Partnership of Four: Managing Alternative Sourcing at Oakland University

Bob Albrecht, ECAR
Judith A. Pirani, ECAR

ECAR Case Study 7, 2009

Case Study from the EDUCAUSE Center for Applied Research
Partnership of Four: Managing Alternative Sourcing at Oakland University
EDUCAUSE is a nonprofit association whose mission is to advance higher education by promoting the intelligent use of information technology.

The mission of the EDUCAUSE Center for Applied Research is to foster better decision making by conducting and disseminating research and analysis about the role and implications of information technology in higher education. ECAR will systematically address many of the challenges brought more sharply into focus by information technologies.

Copyright 2009 EDUCAUSE. All rights reserved. This ECAR case study is proprietary and intended for use only by subscribers and those who have purchased this study. Reproduction, or distribution of ECAR case studies to those not formally affiliated with the subscribing organization, is strictly prohibited unless prior written permission is granted by EDUCAUSE. Requests for permission to reprint or distribute should be sent to ecar@educause.edu.
Partnership of Four: Managing Alternative Sourcing at Oakland University

Preface
The EDUCAUSE Center for Applied Research (ECAR) produces research to promote effective decisions regarding the selection, development, deployment, management, socialization, and use of information technologies in higher education. ECAR research includes

- research bulletins—short summary analyses of key information technology (IT) issues;
- research studies—in-depth applied research on complex and consequential technologies and practices;
- case studies—institution-specific reports designed to exemplify important themes, trends, and experiences in the management of IT investments and activities;
- roadmaps—designed to help senior executives quickly grasp the core of important technology issues; and
- key findings—brief high-level summaries on the scope of an ECAR research study.

As part of ECAR’s 2009 research agenda, the ECAR study Alternative IT Sourcing Strategies: From the Campus to the Cloud, by Philip J. Goldstein, examines the factors IT leaders consider when making sourcing decisions and the state of adoption of a variety of sourcing options for technology services. These options include both on-site services and services available via the Internet (e.g., cloud computing). The research includes a detailed look at the drivers and lessons learned from two particular examples of outsourcing: third-party hosted e-mail and the use of contract labor in the IT workforce.

Literature Review
The literature review helped identify and clarify issues, suggest hypotheses for testing, and provide supportive secondary evidence. Besides examining articles and studies from journalistic, academic, and IT practitioner sources, ECAR consulted with practicing CIOs to develop study objectives and survey questions.

Online Survey
ECAR designed and administered a web-based survey that was distributed to institutional representatives (mostly senior IT leaders) at 1,738 EDUCAUSE member institutions in November 2008. We received 372 responses (a 21.4% response rate).

Interviews
ECAR conducted follow-up telephone interviews with 20 senior IT leaders from a mix of institutions to gain deeper insights into
findings from the quantitative analysis and to capture additional ideas and viewpoints.

Case Study
ECAR researchers conducted this case study to complement the core study. We assume readers of this case study will also read the primary study, which provides a general context for the case study findings. We undertook this case study of Oakland University (OU) to learn about its management of alternative IT sourcing and its consequential impact on the OU IT organization and the university at large. ECAR owes a debt of gratitude for their time and insights to Mary Alore, Enrollment Management Systems Analyst; Brandon B. Bernier, Manager, Student Affairs Technology; Maria Ebner-Smith, Purchasing Manager; Christina J. Grabowski, Director of Graduate Marketing and Recruitment; Margaret Leahy, University Risk Manager; Linda S. Oliver, Alumni Relations Services Manager; Brian D. Paige, Executive Director, Network and Technology; Theresa Rowe, Chief Information Officer; Robert Saunders, Director of Development, Information Services; Mary Beth Snyder, Vice President, Student Affairs and Enrollment Management; Lori Ann Tirpak, Director of Enterprise Systems; and Victor A. Zambardi, Vice President for Legal Affairs, General Counsel, and Secretary to the Board of Trustees.

Introduction
Since interest in alternative sourcing has increased across academic institutions, the consequences in the purchasing and management of those products can be instructive. In Alternative IT Sourcing Strategies: From the Campus to the Cloud, the major research study that this case study accompanies, Goldstein defined alternative sourcing as “the range of options institutions have for providing technology services or operating technology functions aside from doing these things themselves. It included traditional outsourcing of all or part of the IT organization; accessing externally managed applications, development environments, or hardware via the Internet; and incorporation of contractors and consultants as part of the IT organization to routinely deliver IT functions or services. It encompassed an equally broad range of provider types, including corporations, other institutions, consortia of institutions (e.g., open-source), associations, and government or other nonprofits.” This broad definition is intended to capture the options found in higher education.

