

Why IT Matters to Higher Education

# EDUCAUSE

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review

## Do-It-Yourself IT?

## Maybe Not...

Alternative IT Sourcing Strategies: Six Views

Leading an IT Organization Out of Control

A Discussion of Privacy, Security, and Risk

# Alternative IT Sourcing Strategies

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# Views

**C**loud-sourcing. Outsourcing. Consortial sourcing. Institutional sourcing. Collaborative sourcing. Clearly, technologies and IT services are being delivered to colleges and universities in a myriad of ways. Whereas in the past the role of the IT organization was to provide IT services to the campus community—known (now) as insourcing—over time that role has subtly but concretely changed. IT leaders today must not only provide but also decide: which tools and services should they continue to supply, which are better delivered by others, and perhaps most critically, which methods from among the bewildering array of alternative sourcing strategies will best serve their faculty, staff, and students.

In 2009, the EDUCAUSE Center for Applied Research (ECAR) published *Alternative IT Sourcing Strategies: From the Campus to the Cloud*, by Philip Goldstein. The author defined “alternative sourcing” as “the range of options institutions have for providing technology services or operating technology functions aside from doing it themselves. This includes traditional outsourcing of all or part of the IT organization, accessing cloud services and externally managed applications, development environments, or hardware via the Internet, and use of contractors and consultants as a part of the IT organization.”

EDUCAUSE *Review* recently asked six CIOs to talk about alternative IT sourcing strategies and about whether they are, or aren’t, “doing it themselves” at their institutions.

# IT Sourcing in the Cloud: Challenge or Opportunity?



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One of the biggest disruptive technological forces over the past decade has been the move from “assets to access.” One no longer needs to own assets—data centers, servers, storage space, or applications—to take advantage of high-tech services. Access to the Internet is all that is required, with resources and applications a “click” away. Institutions, corporations and even governments are busy following the lead of consumers, who are accessing new applications and moving as quickly as possible to the “cloud.” Anyone who has ever used Expedia, Orbitz, Kayak, or Travelocity to book travel; Amazon to buy books or e-books; Hotmail or Gmail to access e-mail services; Google, Bing, or Wikipedia to explore a topic; or Facebook or Twitter to collaborate and connect with social networking has used application services via access, without regard to the assets required—the where or how—to deliver them.

Students and younger consumers are leading this technological revolution. Internet whiz kids, often still in college, have understood that access, not a roomful of hardware, is all that is needed to invent and innovate new application services. The billionaire “before they’re thirty” list includes Jeff Bezos (Amazon), Sergey Brin and Larry Page (Google), Steven Chen (YouTube), David Filo and Jerry Yang (Yahoo), and Mark Zuckerberg and Chris Hughes (Facebook). All have built creative consumer (and corporate) applications requiring simply Internet access and a little intuition to use. Yet interestingly, many colleges and universities across the world have not yet accepted these new realities and still struggle, especially in today’s resource-constrained environment, to deliver e-mail, web-based services, and other applications just as they have since the late 1980s.

Why do hundreds of higher education institutions replicate each other’s resources and run virtually the same applications, each with its own costly capital-intensive data center? Does everyone doing the same thing make sense in a technology world where Moore’s Law rules with an exponential IT resource return on investment? In 2005, Brian Hawkins, then President of EDUCAUSE, wrote: “The times and the conditions call for new models and innovative means for facilitating collaboration. . . . We

in the higher education community need to ‘get over’ our traditions, our histories, and our many excuses for why we should try to replicate each other’s resources.” He further noted: “Colleges and universities need to outsource . . . to other higher education institutions—similar to the arrangement [at] Drexel University.”

Drexel University embraced this new paradigm in the late 1990s—first by necessity in taking on the management, via an outsourcing agreement, of the largest private college of medicine in the United States and second as an IT business model based on leveraging resources and strategic collaboration with other institutions. Over the past decade, Drexel has delivered the following applications and services: the complete suite of SunGard Higher Education Banner applications, portal, and Oracle business intelligence tools to a number of institutions; Blackboard learning management solutions to a dozen schools, including high schools and community colleges; and the SAP business academic suite of applications to more than forty business schools across the globe.

