Improving Institutional Effectiveness

Cognizant DataInsight™ Analytics Solution Targets Performance in Higher Education

In a climate of closer scrutiny upon providers of higher education, institutions now face the need to perform more effectively across all of their functional areas, from admissions to enrollment to pedagogy to alumni relations (and everything in between). The problem is that each of these areas has its own systems and data. It has been difficult for higher-education institutions to obtain a global view of organizational performance informed by cross-functional data.

The lack of financial performance data can be particularly problematic. In today's fiscal climate, providers of higher education are more accountable than ever. Public universities face dwindling budgets and closer scrutiny. Parents and students decry the cost of secondary education vs. its value.

According to an Educational Center for Analysis and Research (ECAR) study, institutions of higher education need to focus on all metrics of performance, including institutional effectiveness, which is the combination of student success, financial sustainability and staff satisfaction. Institutions need to do more to help their students succeed. They need next-generation learning platforms that will deliver learning content effectively and efficiently.

They need better information on which to make decisions, which can be difficult to obtain across departments such as enrollment, finance and operations.

Many providers of higher education are now looking to analytical tools to help them better understand - and thereby improve - their financial performance and other key measures. The use of analytics is not restricted to universities' finance departments sharpening their operations, of course. Institutions are leveraging analytics to improve performance for IT, student retention, academic research, student enrollment, faculty and other functions.

However, while analytics use is prevalent in some functions (including Library and Alumni Relations) within an institution, it is not widespread in others (including Human Resources, Procurement, Facilities and Faculty Assessment). Measuring institutional effectiveness requires quality data from each function and the ability to consolidate data to report against the strategic plan.

To help address the information gap, university heads would benefit from being able to obtain a consolidated view of all departmental data. Dashboards would allow them to see how they are performing across different functions in terms of different key performance indicators (KPIs). This

1 http://www.educause.edu/library/resources/2012-ecar-study-analytics-higher-education
information could then be shared with regulatory bodies as needed and gives a clear picture of overall institutional effectiveness.

Analytics can help educational institutions track their performance against educational mission, financial and operational variables. Analytics helps to manage the outcomes required by the entire community – students, faculty and parents.

Performance Analytics in Higher Education: The DataInsight™ Solution for Institutional Effectiveness.

To date, most institutions have lacked well-defined business processes to measure and drive organizational performance. Traditionally, there has been weak awareness of technology aimed to help institutions become more effective. The few solutions that existed were not affordable, so it was difficult to show return on investment (ROI).

Institutions of higher education need to measure their progress against their missions, as well as their academic, financial and operational performance against goals (see Figure 1). Cognizant’s DataInsight™ analytics solution gives a complete view of students, faculty, curriculum, programs, operations and budgets, making it easy for leaders to manage and reduce risk while improving operational efficiency. Fed by data ranging from enterprise systems to simple flat files, the system ensures transparency across functions, driving the best outcomes. Cognizant’s DataInsight™ solution delivers academic decision makers better information, enabling them to improve academic, financial, business and operational performance.

Institutional Effectiveness Solution

Built upon a Microsoft cloud platform, the Cognizant DataInsight™ solution can be used with cloud-based storage. The solution analyzes data, identifies KPIs to be fed into dashboards, map the transactions, which are then stored in a data warehouse. Users can generate custom reports using a simple interface. We also provide services related to institutional performance management, including identifying needed reports, reengineering processes if necessary and developing the strategic plan.

Cognizant DataInsight™ Solution Features (see Figure 2):

- The ability to analyze and measure mission performance, academic performance, financial performance and operational performance of an institution.
• A single source of data information, which helps create an integrated view across business functions.
• The ability to produce dynamic reports with hierarchical drilling capability from summary to detail, such as the profitability of a single class.
• The ability to perform “what-if” modeling and scenario analyses to compare alternatives.

Cognizant DataInsight™ Solution

- Single Data Mart enables creation of a single source of truth across business functions within an institution.
- Performance Tracking helps track profitability of a single class.
- Compare Target vs Actual: Set targets and compare actual performance results.
- Adapters to other applications: Integration layer which includes adapters to other applications in the university eco-system with data interoperability standards.

Steps to Setting Up Cognizant DataInsight™

1. Identify data sources e.g. CRM, SIS, HCM, LMS data.
2. Identify relevant stakeholders – Provost, CFO, CIO etc.
3. Set business rules for data access.
4. Set up periodicity and access model (pull-push).
5. Move data on cloud.
6. Map data chunks to system defined variables.
7. Configure access rights.
8. Configure DataInsight.

DB Admin

Data Setup

Application Configuration

KPI Setup & Report Configuration

- Export data to other channels – via e-mail, feeds, university portals.
- Send reports to HCM, SIS etc.

Business Users

- Select metrics from the list for tracking.
- Configure data reports with data elements, frequency, chart type.
- Create custom reports and save them as template.

Functional Consultant/CIO’s office

- Review reports and compare with targets.
- Save reports.

Business Users

- Access reports and compare data-points.

- Export reports or send data to other systems.
Looking Ahead

Higher education is at a critical crossroads. Institutions are under more scrutiny than ever – financial and otherwise. But traditionally, institutions have had no good way to consolidate data across functions to better understand all aspects of business performance.

Now, institutions of higher education are using analytical tools to help them understand – and thereby improve – their financial performance and other key measures. Institutions are leveraging predictive analytics to improve performance for IT, student retention, academic research, student enrollment, faculty, finance and other functions.

Universities and other institutions are familiar with analytics, traditionally using these tools in functions such as Library and Alumni Relations. There is great opportunity to bring analytics to bear in other functions, including Human Resources, Procurement, Facilities and Faculty Assessment.

To thrive today demands that institutions of higher education concentrate on measuring and improving institutional effectiveness, which combines the areas of student success, financial sustainability and employee satisfaction. Toward that end, universities and other institutions of higher education are employing analytics to derive better information for decision-making, driving better performance across functions.

Institutions are leveraging predictive analytics to improve performance for IT, student retention, academic research, student enrollment, faculty and other functions. In the uncertain world of academia, analytics can help institutions not only survive, but prosper.

Get Started Today

We offer pilot projects to capture your institution’s performance against your mission and other goals. In a short six to eight week time frame – we can have your Data Insight proof-of-concept complete (see Figure 3). Contact us today to start improving your institution’s effectiveness.

About Cognizant Education

Cognizant Education provides end to end IT (enabled) services across the phases of planning, building and operating to address the challenges facing higher education institutions. Our solutions are fully integrated, from strategic business consulting, enterprise architecture, design, development, implementation, maintenance and support, IT infrastructure and business process outsourcing. Our Business Consulting practice offers solutions to support the transformation of higher education institutions including business and technology strategy and operations, data warehousing and business intelligence and next generation learning solutions to improve student success, institutional effectiveness and adaptive learning.

For more information, visit: www.cognizant.com/education or write to: EducationInquiry@cognizant.com.

About Cognizant

Cognizant (NASDAQ: CTSH) is a leading provider of information technology, consulting, and business process outsourcing services, dedicated to helping the world’s leading companies build stronger businesses. Headquartered in Teaneck, New Jersey (U.S.), Cognizant combines a passion for client satisfaction, technology innovation, deep industry and business process expertise, and a global, collaborative workforce that embodies the future of work. With over 75 development and delivery centers worldwide and approximately 187,400 employees as of June 30, 2014, Cognizant is a member of the NASDAQ-100, the S&P 500, the Forbes Global 2000, and the Fortune 500 and is ranked among the top performing and fastest growing companies in the world. Visit us online at www.cognizant.com or follow us on Twitter: Cognizant.