The role of a central IT organization in such an environment will necessarily vary with the culture of the institution, the development of alternative sourcing, and the readiness of the CIO and others to meet the challenges of managing the diverse options, as described by Goldstein. OU and its CIO, Theresa Rowe, have been aggressive pursuers of an alternative IT sourcing strategy. An increase in market offerings coupled with rising student enrollment—without an equivalent match in financial resources—prompted a need for increased efficiencies from OU departments. The use of alternative IT sources by University Technology Services (UTS) and OU departments “has allowed us to be responsive, agile, and flexible in the pursuit of this goal,” stated Rowe. “If we implement a service that does not achieve the expected level of penetration and usage in a certain amount of time, we want to be able to move in a different direction. It is a little bit easier when we don’t have the capitalization and equipment.” This strategy enables UTS and OU departments to purchase external solutions or to move more easily from one solution to another as more advantageous solutions appear. For example, OU has deployed numerous e-mail and learning management applications, as well as recruiting and admissions systems.

According to Rowe, the past decade saw increasing opportunities for alternative IT sources as the market options grew. Units
within the university responded to the growth of market options by seeking help to evaluate the benefits and disadvantages of those options. The emergence of cloud technologies is likely to increase the options available to IT units and to user departments directly. IT units that fail to create sound processes for facilitating outsourcing arrangements may be left out of the loop entirely, with resulting institutional exposure on data, process controls, and regulatory issues.

Organizing the resources of the institution to respond to the demands of alternative IT sourcing led Oakland to create a Partnership of Four to benefit both the institution and the contracting units. The partnership includes:

- the end user (such as the Recreation Center or the Graduate School Recruitment Office);
- the Purchasing Department, which is charged with applying university purchasing rules;
- the Office of Legal Affairs and General Counsel, with its responsibility for legal implications; and
- UTS, with the responsibilities for security, data management, network integration, and other technical support.

This partnership represents the essential interests of the university in the acquisition and licensing of software and solutions that must comply with university policies, legal contractual requirements, and the necessities of core IT management as well as ensuring the quality of the product and the proposed benefits to the end user.

This case study examines the ways in which one institution has organized and created an administrative process to cope with the challenges of the procurement and management of the options Goldstein’s study describes. It describes the factors that have driven extensive use of alternative IT sourcing, the Partnership of Four, and the benefits and challenges that external IT sourcing has brought to that institution. Victor A. Zambardi, vice president for legal affairs, general counsel, and secretary to the board of trustees, emphasized the need for cooperation in protecting the interests of the university when contracting with alternative sourcing vendors. Each member of the partnership brings expertise to increase the likelihood of effective, safe, and efficient outsourcing.

**Background**

Oakland University (OU) was created in 1957 when Matilda Dodge Wilson, the widow of John Francis Dodge of automobile fame, and her husband, Alfred Wilson, donated their 1,500-acre estate in Rochester, Michigan, to Michigan State University. The institution enrolled its first students in 1959 and was renamed Oakland University in 1963. It has been independent since 1970. In the fall semester of 2008, more than 18,000 students were enrolled: approximately 14,000 undergraduates and 4,000 graduates. The university has nearly 83,000 alumni.

The suburban campus, some 30 miles from Detroit, offers 120 baccalaureate degrees and 100 professional certifications and graduate degree programs. OU is classified as a doctoral research-intensive university.

CIO Rowe leads OU’s UTS area. Six departments report to Rowe:

- The Office of the CIO handles strategic planning, technology management, budget management, software license management, and personnel processes.
- Architecture Technical Support manages servers, operating systems, identity management and middleware, and the data center.
- Database Applications provides support for OU’s enterprise systems, database applications, and integration.
- Data Administration supports database management and database systems, along with data quality and controlled-access initiatives.
Network Communications manages the university’s wired and wireless voice, video, and data communication networks.

Secure Client Services and Help Desk provides IT security services as well as supporting OU’s students, faculty, and staff in the use of central IT services and products.

Three factors define the OU IT environment and promote the institution’s use of alternative IT sourcing. The first is the strong effort to coordinate UTS and the academic/administrative department IT operations through the Distributed Technology Support (DTS) program. To participate, a department designates an IT support staff person to be a DTS representative (commonly known as the distributed technology person). For example, Brandon Bernier is a distributed technology person who works in the Office of Dean of Students; Mary Alore is the distributed technology person in Undergraduate Admissions and Recruiting. “We hire IT personnel with a high degree of technical expertise who can serve the unique interests of the Student Affairs units and interface very closely with UTS,” stated Mary Beth Snyder, vice president, student affairs and enrollment management.

