Student registration will get an upgrade under Kuali

# Kuali's approach puts keys in higher education's hands

## Community-sourced software suite developed by and for universities is a cost-effective alternative to PeopleSoft

When Indiana University knew it was time to overhaul its aging financial software platform more than a dozen years ago, many assumed the school would buy in to the obvious choice, Oracle's PeopleSoft.

That didn't sit well with Indiana's Barry Walsh, who estimated it would cost the school upward of $22 million to implement PeopleSoft Financial. As he searched for alternatives, one figure stood out.

"I felt we could do it for about $4 million, of which $2 million would be out of pocket and $2 million would be reallocating existing positions," Walsh said.

He presented the idea of a ground-up solution to Indiana's leadership.

"We looked at it, and it didn't take very long for them to see, 'My gosh this is a no-brainer.'"

However, Walsh also knew there were inherent pitfalls with bootstrapping such a complex software solution internally.

"Nobody was going to undergo homegrown development in the 20th

pg. 4

## Colleagues on the run

A group of UIT employees got together for two good causes: Being active and funding higher education.

.03

## Video gets 10M views

UIT's Spencer Stout shocked when his flash mob video becomes a viral YouTube sensation overnight.

.07

# Governance decisions

## At a glance

### Research

**Aug. 15 •** A subcommittee is being formed to shepherd a plan for the best staffing and utilization of the Center for High Performance Computing. The portfolio began discussing agenda items to be addressed over the next six months.

### Infrastructure

**Sept. 19 •** A Grouper pilot is expected Nov. 1. Password resets and multi-factor authentication will be researched for security purposes. An IPv6 task force was nominated. Steve Corbató talked about the Kuali implementation plan.

### Support Services

**Sept. 18 •** A decision about voice systems was postponed until more information is available. Joe Taylor shared the USS list of about 375 applications, plus a cost breakdown currently and as expected when Kuali work begins. An in-progress project list also was shared.

### Teaching & Learning

**Sept. 5 •** Cory Stokes presented a plan for Teaching and Learning to offer online-course development services. The plan was approved. After absentee votes were counted, portfolio members decided to fund a Web classroom solution beyond Canvas' Big Blue Button.

**Find portfolio members, agendas and summaries at cio.utah.edu.**

# Best learning happens when tech, teachers in harmony

It would be hard to overstate technology's role on the University of Utah campus. The systems that UIT staff develop, implement, maintain, manage, and secure have become essential to every aspect of our mission. Indeed, they are "mission critical."

Step back from that phrase for a moment. Mission. Critical. How often do we as information technology professionals really examine that first word? The core of the University's mission is to foster an environment where the business, academic, and cultural leaders of tomorrow build upon the ever-expanding foundations of today. How can we leverage our technologies to further that mission?

There is a sizable movement in the higher education community toward MOOCs, or "massive open online courses," as an alternative to traditional in-person courses that form the bedrock of higher learning. Technology allows us to break down barriers of physical structure, geography, and time in ways impossible even just a few years ago. The question we all must ask is whether that ability is being used to further the mission.

Eric Denna
Chief Information Officer

Faculty understandably wonder whether short-sighted decision-makers might look to this technology as a cost-cutting measure to consolidate courses across campuses. They may be right to worry: A 2009 report by the U.S. Department of Education evaluated thousands of studies about online education and found that statistically speaking, learning outcomes for online courses are slightly higher than for face-to-face learning alone. But the real breakthrough of that study was this:

Courses that mix face-to-face learning with online elements were much more significantly linked to better learning outcomes.

Simply put, when people and technology work in parallel, students learn with far greater success than when one is emphasized over the other.

Properly combining the kinds of innovative learning technologies championed by our Teaching and Learning portfolio members and the TLT unit led by Cory Stokes with the exceptional personal instruction offered by the University faculty yields extraordinary results. The key is discerning the proper mix of ingredients to create a proven recipe for success.

