2014 Enterprise Project Management Survey

Are DevOps and Agile principles finally permeating PMOs?

Among 421 respondents to our survey, 51% take an incremental approach to large ventures. However, just 10% use analytics or visualization of business metrics to decide when to terminate projects, so there’s room for improvement.

By Jonathan Feldman
Jonathan Feldman is chief information officer for the city of Asheville, N.C., where his business background and work as an InformationWeek columnist have helped him develop innovation through better business technology and process. Asheville is a rapidly growing and popular city; it has been named a Fodor top travel destination and is the site of many new breweries, including New Belgium’s East Coast expansion. During Jonathan’s leadership, the city has been recognized nationally and internationally (including receiving the International Economic Development Council New Media, NATOA Community Broadband, and the GMIS Best Practices awards) for improving services to citizens and reducing expenses through IT innovation. He is active in the startup and open data community, and is a co-author of Code For America’s book, Beyond Transparency. Learn more about Jonathan at Feldman.org.
The 421 respondents to our InformationWeek 2014 Project Management Survey, all of them involved with project management at organizations with 100 or more employees, say the most important indicator for success is that a project is completed on time — a criterion we question. Other data points:

- 63% say executives decide when to eliminate or defer projects.
- 30% break up large projects with potentially long timelines and some amount of risk into smaller segments, with deliverables and evaluations at the end of each.
- 34% say the general business attitude toward IT projects is that these efforts almost always deliver value to the business versus 41% saying they’re a mixed bag — sometimes beneficial, sometimes not.
- 11% say business and IT project and portfolio management teams reside in the same organizational unit, and that this setup works well.

In this report, we:

- Discuss how technology is now woven throughout all business projects and processes, and how that affects project management
- Explain how to incorporate organizational change management and DevOps-like Lean project management techniques
- Check the rumor that PMOs are endangered.

Respondent breakdown: 45% have 5,000 or more employees; 34% are over 10,000. Financial services and government are well represented, and 49% are IT director/manager or IT executive management (C-level/VP) level.
Survey Name  InformationWeek 2014 Project Management Survey

Survey Date  February 2014

Region  North America

Number of Respondents  421

Purpose  To determine the role of project management programs in the enterprise

Methodology  InformationWeek surveyed business technology decision-makers at North American organizations with 100 or more employees. The survey was conducted online, and respondents were recruited via an email invitation containing an embedded link to the survey. The email invitation was sent to qualified InformationWeek subscribers.
Quick: Name two activities that are expensive, create overhead, and smell to your CEO a lot like cost centers.

You know IT is one of them. But project management is a close runner-up. The PMO, like IT, is either wunderkind or problem child, depending on how recently it snatched business project victory from the jaws of defeat.

Ensuring that the PMO is functional is one of the most important jobs of any CIO or COO. And that’s where the lines start to blur, isn’t it? Who exactly should be in charge of what projects?

When IT talks about “enterprise project management,” we’re really talking about IT project management that affects “the business” in some substantial way. A prime example is ERP. Core enterprise software functions are less technology project, more business process, given that 80% of the cost is retraining and process consulting and only 20% is software and hardware. Of course IT must be involved, but haven’t we got enough scars from failed projects where we held on to control way past where it made sense? It’s time to say, “This is a business project, not a technology project.” CIOs must involve business leaders substantially, and early on.

And that street goes both ways. Nowadays, few business leaders ask IT to get involved in “their” projects or product planning. That’s a big problem. Take a new manufacturing plant. Robots need data feeds. When these aren’t

Enterprise and IT Project Management Overlap

How do enterprise (business) project portfolio management and IT project portfolio management overlap at your organization?

Data: InformationWeek 2014 Project Management Survey of 421 business technology professionals at organizations with 100 or more employees, February 2014

- Completely separate but cooperative when needed (50%)
- EPM and ITPM exist in the same organizational unit and it works out well (11%)
- EPM and ITPM are coordinated in the same organizational unit, but nobody is happy (6%)
- EPM and ITPM share resources, and it works out well (12%)
- EPM and ITPM share resources, but nobody is happy (13%)
- Completely separate; antagonism exists between groups (4%)
- Other (4%)

Figure 1
planned but added at the last minute, costs go through the roof. Or what about your digital business strategy? Better concentrate just as much on the “digital” part of that as the apps and social angles your CMO is worrying about.