The DTS service level agreement (SLA) delineates each party’s roles and expectations. UTS provides specific information on its technology services and support. A department’s DTS person maintains local network connections and system administration for non-UTS systems, and assists with selection, implementation, and maintenance of software and hardware specific to departmental operations. The Distributed Technology Support Committee provides program oversight. (See the DTS SLA at http://www2.oakland.edu/uts/files/distributedsupport0809.pdf.)

The second factor is the fiscal environment under which OU operates. Over the years, OU has weathered incremental budget cuts, leading its senior administration to foster “a culture of lean and best practices.” As a result, UTS thinks in terms of tasks and responsibilities, not in dollars and cents. This encourages a mind-set of solving problems rather than cutting costs. Instead of fearing the next budget cut, UTS considers any viable option to fulfill its IT strategies and goals.

The third factor is OU’s commitment to noncustomized—or “vanilla”—IT system or service implementations. Beginning with its ERP implementation in 1999, OU senior administration has endorsed vanilla IT implementations to compensate for lack of institutional resources by reducing development and upgrade requirements, and to accelerate implementation time. “We don’t make any changes to it,” stated Robert Saunders, director of development information services. “[A vanilla implementation] takes care of 85% of our needs, and the cost of addressing the other 15% is not worth it to customize.”

Why Outsourcing?

Rowe views the adoption of alternative IT sources as an extension of a 20-year continuum from building a system, to purchasing a package, to now using an alternative IT source. But the growth of alternative IT sourcing at Oakland was spurred by a contract to expedite e-commerce by outsourcing the handling of credit card payments in 2001; the university gradually moved to a fully hosted solution in 2007. Previously, two UTS staff members were charged with managing the processes and working to keep up with compliance and constant changes. “I was always so concerned if our machine wasn’t patched,” stated Lori Ann Tirpak, director of enterprise systems. “When we got the chance to outsource it, it made me feel so much better because the vendor could manage the payment card industry and software compliance.” Outsourcing the work shifted the operation to an external vendor that was equipped to work with the industry and keep...
Alternative Sourcing at Oakland University

ECAR Case Study 7, 2009

up with changes and upgrades; this permitted the reassignment of staff.

Rowe and her immediate staff—Tirpak and Brian Paige, executive director, network and technology—suggested that this trend accelerate at OU as product development in the marketplace increased. Although OU budget issues have been important, the variety of available products has been more significant in driving this trend. Rowe suggested that higher education is following the path of business. “We’re trailing what happened there,” she explained. “[Like business,] we’re focusing on what’s core to our business and outsourcing other activity.” From a broader perspective within higher education, “more and more decisions are made with consumer-based values rather than traditional university values,” she explained. “I think we’re bringing the consumer model [to higher education]. Unit leaders say, ‘Is it faster, cheaper, better to go to central IT, or is it better to go to an external provider?’”

This question is asked within OU’s departments. For example, the staff in the Division of University Relations recognized the need for an online giving website. Its customers, the frontline fund-raisers, needed such a website to compete with their peers at other institutions. Although the internal development of such a site was a possibility, UTS could not meet the time frame determined by the university relations staff. For them, the answer was an alternative IT source. (For more information, see “A Tale of Two Strategies,” CASE Currents, April 2004.)

The decision to use an alternative IT source to address this problem was encouraged by institutional support for lean and efficient operations. The drive for efficiency can be budgetary or competitive in nature. Although budget is always a consideration—and the budget pressures at Oakland remain constant—there are also pressures to go for best practice in operations. Christina Grabowski, director of graduate marketing and recruitment, spoke of the need for software to support graduate school marketing and recruitment. Competition for students drives the search for software that supports her department. She emphasized the importance of her conversations with colleagues elsewhere and the presence of vendors at her professional meetings. As she said, “Every professional meeting includes vendors who are eager to demonstrate how their products can help us.” This puts additional pressure on departments to “keep up with the Joneses.” “It may look ideal when you see a product at a conference, and there is political pressure on campus to solve a problem,” stated Snyder. So the next step may be to evaluate the solution’s feasibility at OU.

The decision to use an alternative IT source represents a natural expansion of current operations, too. The Division of Student Affairs and Enrollment Management has outsourced other services—e.g., the bookstore and food services—for several years. Administrative units are not alone in looking at external vendors for help. The School of Business Administration, the College of Engineering and Computer Science, and the School of Nursing have looked to alternative sourcing.