The conversation surrounding teaching and learning technology at the University of Utah is not about supplanting face-to-face instruction, but supplementing faculty teaching methods in a way that the whole is far greater than the sum of its parts. It is a delicate conversation to have, but an essential one. Indeed, it is mission critical.

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Team UIT at the Young Alumni Scholarship 5K race in Salt Lake City  (Courtesy of Steve Corbató)

# Team UIT hits the streets for alumni 5K

The words "up and running" are music to information technology employees' ears, so it's no surprise a group of UIT colleagues decided to lace up their running shoes for the Young Alumni Scholarship 5K race.

Team UIT — Amber Angell, Steve Corbató, Brian Harris, Peter Panos, Caprice Post, Anita Sjoblom, John Wardle and some of their family members — donned red "We Bleed Red Bytes" T-shirts for the Sept. 14 event.

"For the 5K we had so many different fitness levels there," said Angell, who organized the team. "Brian Harris was crazy fast … other people walked. I just like that we all got together and just did it."

Wardle, a manager for UTV who joined UIT in 1999, saw the event as an opportunity to start a healthy activity. He began training for the event just four weeks before.

"I hate running. It's just so hard, but it's just so good for you," he said. "We are now, my wife and I, looking to a 10K."

The idea was sparked by some informal conversations about running and fitness before meetings. Angell, a UIT executive secretary who has competed in triathlons previously and is returning to running after a hiatus, felt the time was right to turn words into action.

### Sound like fun?

Anyone interested in joining Team UIT can contact Amber Angell at amber.angell@utah.edu.

"I'm a firm believer in healthy lifestyles, and I would like everyone to get involved," she said.

Wardle said the chance to build camaraderie with fellow employees was also a draw.

"You get people who are with UIT that you don't — because we're in different roles — know much about. So it gives us an opportunity to say, 'Oh, that's the person I got to run up the hills with.'"

While there are no plans for the next Team UIT event, several people hoped the Alumni 5K would be the start of an even bigger team.

"I would like more people to do it and maybe have training together — maybe just going on walks together during lunch," Angell said.

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## Kuali (continued from pg. 1)

century — that's the loser's corner," he said. "You may get what you want, but you're stuck with it in perpetuity."

So Walsh and Indiana struck out on a bold experiment, partnering with other institutions also eying a new financial system and pooling their programming and financial resources — along with grant money — toward a solution that met the needs of all. The result was a community-source product offered under an open-source license that did not require institutions to commit to bloated maintenance contracts. The Kuali Financial System's success spawned the Kuali Foundation, a nonprofit group now boasting some of the nation's top institutions, including the University of Southern California, Cornell, Duke, Michigan State, University of Washington, University of Michigan, Indiana University and others.

Today, the Kuali Foundation has 72 community and commercial partners collaborating on eight distinct products — systems for financials, human resources and payroll, research administration, middleware, mobility, service-driven library management, business continuity, and student administration.

It was Kuali Student that caught the attention of University of Utah CIO Eric Denna. University President David W. Pershing made improving the student experience a pillar of his tenure, and many opportunities to better that experience lie in streamlining software and the business processes behind it, Denna said.

"I started digging into our PeopleSoft implementation and learned a lot of things that were pretty troubling. The level of customization, the amount of maintenance we do on it, it's just a very expensive proposition for us — unnecessarily so," Denna said. "Others may disagree with this, but I believe it pulls resources away from our core mission."

UIT's programmers are adept at shaping PeopleSoft's underlying code, effecting deep customization across the platform. By baking in more than 18,000 PeopleSoft customizations, Utah has in essence over-achieved itself into a corner.

"It's very difficult for us to take PeopleSoft upgrades and incorporate them because we have to reconnect all these customizations into PeopleSoft. It gets worse and worse over time," Denna said, adding that 80 percent of UIT's programming staff is dedicated to maintaining the current systems.

### Time and money

While analyzing the U's PeopleSoft implementation and considering its needs for the future, Denna began hearing that schools such as the University of Minnesota were committing to spend $83 million simply to

### Say hello to Sue

Salt Lake City native Sue Broadbent joins the team behind the Eccles Broadcast Center Atrium Reception Desk. Broadbent takes over for the recently retired Terry Cirillo. She recently worked at ibahn, a provider of hotel wifi service.

