RETHINKING PROCESSES:

Reducing Costs and Maximizing
Resources in Education

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Educational institutions are facing enrollment increases while simultaneously experiencing significant budget cuts. The impact of these two trends has forced higher education institutions to raise tuition and reduce operating costs and administrative services in order to preserve academic and research programs while trying to attract the best faculty, staff and students.

In the UK, there has been significant controversy surrounding the government's intention to introduce "top-up fees" for higher education students. It is feared this will produce a two-tiered system, with the more prestigious, over-subscribed universities able to charge full tuition and still attract students, while less prestigious universities must charge less in order to compete. This may inevitably lead to a system whereby choice of university is based on affordability rather than academic ability/choice of courses.

Meanwhile, in Japan, economic recessions and lower birth rates have translated to low university enrollments. Many of the finest universities in that country are operating at far less than capacity. Fewer students means fewer funds to operate the universities, while recession makes it more difficult for students to afford to attend.

Education systems serving the primary/secondary market are also faced with budget shortfalls and increased political pressure to improve educational outcomes with less funding.

Yet as schools and institutions in the U.S. and abroad deal with shrinking budgets and other issues, they are simultaneously being asked to be more accountable for student performance and outcomes. Schools and institutions around the world, therefore, have to find new ways to fund initiatives that deliver outcomes while dealing with the numerous challenges they face on a daily basis.

> A New Way of Thinking

Fortunately, there are ways schools can help improve their circumstances. Schools and institutions must rethink how they approach education in order to reduce costs and invent ways to achieve their outcome-based objectives.

"The current situation is creating a new set of challenges for education and forcing schools to think long and hard about their core missions and what they are trying to achieve," said John Hrusovsky, managing partner for Accenture's Global Education Practice. "Schools need to find opportunities where they can leverage the funds they still have."

In short, Hrusovsky said, institutions and school systems need to think more like businesses and proactively seek ways to reduce costs and increase efficiencies. And, he said, innovative business processes supported by technology are excellent tools for helping schools do so. "Technology supporting new processes can help universities and school systems target opportunities to eliminate inefficiencies, identify innovative cost savings and then reinvest those savings into their core objectives rather than react to budget constraints through cuts and headcount reductions."

In fact, many school systems, colleges and universities around the world are already accomplishing these goals. Such institutions and school systems haven chosen to see the current situation as an opportunity to be creative rather than a setback, devising new, technology-infused ways to rethink, reinvent and reinvest.

The majority of such schools are accomplishing those objectives in five consistent ways: strategic sourcing, streamlining, shared services strategies, outsourcing, or enterprise energy management. While the institutions and school systems differ widely in their demographics and locations, they all have one thing in common: an effective executive sponsor who has convinced those who resist change to share his or her vision of improved administrative processes via technology.

This white paper will examine some of the institutions and school systems that are leading the way. These institutions are implementing new processes that generate cost savings which can then be used in programs that address the core mission of education.

> Strategic Sourcing

Strategic sourcing is the process of leveraging buying power, reducing the number of suppliers, verifying vendor compliance to negotiated agreements, and reducing the number of procurement transactions and cycle times. The idea is that, in evaluating opportunities to outsource, organizations can drive down unit costs and purchase commodities at the lowest possible cost of ownership.

"Institutions and school systems need to look at what they spend and the number of suppliers they have and compare that to external benchmarks," said Hrusovsky. "Typically, a large organization such as a university or a large school district spends a significant amount of dollars on routine and recurring purchases. If they purchase things more strategically, they'll usually find significant savings."

> New York City Department of Education

The New York City Department of Education (NYCDOE) manages the New York Public School System, the largest school system in the U.S. Over 1.1 million students in New York City attend 1,300 schools taught by over 80,000 teachers. The district also has over 50,000 staff and administrative personnel. It had also been operating at a substantial deficit.

"We had to go through a considerable reorganization," said Jason Henry of NYCDOE. "We knew we had to reduce costs, and one of the areas we wanted to look at was procurement. We were spending $2.6 billion in the area of commodities and services, and that seemed outrageous."

NYCDOE began by partnering with Accenture to perform a Vendor Commodity Analysis. The analysis pinpointed where their money was going and how they could use strategic sourcing to reduce costs. The analysis immediately identified $60 million in potential savings in the areas of computer hardware, software, telecommunications, office supplies, office equipment, instructional supplies, books, and maintenance. Realizing those savings was a matter of streamlining purchasing processes and using their purchasing power to negotiate discounts and new contracts.