A Replicable Purchase and Implementation Model

Although responsibility for an alternative IT source may reside in an administrative or academic department, its purchase and implementation may cross the interest, processes, and responsibilities of different OU organizational areas. Such structures may impede appropriate and even necessary cooperation. At OU, the increase in alternative IT sourcing by many units across the institution led to a realization that the procedures for letting and managing contracts with outside vendors needed to be reconsidered to provide structure and coordination.
Zambardi recognized the need to stay ahead of market developments in order to protect the institution from IT security risk, legal vulnerability, and other procedural liability. Rowe, Zambardi, and Maria Ebner-Smith, purchasing manager, share the view that the new environment of outsourcing potentially creates liabilities that can be managed with foresight and clear procedures. The major players in the process—contracting units, UTS, the Purchasing Department, and the Office of General Counsel—were acting independently on contracts that required participation from all of them. Over time, all realized that cooperation was necessary, and a purchase and implementation model has evolved, creating the Partnership of Four.

The partnership reflects the typical procedural issues at private and public institutions: How does a unit such as admissions work through the tangle of technical issues, purchasing rules, legal contracts, product quality evaluation, institutional data management, data security, and data integration? Which department of the university is prepared to answer the questions of the end user? Oakland recognized the advantages of retaining the traditional technical, purchasing, and legal resources while offering cooperative support to end users.

What has emerged is a three-phase, replicable model for alternative IT sourcing purchase and implementation. The entire process has been replicated repeatedly across OU departments, with the Partnership of Four buttressing local units’ activities through its key review and approval steps. The partnership, according to Margaret Leahy, university risk manager, exemplifies the team approach used at Oakland in other areas, such as export control. Rather than tasking a single office or a broad-based committee with responsibilities for oversight, the university has formed teams of leaders to work together to oversee areas such as the processing of alternative sourcing contracts.

Phase One: Local Needs Assessment

Once a potential alternative IT source is identified by department staff, a person—usually the distributed technology person—becomes the point person in the purchase process, working closely with potential users to develop a detailed list of requirements, conduct initial product evaluations, and recommend next steps, often including an RFP. “We work with the user to determine if the solution will make our area more efficient, if it is worth the investment cost, and whether it will save us money on the back end,” stated Bernier. Areas such as Student Affairs do “make a very concerted effort to keep UTS in the loop and involved in this process to avoid any bad selections,” stated Snyder. “Maybe we added a layer of bureaucracy, but it seems to be working.”

Once a solution is deemed feasible, the point person contacts UTS to vet the proposed solution through a formal process involving the Partnership of Four.

Phase Two: The Partnership of Four

As CIO, Rowe has worked proactively to foster closer relationships with the OU Purchasing Department and the Office of General Counsel to enhance their understanding of technology issues and thus facilitate the purchase process. Rowe has invited Ebner-Smith to UTS quarterly budgeting meetings and technology task force meetings in order to increase her understanding of UTS concerns and plans. UTS developed a relationship with the Office of General Counsel by working together on IT-related acquisitions.

What brought these units together with contracting departments was the recognition of their singular and joint responsibility for critical institutional decisions. Purchasing and the general counsel necessarily brought expertise to the selection and contracting process; central IT brought the technical expertise and
potential support for the purchased product. “It is not three silos,” stated Rowe. “We really stick together throughout the process.” If the Purchasing Department or Office of General Counsel receives a department’s RFP first, they will automatically send it to UTS for review.

According to Ebner-Smith, the role of the purchasing manager shifted with the increase in licensing and hosted solutions. Her job “has changed 180 degrees” with the increase. She works with units across the university, including UTS, for all contracts since the broad responsibility of her office is compliance with university policy. “It’s more than purchasing policy,” she said, that requires her office to review all purchases under all relevant policies. Such reviews are necessary because “some departments don’t even realize they are buying a hosted solution, so they don’t know what university policies apply.”

The contracting units rely on this process. End users, convinced that a particular software application will achieve new advantages to the unit in its daily competition with other institutions, may overlook the pitfalls of faulty contract language, the lack of compliance with purchasing rules, and the potential difficulties with data security or system integration. Further, as Rowe pointed out, the issue of data management and control often falls to UTS rather than to the unit itself. Alore explained, “I am in the middle. The vendors are promoting their solutions, but I don’t want to make a bad decision and purchase something that does not fit or interface into the university IT environment.”

Rowe estimates that the Partnership of Four reviewed 25 alternative IT source solutions for OU departments in 2008.

The Partnership of Four process works as follows:

- The contracting unit writes a needs analysis and a product recommendation for UTS to review. If an RFP is required, UTS may help write the RFP. The submission of a formal RFP to UTS triggers the Partnership of Four review process.

