singular view of performance and accountability. By applying IBM Business Analytics, many higher-education institutions have torn down those silos and achieved a complete view of students, programs and budgets, alignment with institutional strategy and execution, identifying and accelerating the recruitment of the right students to achieve their institutional goals, the enhancing of university advancement and alumni management, improving student performance and retention, as well as improving operational efficiencies.

IBM Business Analytic software provides an integrated platform for educational performance management. It leverages all of an institution's critical data and delivers information through intelligent reporting and interactive analysis to understand historical performance, scorecards and proactive alerts to monitor key metrics, predictive analytics to better anticipate what is likely to happen, as well as budgeting and planning solutions to optimize performance accountability and drive future excellence.

Let's take a closer look at business analytics in action under the example of a grant management administrator. So here we are within our IBM Cognos Business Analytics grant management dashboard. As you can see, since I've logged in as the grants management administrator, I have grant-specific information available at my fingertips. This is all being viewed directly through a Web browser, so nothing needs to be downloaded. I can access this information from anywhere that I've got an Internet connection. There is various grant-level detail that is being displayed via this dashboard at a high level so that, at a glance, I can very quickly get a grasp for the grant information that's pertinent to me. On the left-hand side, I have various alerts that are proactively notifying me of certain business rules or thresholds that have been crossed, so it's being published directly here to the dashboard. I also have a series of standard reports that I commonly would like to run, as well as an overall geospatial or map-based analysis showing me the various amounts of grants, source funds by state. And then I have four visual dashboard objects here that are showing me, again, various sets of grant information. The first one we'll take a look at is actually this gauge for grant status, where it's showing me whether the grant has been applied, awarded, not awarded. And as I actually go to look at this information, I can choose to focus in on, say, maybe those grants that have not been awarded yet. So the dashboard, as you can tell, is very interactive. Not only is it customized for the information that is pertinent to me, but I can

interact with it, as well, to drill down to the details. In this case, I see that the college of arts and sciences actually had one of the largest remaining amounts, so that is showing up as an outlier amongst the data here. Equally, I can see that, within the non-degree type, that there's actually a very high percentage of completion, but an overall very low contribution of dollar amounts, so very interesting information.

Let's return back to the main dashboard page. So again, I can interact with this information such that, without even clicking, just by hovering over the various needles, in this case, it's letting me know what the awarded amounts are, and you can apply multiple measures on any dashboard object.

Let's continue to browse through the dashboard here. I have a nice time series analysis chart, where I'm looking at my actual versus budget amounts, and you can see that here, in the most recent periods, I have my actuals have actually exceeded my budget and crossed those spending thresholds, which is a concern. Over here, on the right-hand side, I've got a nice bar chart here, showing me grant amounts by college, and very quickly, I can see that the college of arts and sciences is one of the largest. And if I choose to drill down, in this case, as opposed to drilling through, directly here on the dashboard, it's going to provide more information. And just by right-clicking, I can choose to drill up all the way to the highest level so that here I can see all of the various colleges and degrees within those colleges.

Lastly, I've got another type of visual analysis on the dashboard here that's showing me spending by year. And this is showing me, by 2008 and 2009, what the various contributions to spend were, what the various categories were. Very quickly, just at a glance, I can see that employee benefits, by far, are making up the largest percentage. So if I wanted to actually drill down on that information, you can see the type of employee benefits that are driving that, and one of the largest is actually health insurance, which is not a surprise. If I want to, I've got the ability to right-click and go seek more information. Let me actually drill back up to the top of this hierarchy. And once I'm at the top of the hierarchy, I perform a right-click. One of my options is to go to a drill-through report. In this case, it's going to show me all of the spend by college, not just by actual spend category, in this case, employee benefits. So if I wanted to see which colleges had the largest amounts of employee benefits, you can very quickly see, again, it's the college of arts and sciences, which, for my university, is one of the largest. And secondarily, it actually is the school of graduate studies.

Let's go ahead and close this down and go back to our primary dashboard page. So I've already got a very good idea of where my award statuses are, how I'm performing against budget, as well as what colleges and majors are making up the majority of my spend.

Let me show you one more report type here, where I can actually look at current grant progress. This happens to be more of a formatted type report, which Cognos does an excellent job of generating, and this one's allowing me to interact even further via parameter-based inputs. So for instance, if I wanted to see a list of all of the grants that were less than 25% complete, I can go and filter this result set down directly here while

looking at the report. And if there's one particular grant that is of interest, perhaps this first one around water, where it's only 3% complete, just like any Internet application, if there's a blue hyperlink, it contains more information, more details behind it. And here, I can see all of the detailed grant information just by simply performing drill-down and drill-through types of actions. And we can go ahead and close this down and go back to the initial dashboard page.

So what you've seen me just demonstrate is a very high-level overview of a grant management dashboard through IBM Business Analytics. We invite you to come visit the IBM Web site and explore with us how IBM Business Analytics can add value to your institution. And we look forward to working with you. Thank you for your time.