During the analysis, NYCDOE also discovered they were doing business with over 700 different computer hardware suppliers. By negotiating contracts with just four primary hardware suppliers instead, the department was able to save 34 percent on computer purchases immediately. In examining their telecommunications services expenditures, NYCDOE found that telecommunications rates were being applied inconsistently and that they were paying huge late fees. By implementing electronic summary billing and converting 13,000 analog lines to Intellipath to ensure consistent competitive rates, the department eliminated late fees and lowered overall telecom costs. Additionally, NYCDOE reduced their office equipment supply base from 300 to just two contracted suppliers, standardized equipment specs from 400 to 13 and took advantage of purchase-to-lease conversions and fleet optimization to save even more money.

The department figures that, as new contracts continue to be negotiated, annual savings could exceed $70 million. In addition, NYCDOE is now positioned to leverage buying power more effectively, outsource non-core support functions, deploy new technologies such as e-procurement, extract better service from suppliers, and use data to make better decisions and measure supplier performance.

> Streamlining

Streamlining is an effective tool that institutions and school systems can use to examine processes and simplify them, often leveraging technology and other tools in order to enable self-service functions.

> The University of Texas at Austin

The University of Texas at Austin's Office of Sponsored Projects (OSP) recently streamlined their process for securing grants from external sources. OSP's mission is to help departments throughout the university obtain grants that can help them raise the level of their academic offerings. Securing grants is a paperwork-

intensive process that requires meticulous record-keeping to assure compliance with numerous university policies as well as government regulations. Completing the paperwork quickly and correctly generally improves a university's chances of securing such funding.

"The process we had for completing grant applications was largely paper-based and slow," said Rich Bredahl, senior systems analyst at OSP. "The different departments around campus would find a funding source, fill out all the necessary forms and bring them to us. We would then review them, enter information into the computer manually and send them out to the funding agency."

The slow turn-around occasionally meant the university missed deadlines for applying for grants. Looking to improve their chances, Bredahl began searching for ways to streamline the process by creating a database-driven repository that could generate completed forms on demand and transmit them via the Web. Bredahl found a system from Appligent that could extract content from the university database, fill in Acrobat forms and flatten the form fields on the server. The new system means users can now fill out computerized grant applications and submit them electronically to OSP for quick review and submission to various funding sources.

"We are already seeing cost savings in terms of the amount of paper we no longer have to use," said Bredahl. "We can also reassign personnel who used to handle the bulk of paperwork to other tasks, allowing us more productivity. And, we don't have to have runners physically bring proposals to our office anymore. Our campus is huge and a lot of departments are off site. It could take someone an hour or so to drop off a proposal. With the new system they do it all online."

Bredhal said the system may also help them generate more money from grants. "The research community has complained for years about having to jump through hoops to submit a proposal," he said. "This should help them out. If it makes it easier for them to submit proposals, it will give them more time to go out and look for more sources of funding that can help us deliver quality education to students."

> The University of Ulster, Northern Ireland

The University of Ulster recently streamlined its IT processes in order to improve efficiencies. The university, located in Northern Ireland, had relied on a fragmented set of 25 servers to support the information management needs of more than 24,000 full-time students, 4,500 further education students and 3,500 distance learning students abroad. Ulster was also using up to 40 different tape devices running four separate backup software systems to manage the backup and restore processes across its diverse operating systems and platforms. This inefficient approach made it difficult for the university to deal with rapid growth and deliver uninterrupted IT services to students and staff.

Andrew Gregg, assistant director of corporate information and infrastructure services at the university, saw the need for an information storage management solution. Once Gregg was able to convince others of the potential improvements, the university standardized on a VERITAS-based system designed to seamlessly backup and restore their range of operating systems. Using a single management interface, the university can now quickly and reliably back up remote sites across Ireland to its central IT room in Dublin.

Administrative personnel at Ulster now know that information will be continually available, wherever their students are in the world. They've also gained remarkable efficiencies. A process that would have taken 23 hours to complete before now takes just 15 minutes.

> South Carolina Department of Education

The South Carolina Department of Education recently began streamlining the financial systems of its schools statewide. All K-12 schools in the state now use InSite software to analyze school and district expenditures by function, program, grade level, and location, providing indepth management information. The system is helping administrators and taxpayers match dollars to needs and priorities and identify ways to increase school efficiencies.