Broadbent enjoys crocheting, traveling and spending time with her family. She is the mother of four boys, and she and her husband are also a foster family, having hosted 28 children including the three teenage boys currently in their home.

### Facelli shifts roles

After over 20 years of leading the Center for High Performance Computing (CHPC), Julio Facelli stepped down as director of the Center on Oct. 1 in order to focus on his administrative and research responsibilities in the Health Sciences Center.

He remains professor and vice chair in the department of Biomedical Informatics. In addition, he continues to serve as director of the Biomedical Informatics core within the Center for Clinical and Translational Science.

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Kuali (continued from pg. 4)

upgrade PeopleSoft systems. Similarly, the University of Wisconsin and University of California saw pricetags of $80 million and $300 million respectively to implement PeopleSoft's HR solution. In an age where tuition costs are rising and the education funding landscape is challenging at best, those figures are a difficult sell on any campus.

Denna's search for a cost-effective alternative led to a visit to Indiana University — the "center of the Kuali universe" — during the 2012 Kuali Days, a yearly gathering of partners to discuss all things Kuali. He spoke at length with the architects building the software about how they kept the project on a reliable timeline.

**Barry Walsh**
**Indiana University**

"It's a much more directed effort, which makes it much easier to commit resources because you know something is going to come out of it," he said. "The mantra that is emerging within Kuali is 'keep your money in your mission.' There's a growing group of CIOs who really want to make sure that we're doing the very best job we possibly can on administrative systems, and investing enough, but not too much. And we believe there are ways we can do this more inexpensively than

we've been doing in the past."

Walsh saw in Utah an opportunity to bring a respected institution with significant IT capabilities into the fold. Because the Kuali suite is a work in progress, some schools are gun-shy about committing to the promise of a package tailored for higher education when only parts of it are actually implemented.

"For a big school like Utah, they're not going to decide and implement in three months, it's going to be a multi-year implementation," he said. "If you look at it like that, then the timeframes for the Kuali systems are not as daunting."

### Shaping the software

Utah also saw an opportunity in Kuali and joined on as a founding partner of Kuali Student, the student administration portion responsible for areas such as registration and academic planning. By joining the Kuali Foundation and dedicating programming and leadership resources, the University can both shape the direction of the software and reap the benefits of lower-cost implementation and maintenance.

"The fine line that we have to balance is maintaining what we have, because we can't just turn it off and replace it all of a sudden," Denna said. "So it's keeping a core group of people who can maintain what we have while a group of people retool to be able to participate in the Kuali community."

## Kuali's offerings

*Kuali has eight distinct modules deployed or under development.*

**Student** • Student administration
**People Management** • HR/Payroll
**Financial** • The original project
**Coeus** • Research administration and compliance
**Rice** • Middleware used to connect modules to one another
**Open Library Environment** • Extensible service-driven library management system
**Mobility** • Mobile tools
**Ready** • Business continuity

UIT is in the process of building that group of programmers and support staff who will forge ahead with Kuali Student.

"I'm committed to helping whoever wants to make that transition, that they have that opportunity to learn," Denna said. "But the pace is pretty aggressive. It's not like, 'Take the next three or four years and try to figure it out,' it's a matter of months. And there will be some that just don't care to do that, and they may choose to go do something else. But for those that are willing to make the transition, I'll be very supportive of them."

Walsh sees Utah's participation as a mile-marker moment for Kuali.

"I think Utah is going to become a very, very significant part of Kuali's history. And the reason I say that is you're already a PeopleSoft school, so it's not like you don't already know the plusses and minuses. Lots of the Kuali schools are the ones that had a 30-year-old homegrown system. But in the case of Utah, yours is a very thoughtful institution with a very visionary CIO."

