

achieve

## Microsoft's Commitment to Maryland

In Maryland, a robust economy and effective education system benefit everyone. That's why Microsoft—in partnership with public and private organizations, community leaders, and business partners—is striving to foster innovation and economic development by improving access to powerful technology. Discover some of the exciting initiatives and investments taking place to help the people of your community achieve their full potential.

## Microsoft BI is Head of the Class at Coppin State University

Coppin State University (CSU) is a residential liberal arts university with a rich history in providing quality academic programs in the arts and sciences, teacher education, nursing, graduate studies, and continuing education. As a fully accredited institution, Coppin serves Baltimore residents as well as students from around the world. It is widely recognized for its intelligent use of information technology and is a recent recipient of the EDUCAUSE Award for Innovation in Network Technology and the Campus Technology Innovator Award from *Campus Technology* magazine.

In 2005, CSU's small IT staff was facing big problems that gave impetus to the search for a fully integrated business intelligence (BI) solution. One of the largest issues was mounting pressure to provide dependable business performance information to the organization. "We faced the realization that our decision-making process should be based on data, not assumptions or politics, and we needed something that would help us make informed decisions in a timely manner," said Dr. Ahmed El-Haggan, VP of IT and CIO. "From the faculty level all the way up to the president, everyone needs access to data all the time in order to make well-informed decisions on their own."

Equally important, CSU needed something to help it deal with the data-driven rigors associated with maintaining their status as an accredited university. "Maintaining our accredited status is critical; without it we would lose revenue, students, staff, and federal funding because we would lose all credibility and international appeal," said El-Haggan.

Faced with a small IT staff, a limited budget, and a need to optimize its existing PeopleSoft ERP application and HEAT helpdesk platform, solving their data access problems could have been a daunting task for CSU. Adding complexity, it needed a BI solution that would not take two or three years to implement. Finally it had to be easy-to-use with minimal training since it would be deployed to 200 users across the organization.

But to El-Haggan and his team, the answer was clear.

"During our ERP implementation, we felt very strongly that the [Microsoft] SQL Server environment was more than adequately scalable. However, our Service Center Board of Directors suggested we ask key industry analysts for guidance," said El-Haggan. "At the end of the day, our original strategy of SQL Server and Windows Server 2000 won out as the best choice for moving forward."

CSU also implemented Microsoft Office PerformancePoint™ Server 2007 for in-depth data analysis, an integrated performance

management application designed to help improve operational and financial performance across the organization.

Finally, CSU worked with Microsoft partner iStrategy to develop its HigherEd Analytics data warehouse and analytic reporting application, with pre-built integration to existing ERP systems, including PeopleSoft, Datatel, and Banner. The iStrategy solution is built on a Microsoft technology stack including SQL Server, Integration Services and Analysis Services, with PerformancePoint Server as the front-end analytic application.

CSU's decision to empower their users with access to information paid off even more quickly and profoundly than they expected.

The solution was deployed to 120 users, each with a personalized dashboard to track a variety of Key Performance Indicators (KPIs) necessary to manage operations. Metrics like applicant count, number of new applicants admitted, enrollment count, student grade point averages, and information from its HEAT helpdesk call tracking system are just a sampling of the items tracked to understand if the graduate and undergraduate schools are meeting projections. Additionally, from an accounting perspective, CSU tracks gifts and pledges, donor histories, and changes in giving patterns.

"The Microsoft BI offering, combined with iStrategy's industry expertise, satisfied 90% of our analysis and reporting needs right out-of-the-box. It was a very quick return for us. Eyes open and mouths drop when we show new users how easy it is to use, and our ability to access and analyze information has created a cultural change in the way we look at things and make decisions," said Prasad Doddanna, Director of Information Systems at CSU.

Additionally, iStrategy delivered a data model which included both relational star schemas and OLAP cubes that enabled the application to be installed in days and implemented within weeks. Immediately after installation, CSU was able to drill-down to underlying detail, with the ability to quickly export the information to other applications, including Microsoft Office Excel®, for further analysis

"It's extremely intuitive and easy to customize. Boom - we get a graph to analyze whatever we need. This functionality is extremely important to us, and adding new dimensions to reflect what we need in reports is a piece of cake," said El-Haggan.

"The friendly interface of the entire Microsoft BI offering and the ease-of-use has been very important because we want to push it out to more users throughout the university," added El-Haggan.

A concrete example of this is the Nursing school. “Traditionally, we have been very good at getting grants, but the process is extremely long and research intensive. However, with PerformancePoint Server, we were able to independently get all of the pertinent data needed and saved two to three weeks worth of research work. As a result, we received a \$750,000 grant that we might not have received without the Microsoft BI solution,” said Dr. Marcela Copes, Dean of the Nursing School.

Also key to the success of CSU is its ability to maintain its accredited status across its six schools/colleges. Traditionally, it has cost the university upwards of thousands of hours to get through the process and the requirements are becoming more difficult to meet.

“Before the implementation of our Microsoft BI solution, it took our School of Education about 1.5 fulltime employees to manually track our students’ progress. That is about 3,000 work hours a year that we replaced with a push of a button,” said Dr. Sadie Gregory, Interim President and VP of Academic Affairs. “It is not only the savings in work hours that we were interested in, but the business intelligence and the outcomes assessment as well as the ability to track the progress of our students down to a great detail. That was impossible before.”

The accreditation process is designed to make institutions more accountable, and includes a peer review process conducted by organizations that have been identified as ‘experts.’ A school cannot be successful without this seal of approval. If you don’t meet the standards, it’s a disaster...you lose the confidence of everyone,” said El-Haggan. “We are able to address this accountability through

our investment in Microsoft BI.”

Several different government bodies accredit educational institutions, and there are varying levels of accreditation including general school, specialized, and full vs. conditional accreditation. One of the more distinctive accreditations for CSU comes from the National Council for Accreditation of Teacher Education (NCATE). Their performance-based accreditation system requires institutions to provide evidence of competent teacher candidate performance.

“Our school of Education has 99 different and very detailed rubrics and milestones to assess students and understand if they have been successful or not. Previously, there was no way to manage all of that information, but Microsoft has provided us with a solution to this challenge,” said El-Haggan. “It helps the University keep track of student progress and identify those that are having a hard time before they get into real trouble.”

“We passed the NCATE accreditation with flying colors because we had the Microsoft BI solution, which gave us access to crucial information with a click of a button,” said Dr. Gregory.

“Now, many schools that are much bigger with much larger budgets are asking us to share the information on how we did it,” added El-Haggan.

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Director of Information Systems  
Coppin State University