- UTS reviews the RFP for technical requirements, considering solutions already implemented and open-source options as well. An integral part of this step is the IT security review. If the proposed alternative IT source is a hosted solution, the vendor must submit a written response, verifying its compliance with UTS’s documented security standards.

- After the RFP receives UTS approval, the Purchasing Department reviews the RFP for university requirements.

- Purchasing, UTS, and the contracting unit together evaluate bids received in response to the RFP, selecting a vendor. The Purchasing Department also involves Risk Management if review is required.

- With the Purchasing Department’s approval, the contract documents—the contract or statement of work, the UTS security review, the software license, etc.—go to the general counsel for review and approval. With approvals from UTS, the Purchasing Department, and the general counsel, the unit can proceed to the final step of awarding the contract and completing the purchase.

UTS is currently documenting the Partnership of Four review process, as described in the sidebar “Partnership of Four Documents.”

A major advantage to the Partnership of Four is that it clarifies the processes of contracting with outside agencies—the vendors. Legal and purchasing requirements must be met, and the functions and responsibilities of the central IT unit must be defined and understood among the players. For the Partnership of Four to work effectively, each member must acknowledge the resources and responsibilities of every other.
Phase Three: Implementation

Upon completion of a favorable contract review by the Partnership of Four, the focus shifts back to the contracting unit. A designated department staff member—again, typically the distributed technology person—implements and manages the alternative IT source on a day-to-day basis. For example, Alore implemented and now manages her area's outsourced student recruitment system, ensuring the solution is integrated with other enterprise IT systems, operates properly, and fulfills departmental requirements. She is the primary vendor contact, talking with or e-mailing them daily to ensure they meet contractual responsibilities. When she needs help, she contacts Tirpak, who is her UTS point person. “People think because you’ve purchased a product, you push a button, and it works a certain way,” said Alore. “They don’t understand it takes more than that.” Alore estimated that managing the outsourced student recruitment system consumes about 75% of her time.
Benefits and Challenges

The benefits and challenges of alternative IT sourcing are found throughout the units of the university and have altered OU’s IT environment in several ways.

Changing Role of Central IT

For Rowe, the unit management of alternative IT sources enables the institution to expand its technological environment while helping UTS to function in the university-prescribed lean and effective manner. “We have 50 examples of alternative IT solutions on campus,” stated Rowe. “I don’t have to hire 50 UTS staff members to manage each one.” These examples are found in academic units, such as the Colleges of Business and Engineering, and in administrative units, including Human Resources, Career Services, Registrar, Admissions, Student Business Services, the Recreation Center, Communication and Marketing, and, of course, UTS, a primary user of alternative sourcing.

Although the size of her staff has not changed, the staff functions have changed, moving from developing scripts and programming 10 years ago to today’s data management orientation. As Tirpak described, “We know data, put it out, work with vendors on data issues” wherever they occur throughout the institution because UTS remains the primary data manager. This means that Rowe needs “people who spend a lot of time with the data as opposed to trying to understand how an Oracle application is developed. I have very few developers here, and we don’t have what I call a ‘systems development skill set’ at all. We integrate packages and solutions and customize data with a script here or there. Our day-to-day activities are very different from systems development.”

For example, Paige noted the impact of outsourcing OU’s e-mail on his area. “It removes the underlying architecture that we need to sustain, maintain, or patch and the end-of-life-cycle management of associated hardware—when hardware will be replaced and how much more expensive it will be. All that goes away, becomes the outsourced vendor’s problem,” he explained. He took the view that “we’re change experts rather than technology experts. Technology is ancillary to our being change agents. And helping people understand whether a solution is appropriate for their organizations or not—that’s what we do, rather than installing routers and servers. It is another part of the challenge resulting from the move to alternative sourcing.” Rowe emphasized that this role described by Paige begins as soon as any unit considers external sourcing: “People will go wherever they can to buy a product that they think will help them. The value we can add consistently is smart IT decisions, since we have the background to recognize high quality and what efficiencies are possible in the software.”

Another consequence Rowe noted is that it can be challenging to recruit staff with the appropriate IT experience and to find good professional programs to teach her staff new skills in areas such as contract negotiation.

If alternative sourcing shifts some of the traditional IT work from central IT to the units, what remains as the core function of the central office? The central IT organization may experience a redefinition of its function and responsibility as other units work directly with outside vendors. Questions may arise as to the relationships among units, the reporting lines for IT employees in the units, and the relationships between external vendors and relevant units within the institution. Further, and arguably most critical, where does responsibility for data security and data management lie as administrative units share data with external vendors?

For Rowe, the first priority is to support the teaching and research functions of OU. “I want things that are best for student education, and I want the faculty to be able to teach effectively.” Given those goals, she recognizes “data stewardship, identity, and security” as
parts of the core, because they enable the teaching and research functions.