*"I'm committed to helping whoever wants to make that transition, that they have that opportunity to learn. But the pace is pretty aggressive. It's not like, 'Take the next three or four years and try to figure it out,' it's a matter of months." — Eric Denna*

Kuali (continued from pg. 5)

### A familiar process

Denna also hopes to contribute to Kuali's success by incorporating the business processes analysis expertise that Utah has developed in recent years. By examining tasks involved in registering a student across the entire process, as opposed to looking at them as individual steps, Kuali can incorporate best practices into the initial design of the software to create a better experience overall.

"Too often what happens with process is it gets broken up by functional boundaries," he said. "So a college will do this part, and admissions will do another part, and financial aid will do another part, but they're only thinking about their little slice. And the problem is, they can optimize within their functions and create a miserable experience for students. So what we want to do is

### Utah and Kuali

*The University of Utah has three participants in Kuali's leadership.*

**Mary Parker** • Sits on board of Kuali Student
**Steve Corbató** • Member of board of Kuali Rice
**Eric Denna** • Serves as vice chair of Kuali Foundation board

take the student perspective and say, 'How does all this fit together?' and that's process work."

By collaborating with other universities about their processes and experiences with similar functions, Denna expects to align the business aspects of higher education more closely with the academic aspects.

"On the research side, we get a lot out of peer review and being a part of communities of scholarship. We want to do the same thing on the administrative side and take advantage of peer review and collaboration with other institutions that we can learn with."

For now, Utah has committed to ushering in Kuali Student as one answer to President Pershing's call to action regarding student experience. Based upon that experience and as the need arises to upgrade other systems throughout the University, other Kuali modules may prove to be the best solution going forward.

"The thing that is different about what's emerging out of Kuali is, when we did PeopleSoft originally we replaced student, HR and financials all at once," Denna said. "We don't have to do that going forward. We can take pieces out and replace it over time. So five years from now it will look substantially different — I don't think we'll be done. It will depend on how much appetite and energy we have to make those kinds of changes."

# Welcome to Node 4, your new source for UIT news

Thank you for reading the first issue of Node 4! This monthly newsletter is produced by UIT's Strategic Planning and Communication unit to keep UIT staff informed of important changes, upcoming events, special happenings and more.

Node 4 refers to the University of Utah's history as the fourth node of the ARPANET, the precursor to the Internet. It is a vehicle for sharing general news and information about changes happening now or in the future that may affect your work. You will also find a brief synopsis of IT governance decisions from the most recent meeting of each governance portfolio.

This is also a place to learn more about the people you work with, not only in their professional endeavors, but also in their personal hobbies and triumphs.

Do you know someone who crafts elaborate bird houses in his spare time? Did a member of your team recently win an award for her tireless work on behalf of the homeless? Did a UIT programmer just publish a nifty app to the Apple Store? We want to hear about it!

We welcome your ideas for content, for features you would like to see in future newsletters, and for ways we can make your newsletter a must-read every month.

One feature being considered is a section to offer thanks and praise to your peers for a job well done. If you would like to recognize someone who did an exceptional job on a project or went out of their way to help make an event special, or who always seems to help calm a team in the face of crisis, let us know. Email us their name and department, along with your comments. You can remain anonymous in print, if you prefer, as long as we can verify your submission.

We look forward to hearing from you!

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# Epic marriage proposal becomes viral hit

## Spencer Stout's elaborate video viewed by millions, makes headlines worldwide

When Betty Who's "Somebody Loves You" first played on Spencer Stout's Spotify feed, he knew it was a song he could hear again. So he put it on his favorites list, and the song popped up a few more times.

The more it played, the more he really listened to the words. The more he listened to the words, the more he realized it spoke to how he felt about his partner of two years, Dustin Reeser.

The more he thought about it, the more he knew it was time to do something he had contemplated for awhile: It was time to propose.

"It was really the song that kind of sparked everything. I knew for months anyway that I wanted to marry Dustin," said the USS product manager coming up on five years in UIT, "but the song inspired it all."