"It helps us see where we are spending, and assess how we can spend as many dollars as possible on actual instruction," said Glenn Stiegman, assistant superintendent for business at Spartanburg District #7 in South Carolina.

Stiegman said the software also allows him to compare Spartanburg's financial data to that of districts similar to his. "If another district similar to ours has categories that are more economical, we can look at what they are doing to keep costs down and learn from that," he said.

Stiegman also uses his district's data as a tool for communicating to the Board of Trustees. Because it's third-party data that has been gathered in a consistent way around the state and isn't skewed by the idiosyncrasies of individual accounting systems, it carries more credibility.

"This last budget cycle, when we were looking at where to make reductions, it was valuable to illustrate to our board that we were trying to make reductions as far away from the students as we possibly could," said Stiegman. "It has also helped highlight numerous areas where we could potentially save money."

One test district in Charlotte, S.C., reported using the model to identify potential savings of $4 million.

> Shared Services

Other schools are uncovering savings via shared services. Shared services is the process of consolidating distributed administrative staff and facilities into shared services centers, applying integrated technology solutions and self-service tools to lower the cost of providing services.

"The concept is to consolidate the delivery of administrative support functions into one or more service centers that support many organizations," explained Hrusovsky. "This is an area where the private sector has excelled. Instead of having human resources and payroll in each of several offices of one organization, for example, those services are consolidated and efficiencies are gained. Basically, it equates to providing better service at a lower cost."

> Nippersink School District 2

Nippersink School District 2 in Illinois leveraged shared services in the K-12 arena. Nippersink 2 is a new district that was formed when the Spring Grove and Richmond districts were forced to merge. The merger left Nippersink with a small IT budget of $340,000 and two people to address the needs of more than 1,500 students.

Support and maintenance of the district's existing Microsoft-based financial application quickly proved too time-consuming for the IT staff. In addition, costly delays in technical support prompted Nippersink to evaluate other options. The school district could not afford to increase its IT staff or invest in additional hardware or software upgrades. But with a projected student body increase of 10 percent year-over-year for the next 10 years, the district had to do something.

Nippersink decided to take a shared services approach by combining student and financial management functions using software from Skyward Inc. The system, which is being used under an ASP-based model to help keep costs down, now handles the day-to-day operations of the school, including purchasing, accounts payable and payroll. School administrators say this approach has allowed them to address the restrictions of cost and management, while handling security demands for 600 machines distributed between three buildings and two IT staff. Additionally, the district's staff members now have home access to the system, and the district's accountant doesn't even have to come in to the office to do payroll. More importantly, the system has freed administrators to dedicate more time to their primary responsibility: the students.

> Outsourcing

By outsourcing selected IT and administrative functions to a lower-cost and higher-quality service provider, institutions and school systems can lower overall costs, improve service levels and better focus on the core mission of teaching, research and community service.

> Detroit Public Schools

Detroit Public Schools (DPS) is the 10th largest school system in the U.S., with more than 268 schools and 163,000 students. In late 2001, DPS was searching for creative ways to deal with a $2 million budget deficit.

Upon examination, DPS discovered it was spending $20 million per year to operate IT services. It seemed the perfect place to start making changes.

DPS decided to outsource its IT services to Compuware in an effort to improve the efficiency and effectiveness of its technology operations. Compuware now provides IT services that support the district's educational mission in areas such as human resources, finance and budget operations, student information services, special education, etc. DPS now has a new, Web-enabled e-mail system, T1 lines at all remote locations, upgraded network components, and new high-speed servers. They have also been able to improve call center response for IT problems and expand their student attendance system.

DPS recently reported that outsourcing their IT functions has resulted in savings of more that $3 million per year.

> TAFE Queensland

TAFE Queensland, a department of the state government of Queensland, has 15 autonomous institutes enrolling approximately 250,000 students over 80 campuses. For the last 10 years, TAFE has used a customized student administration system. But the system has become extremely outdated. TAFE wanted to launch new programs, such as Web-based student registration, but the old system couldn't handle it.

Instead, TAFE outsourced the maintenance of its student administration system to PeopleSoft. The new system will not only be able to handle student administration functions, but will also manage human resources functions, allowing TAFE to perform fewer manual administration functions and instead focus on career advisory services for students. The new system will also streamline other school functions and generate performance reporting.