For example, Rowe feels a strong sense of data stewardship as alternative IT source vendors access university data. “I grew up in a world that had a very strong perimeter around our data,” she explained. “We knew when that perimeter was breached. And now I don’t see a perimeter. The data are everywhere. I don’t have one place I can look and say, ‘here is where all our data live.’ I can’t tell you from a data element perspective all the different places that data element is located. There is no tool to do that. One of the interesting things I’ve found during alternative IT source contract reviews is that departments grab on to the solution, but they do not think about the university data that is going to live there.”

Along with stewardship comes the issue of data integration. Rowe observed that the issue of integration grows as the number of outside IT providers increases. “Data flows from the university to Vendor A and back to the university. The same is true with Vendor B. Despite our efforts, Vendors A and B will not work together because of intellectual property concerns. So it requires quite a bit of knowledge and data integration from us.” How an institution manages that problem depends not only on policies but also on the cultural values and accepted responsibilities.

Finally, there is the issue of security. As the IT environment expands to include outside vendors, Rowe vigilantly strives to maintain IT security. “If we outsource these data, our high standard of security has to follow those data,” stated Rowe. “I will not accept a lower standard of security because it is a hosted solution.” The security review, which is part of the Partnership of Four process, is designed with this goal in mind. The process provides a locus where responsible authorities can work cooperatively to support the institutional interest, protecting data while furthering education and research.

**Changing Role of Unit IT**

With the units’ management of alternative IT sources comes greater responsibilities. Not only do they incur obligations for the consumer tasks of purchasing—partnering to produce an RFP and negotiating a contract—but as noted earlier, they must also maintain the vendor relationship and the contract. As Grabowski said, “[Managing an outsourced solution] is a huge time commitment.”

Staff resources within the unit must be developed and maintained, often requiring skills not needed before external sourcing. Some units may discover a need for IT personnel who have no immediate reporting line to the central IT organization, thereby extending the decentralization of such functions. As Snyder explained, “My experience with alternative sources in other areas (e.g., food services and the bookstore) convinced me to hire IT personnel to manage my alternative IT sources. I learned you need close relationships with your contractors to stay on top of it all the time, to make it work, and to meet campus expectations. I intuitively knew I needed IT staff to manage these outsourced projects.”

And like central IT, the units have altered their IT roles as they take on management responsibility for their alternative IT sources. “We need different kinds of people, and we have to train our current staff accordingly,” said Grabowski. In some areas this expertise comes from local IT staff, but in others it requires unit staff members to become more IT savvy. Grabowski, a graduate admissions and marketing professional, talked about learning how to import and export pieces. Linda S. Oliver, alumni relations services manager and distributed technology support for alumni relations, spoke of her experiences creating databases and queries as well as modifying simple scripts and codes.

Working with vendors or external developers brings to the unit staff members the realities of implementation and maintenance. Sometimes units discover that implementation
entails more work than anticipated. “It can be complicated, and every piece is a bump and a learning experience,” stated Oliver. For example, she described the unexpected experience of having to build the majority of web pages and layout for the online interface for one alternative IT service.

Depending upon the vendor and the product, units may encounter a world of unexpected updates delivered with no notice or a plethora of unrequested features that may not be needed or wanted. But the increase in alternative IT sources means that central IT no longer has the developers to customize the product. “We are not managing the servers as with our enterprise system; the vendors are driving it,” stated Grabowski. “The vendors send us things whether or not we have the time to manage it or the interest. New releases create work for us. I don’t know what will happen if a big release came along. It is a different experience.” Oliver described one alternative IT source that automatically delivers product updates quarterly—whether she is ready for them or not. One new module required training that she scrambled to complete before the vendor release. Sometimes the unit using the product may turn off features because they lack the time or resources to manage them.

As units manage more alternative IT solutions, Rowe has provided tools to help the local solution managers perform their tasks more effectively. Besides organizing the Partnership of Four review program and IT security checklist, Rowe organized a three-day technology requirement definition training program to help the units effectively evaluate options for a specific need. Discussions included how to find and organize potential stakeholders as well as how to ensure that everyone clearly understands the solution’s final goal. “These are things that I learn as I go,” stated Oliver. “It is not my area of expertise. I wish I had those tools two years earlier [when I chose my area’s online alumni community solution]. It would have been very helpful.”

The Importance of Vanilla

Some institutions have the capacity to develop the software required by their departments and are able to do so at a cost comparable to that of the commercial vendors. These institutions are often larger universities with a history of central IT organizations that have the capacity to develop the needed software. For smaller institutions or those with less complex IT organizations, the alternatives may simply be working through the choices among outside vendors.