For many people, that would be a romantic dinner, maybe a stroll through the park, and a heartfelt dip to a knee in a private moment. Not Spencer Stout.

He enlisted a small army of friends and family to learn a highly choreographed flash mob dance set to "Somebody Loves You."

When Reeser was led, unsuspecting, to the lumber aisle of Home Depot, a full production broke out. The scene, shot with four cameras by friends of friends, captured the surprise on Reeser's face and the touching moment when Stout asked him to share the rest of their lives together.

A week later, Stout posted the video on YouTube and Facebook for friends and family to enjoy.



Spencer Stout's proposal to Dustin Reeser (Captured from YouTube)

### Watch the video
See Spencer Stout's proposal at http://bit.ly/UITspencer

Then his phone blew up.

"I figured that it was going to be bigger than I was expecting when I got a call from Fox 13 and ABC 4 Utah that morning," he said. "I watched it go from 32 views to hundreds of thousands."

The video has since been viewed 10 million times all over the world.

"Looking at the analytics behind the video is so cool because countries I've never heard of have seen this video 25,000 times," Stout said.

The notoriety led to dozens of interview requests from national sources, but an offer from Ellen DeGeneres' talk show stood out.

"This was really not intended to be a political thing or anything like that," Stout said. "So we figured the Ellen show would be the best venue to go and talk about it without it becoming a political thing."

While they were on the show, it was DeGeneres' turn to surprise. She told Stout and Reeser that a sponsor was going to pay for their dream Australian honeymoon.

The video's notoriety helped the songwriter, as well. Just after it took off, Betty Who inked a deal she had been working on with RCA Records.

"She's just flooding me with thanks. I'm just so happy for her because she's gotten so much attention," Stout said.

For now, Stout is happy to have the media whirlwind subside so he can get back to work at UIT. But there's still more to be done: "We just met with a wedding planner."

> "Looking at the analytics behind the video is so cool because countries I've never heard of have seen this video 25,000 times." — Spencer Stout

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# Computing team gets $2.4M grant

## Adaptable testbed project led by Robert Ricci catches the National Science Foundation's attention

A collaboration between the School of Computing's Flux Group and the Center for High Performance Computing has earned a $2.4 million grant from the National Science Foundation, with $1 million in matching funds from the University.

The team, led by School of Computing faculty member Robert Ricci, will develop an adaptable profile-driven testbed that will allow computer research teams to use the same resources to carry out different missions with the same pieces. Ricci likens it to a super Lego set.

"Rather than buy the Lego castle kit or Lego 'Star Wars' kit, we just bought a bunch of Legos. We can pull pieces off to build the castle or the Death Star as we need."

Development will continue over the next three years. He expects thousands of researchers nationwide to sign on with the project.

"This will give domain experts the ability to create an environment to conduct research and then share that with others."

# On the agenda

# October

### Thursday, Oct. 3
**Using Python for Scientific Computing** • Presented by Wim Cardoen, 1-2 p.m., INSCC Auditorium (room 110)

### Wednesday, Oct. 9
**Technology & Venture Commercialization Boot Camp** • Teaches U faculty about TVC and the services it provides, gives info about grants, 1-4 p.m., HSEB (room 1750), register at www.tvc.utah.edu

### Tuesday, Oct. 15
**Tech Tuesday** • A networking event featuring speakers, inventors and entrepreneurs, 4-6 p.m., University Guest House, RSVP with Sheri Gordon, 587-9619 or sheri@tco.utah.edu

### Monday, Oct. 21
**UIT All-Hands meeting** • 9-10:30 a.m., leadership meet-and-greet 8:30 a.m., Saltair Room, Ray A. Olpin Union Building

# November

### Nov. 7, 12, 13
**ITIL Foundations class** • The final IT Infrastructure Library course of the year, 8 a.m.-5 p.m. each day, with a test on the final day, free for UIT and ITS staff, to register email craig.bennion@utah.edu

### Monday, Nov. 11
**Research Data Management, Sharing and Ownership** • 2-4 p.m., HSEB (room 2110), registration required, click here to register

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