Kay Giles, program sponsor with TAFE, said getting the new system going wasn't an easy proposition. "We've done a lot of work involving all the stakeholders," she said. "Institutes are demanding all the bells and whistles, but we are mindful of not trying to do too much too fast in order to keep the new system manageable."

Giles says TAFE expects to see significant cost savings under the new system and a decrease in maintenance processes — freeing up dollars for core TAFE educational missions. Plus, the new system will be continually updated. "Ten years from now we won't have a 10-year-old system because we'll be consistently upgrading," said Giles. "Future-proofing was a big part of our strategy."

> Enterprise Energy Management

Enterprise Energy Management is the process of monitoring enterprise-wide energy data in near real-time in order to respond to and adjust energy usage, increase energy efficiency, improve energy financial management, strengthen operational efficiency, and provide the information necessary for better energy sourcing.

Electricity, natural gas and water utilities are often the largest single costs outside academic mission costs at a university, according to Hrusovsky. "Universities often spend between $5,000 and $10,000 per student on facilities," he said. "Using technology to monitor usage of energy, as well as to audit bills, can save a lot of money. Most states have energy conservation programs that actually will help fund those capabilities. So it's just a matter of putting the two together."

> University of California at Santa Barbara

The University of California at Santa Barbara (UCSB) is an enormous campus, with over five million square feet in buildings, 20,000 students and 5,000 faculty and staff. In many ways, the campus operates like a small city, and in a similar manner, it spends vast amounts of money on utilities each year.

UCSB recently implemented a comprehensive energy management and building automation system from Itron. The system gives UCSB control over its energy consumption, allowing it to modify schedules and tweak systems to ensure it operates in the most efficient manner. "From that, I'm able to find out where the opportunities for savings are," said Jim Dewey, energy manager at UCSB.

Dewey said the system pulls all energy management information together for him in real-time, and then gives him the tools he needs to account for all the energy use in all the buildings over time. From that, Dewey can figure out what each building is costing them.

Dewey said he originally pushed for the system because "if you can't measure it, you can't manage it. I needed a tool to use because I had no information coming in from the buildings that was useful in terms of energy use and demand profiles."

Dewey was able to convince his managers of the tool's value and was also able to secure grant funding to help cover the costs. Since then, UCSB has saved over $21 million in energy costs.

> Beaverton, Oregon School District

K-12 schools are also practicing effective energy management. The Beaverton, Ore., School District, located just outside Portland, is using software to end energy waste in its large PC networks. The software, called EZConserve, schedules when, where and how power management policies are used on network PCs. It can also invisibly transition each PC on the network through a series of unique "power profiles" and ensure they aren't left running over nights and weekends.

Jerry Green, administrator for energy and environment at the Beaverton School District, led the implementation. "We figured that with 5,000 PCs in our total population, we would be able to reduce consumption by 711,310 KWH a year using the software. That translates to $49,815 per year."

Green purchased a general site license that can be implemented anywhere throughout the district where PCs exist. "We had policies in place before on energy reduction, but no good control mechanisms," he said. "We would be able to control our energy savings better by having a control mechanism in place. We saw this as a good tool that would give us a time clock that would turn things on and off on a scheduled basis to help us save energy."

Green said they also went through a statewide energy initiative to purchase the software. "We thought it would be about a nine month return on investment, but it turned out to be faster than that," said Green. Each year, it's going to be an extra $50,000 of operating expenses that we don't have to pay. That's money that can be returned to the classroom for other purposes."

> Moving Forward

Despite the challenges educational institutions and school systems face, doing more with less is possible. Leveraging new and innovative processes supported by technology through streamlining, shared services, strategic sourcing, outsourcing, and enterprise energy management can help immensely.

But institutions and school systems must also remember that new processes and technology alone will not accomplish their goals. In all the examples above, strong leaders existed who were willing to break new ground and enact effective change. They were also willing to collaborate with leading industry partners that could add value and target opportunities to eliminate inefficiencies and realize value.

After all, many private sector organizations have already experienced cost savings initiatives to fund critical programs. Institutions and school systems now face similar challenges. Leveraging the experiences of the educational institutions and schools mentioned above and taking advantage of the private sector's experience can help institutions and school systems achieve greater efficiencies in a time-constrained and politically pressured environment.

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