As noted earlier, Oakland typically implements vanilla versions of IT systems without customization. As the outsourcing experience at Oakland has developed, the options of vanilla and customization have become better understood. Paige described the alternatives as “active” and “passive” outsourcing. Active outsourcing means shopping for a product that with modification meets the unit’s needs; passive outsourcing means accepting a product that meets perhaps 75% of the needs. When internal budgets cannot be stretched to cover the costs of modification, passive outsourcing may be the only choice. However, if a unit can afford customization, that can be done by the vendor or by a central IT department. At Oakland, the unit must often choose a vanilla version because neither the money nor the development expertise is available internally.

Greater Agility

Some units prefer the agility gained through outsourcing—the “fast-track approach,” as described by Paige, of developing an RFP and letting a contract to an external vendor that avoids the internal costs of development and life cycles. Paige has found that UTS must respond to that practice by developing its own agility, becoming “change managers,
change agents,” rather than accepting more traditional IT roles.

If the unit chooses “highly functional products,” said Rowe, “we can drop a product after three years—the length of the contract—as another comes along. We stay agile by choosing high-quality products that permit a successor to be moved into the core.” Of course, adopting this pattern requires close cooperation between the unit and UTS. One of the new challenges for UTS is becoming part of the vendor search early in the process, before an RFP is submitted for purchase approval.

Growing Responsibilities and Processes

The benefits and challenges of alternative IT sourcing depend on one’s perspective: to an end user—a “consumer,” in Rowe’s lexicon—cost, efficiency, and measurable changes in operations must be primary; to a CIO, the impact on central IT operations from one internal source versus 50 external sources is seen differently. Oakland’s experience of 25 new contracts in the past year and more than 50 contracts in operation has brought new responsibilities to local units, leading to new processes, while creating a greater understanding of alternative IT sourcing to the institution.

When units are on their own to develop and manage contracts with vendors, unfortunate consequences can occur. Before Rowe was able to put in place some of the current policies, the vendor to one unit did not practice data security to the extent required under Oakland standards.

Such an example reflects the necessity for cooperation among the institution’s players. In response, an institution might develop procedures such as those of Oakland’s Partnership of Four. While offices across the institution continue to originate and process contracts, new patterns of cooperation may be needed. Central IT, for example, may need to take part in negotiations involving student affairs or alumni relations or academic units. Such work may lead to changing roles for the central IT office, as it did for Oakland’s UTS.

Cultural Impact

Finally, the use of localized alternative IT solutions may have one unintentional impact: loss of the institutional IT culture. Centralized services and systems with stakeholders from across the institution create shared values and common terms that revolve around the system. It draws people together in the various oversight and user committees, creating a social fabric of institutional contacts and information sharing. This can be lost when units focus on their own solutions. But OU operates centralized enterprise systems; OU’s Distributed Technology Support Program has a broad membership. Both initiatives work to keep the institutional IT culture intact.

Future

The directions that alternative sourcing might take at Oakland over the next 5 to 10 years are difficult to foresee, according to those interviewed. Changes in costs and in budgets; market developments in the industry, including open source; and other factors could impact sourcing patterns. However, no one predicted a significant decline in the number of alternative sourcing contracts. Ebner-Smith predicted that alternative sourcing will increase because academic departments, for example, want to continue to offer additional products that enable them to serve students better.

In *The Tower and the Cloud: Higher Education in the Age of Cloud Computing*, Philip Goldstein, who authored the primary research study that this case study supports, described the current CIO as wearing “several... hats [that] include strategic adviser to institutional leadership, technology consultant to academic and administrative departments, advocate for technology and technology
adoption, risk manager, and steward of the institution’s information assets." That description to a large extent matches Rowe’s portfolio. In looking ahead, she emphasized the need for CIOs to take on aggressively a role that Goldstein prescribed: “the preservation and protection of data...[including] information security.”

Goldstein also mirrored Rowe’s current situation as he wrote, “Tomorrow’s higher education IT leader will need to translate an architecture into a legal, technical, and service web that appears to all as an integrated whole.” Oakland has that now with the development of the Partnership of Four.

Although Oakland seems to exemplify some of the challenges and solutions of which Goldstein wrote so recently, the question of what lies beyond current innovations cannot be answered. The interviews at Oakland suggest satisfaction with relying upon the marketplace for external products that can be integrated into the university networks. Issues of data management and security remain challenges.

Lessons Learned

UTS and other OU department staff members shared numerous lessons learned.

Dollar costs alone may be deceptive.