Drexel is not only a provider of cloud-based services to others but also a large consumer of cloud services—“we eat our own dog food.” Drexel’s cloud-provided services include RightNow for customer relationship management (CRM), CollegiateLink and StudentVoice for online student organization services, MIR3 for emergency alerts, Samaritan Technologies for civic engagement and volunteer management, Terra Dotta’s StudioAbroad for study-abroad program management, Symplicity for career fair management and career services, University Tickets for athletic ticket sales, Nuventive for e-portfolios, HRsmart and PeopleAdmin for employment, performance management, and applicant tracking, TouchNet for credit card processing, JP Morgan Chase Commercial Card Solutions for e-procurement, Gmail and Hotmail for student e-mail, and Qualtrics for survey administration.

The question we ask ourselves at Drexel is, why haven’t more institutions adopted this new model of collaboration? The answers are complex, varying from institution to institution. First, an institution needs to reach the point where IT decisions seem to be reactive responses to an ever-changing landscape of IT-related (actual or perceived) problems. As a result, increasing IT costs eventually put pressure on leaders to look at alternative delivery models. Other factors in the decision include institutional crisis, new blood, the instinct that survival requires change, a willingness to accept best practices over custom solutions, and the vision to understand that information technology is a commodity and not core to most institutions’ missions today. However, many questions and counter-arguments will immediately surface: “What about our data? What about a service level agreement (SLA)? The risk is too high. We’re unique and need a custom solution. We can do it less expensively.” Ultimately, making the decision to partner with another institution takes strong leadership at the top, from the president and often the board.

While many CIOs and IT leaders are busy analyzing the details of costly SLAs, complicated contracts, and endless rationales regarding why services must be provided locally, the move to the

cloud is happening, with or without their participation. Students, faculty, and staff are using Expedia, Amazon, Gmail, Google, and Twitter. Furthermore, the individual selection of application services remains with the user, under the radar of the IT organization and its “prescribed” applications. The institution’s General Counsel Office was not involved, and it’s unlikely any paper trail exists.

In this new environment, the CIO’s role must shift to become the institution’s Chief Information Strategist developing an institutional IT strategic agenda. The move away from assets is clear; the data center will slowly disappear. The new IT agenda must recognize that hosting, Software as a Service (SaaS), and Software plus Service (S+S) will dominate. In fact, applications as we know them today—as well as traditional vendors—will need to reinvent themselves to survive a changing marketplace. Applications will move to a subscription model with “pay as you go” purchase (e.g., the App Store).

Cloud-based services in the teaching and learning environment are sure to be an even greater challenge than traditional enterprise services. Today’s easily managed enterprise-wide learning management systems (LMSs) will undoubtedly disintegrate into a framework to access cloud-based distributed learning objects creating a Personal Learning Environment (PLE). Facebook, YouTube, Survey Monkey, Twitter, Google

Apps, Drupal, and many others (some not even invented yet) will fill the growing need for content and the widening quest for collaboration. Courses will be increasingly commoditized and franchised. A move to a Wikipedia course model—with an expert owner/moderator to sort out contributor content—would not be surprising. Faculty will sell “apps” like textbooks (at Drexel, we’re currently considering updating our textbook ownership policy to include apps).

The IT organization must provide an environment that fosters innovation while at the same time identifying “best practice” service providers. Increasingly, the focus will turn to negotiating and managing contracts and providing integration of applications, whether cloud-based or in-house, with access security, identity, and role management. The challenges are here. The opportunities are clear. The question is, where will you be in five years? Wondering what happened? Fighting to maintain the status quo? Or, leading the charge from assets to access?

#### Note

1. Brian L. Hawkins, “We’ve Got to Work Collaboratively!” *EDUCAUSE Review*, vol. 40, no. 1 (January/February 2005), p. 68, <<http://www.educause.edu/EDUCAUSE+Review/EDUCAUSEReviewMagazineVolume40/WeveGottoWorkCollaboratively/157951>>.

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