“Hosted solutions can be less costly,” said Ebner-Smith. Her thoughtful additional point is that dollar costs alone may hide potential risks of downstream consequences to the unit and to the institution.

Alternative IT sourcing can foster both technological and financial agility.

Alternative IT sourcing has enabled OU to be extremely agile technologically—plugging in new solutions whenever advantageous to the institution. Extensive outsourcing also enables central IT, the CIO, and the institution to achieve great agility in the management of budgets through contracts that take into consideration the life expectancy of hardware and software while eliminating the need to maintain and patch them. “It does allow you to operationalize costs in a much flatter and steadier way,” stated Rowe. “It makes it more predictable at times.”

Alternative sourcing may significantly alter job functions and staffing.

Rowe has discovered the central IT organization must be agile, too, in responding to the shifting responsibilities and skill sets that the unit management of alternative sources brings. Tirpak described the new skills needed as “knowing data, managing data, working with vendors, and working as integrators to connect UTS systems with outsourced solutions.” Rowe identified the need for new skills as one of the most significant changes brought by increased alternative sourcing.

Institutional processes must change to meet alternative sourcing, which may result in stronger centralized purchasing procedures.

Ebner-Smith suggested that if an institution reviews its purchasing (contracting) processes in the light of increased alternative sourcing, it will almost certainly change those processes.

Contract approvals continue to rest with institutional authorities, such as purchasing departments, but the initial choice of sources has been shifted to the using units. Today, at OU, the initial choice of a particular software product may rest with employees who understand the administrative needs of an office but who have little, if any, knowledge of the technology. This, combined with the need to effectively track and manage units’ purchases, may require institutions to review their internal policies and procedures. New procedures in central IT as well as in the purchasing department and legal counsel may be required, perhaps creating a program similar to OU’s Partnership of Four.
But the shift in responsibility is not so well defined. As a contracting unit manages the new alternative IT resource, the central IT office no longer has an immediate role in overseeing the management of the data covered by that contract, or so it could be argued. Has the responsibility shifted? Who sets the data perimeters? UTS is struggling with responses to these questions.

*Choosing vendors for hosted solutions can be hazardous.*

Units at Oakland have quickly gained considerable experience at reviewing vendor qualifications. Alore said the review of a potential vendor should follow several guidelines: “Ask about everything, look at everything, see the proposed system, and ask for documented proof.” Along with Brandon Bernier, she also recommended visiting campuses that had purchased the product and asking vendors who developed the product and who owns it. Bernier canvassed five institutions’ recreation centers with different solutions when evaluating software options. “We knew exactly what we were getting into because we heard it from actual customers,” he stated. A check of the vendor’s financial viability is important, too, as the vagaries of business may cause vendors to merge, grow, or disappear regardless of institutional dependence on their products.

*Be prepared for unexpected incidents of alternative IT sources.*

The marketplace continues to expand, with vendors of alternative IT sources reaching administrative units, faculty, and researchers. Paige noted, “Our researchers are going to the cloud without us.” Although state and university rules and policies may require contact with central IT and other offices, units and individuals working without public support may fall outside those policies. At OU, if a researcher requires the Purchasing Department’s or Office of General Counsel’s involvement to use their grant money to buy a solution, this triggers the Partnership of Four review process. Such a process offers protections to the unit as well as to the university.

*Comprehensive data management policies are key.*

Data management policies need to be reviewed to meet the complexities entailed by alternative sourcing. Although the practices and policies overseen by the Partnership of Four at Oakland provide for appropriate data management, the new distributed environment created by alternative sourcing remains unpredictable. Despite careful contract reviews, numerous unpredictable factors—e.g., change of vendors, changes in products—remain.

**Conclusion**

Alternative IT sources represent a different IT service delivery option. Many central IT organizations incorporate them into their service portfolio, but perhaps not to the same extent as Oakland University, which currently has about 50 such solutions under contract. This strategy has altered IT’s institutional dynamics, with local units undertaking a greater role in directly purchasing, implementing, and maintaining these solutions. Central IT, through the Partnership of Four, ensures all these disparate solutions coalesce properly and securely into broader institutional IT data and service frameworks. Accomplishing this has required ongoing shifts in both central IT and unit skill sets, operational procedures, and responsibilities. The result is an agile IT environment that enables Oakland to advantageously incorporate new IT services and technologies without adding IT staff and while minimizing investment costs. The Partnership of Four has ensured cooperation, which enables UTS to fulfill its mission of IT security while increasing the university’s protection from excessive vulnerability.
Endnotes

2. Ibid., 12.
5. Ibid., 244.
6. Ibid., 247.

Citation for This Work