Technology is the lifeblood of every business, so we had better start collaborating.

If you’re thinking this looks like a lot of work that you have no time for, remember: You can pay that bill now or you can pay it later, with interest. IT has an interest in projects going well, because business stakeholders have an unpleasant way of blame-storming failure not on the PMO or employee engagement or the level of commitment or resourcing, but on the technology. It’s not that business leaders are out to get you, it’s simply that technology is the least-understood portion of the project and therefore the easiest to cite as the cause of failure.

That’s especially likely when IT and business project and portfolio management teams are separate, as is the case for 63% of respondents to our InformationWeek 2014 Project Management Survey. The good news is that just 23% of our 421 business technology respondents from larger organizations, with 100 or more employees, cite some level of antagonism or angst in the relationship between ITPM and EPM.

So most of our respondents are at least marching to the same drummer when it comes to managing enterprise projects that have technology components. That’s great news. After all, a functional IT organization is seeking the same thing as the EPM group: better business processes supported by better automation and technology.

It’s time to tear down some walls, as we’ll discuss. But first, let’s pinpoint what we’re trying to achieve.

Figure 2
Project Success Metrics

The goal of any PMO is to succeed spectacularly with the projects that you do take on, unhindered by resource suck and overutilization fallout from projects that won’t advance business goals.

That raises two questions: What does spectacular project success look like? And how do we spot losing efforts that will just drag us down?

One red flag in our survey suggests we had better figure it out: Just 34% say IT projects almost always deliver value to the business. Twenty-one percent say IT projects “sometimes” deliver value. The No. 1 answer, with 41%, is that results are mixed — and remember, our respondents are predominantly IT pros. If history is a guide, business execs are less generous.

We have room to improve. Clarifying what “success” looks like is the first step.

“Effective project management really comes down to the project manager knowing both sides of the table, what the sponsors or management want, and what it takes for the IT developers to get it done in the time frame set by the sponsor,” says Chris Lucas, an analyst with Jones Day, a multinational legal services firm. We’ll buy that and add this: Ensure that decision-makers not only have the authority but are also confident enough in their roles to make hard calls, like killing a project or reallocating resources, and stick to them. Understand

Figure 3

Keys to Project Success

Please select the top factors you believe make projects at your organization successful.

- Staff technology skills (48%)
- Executive support of projects, PMO, and/or project managers (41%)
- Staff communication skills (26%)
- Agile project management techniques (19%)
- Certified project management staff (17%)
- Staff leadership skills (12%)
- We hold back vendor payments until contracted goals are achieved (8%)
- Waterfall project management techniques (6%)
- The use of analytics or visualization to anticipate project issues (5%)
- Other (4%)
- Projects at my organization are generally not successful (3%)
- Other (3%)
- Projects at my organization are generally not successful (3%)

Note: Two responses allowed.

Data: InformationWeek 2014 Project Management Survey of 421 business technology professionals at organizations with 100 or more employees, February 2014
that process is a means to obtain outcomes. **Value the outcome more than the process.**

A respondent from a large manufacturing company in North Carolina identified some ways to fail: take on too many projects, neglect to tie projects to business strategy, and fail to manage resource constraints. Resource management is the ongoing adjustment of activities or projects based on the resources available during a certain period of time, so it’s not static.

Here’s what else project success doesn’t look like: projects that come in on time and within budget but with little regard for customer satisfaction. That’s worth remembering for our respondents, who overwhelmingly chose “on time” as the No. 1 indicator of project success (61%), followed by No. 2 “within budget” (57%), with stakeholder and sponsor satisfaction trailing at No. 3 with 33% of respondents. Talk about upside down.

Here’s what else is clear about project failure: The “moon launch” methodology of project initiation and planning is still popular, and it’s killing us. Almost half of respondents say they budget and plan for big projects up front, as opposed to 30% who are agile and break large projects up into smaller time frames, smaller deliverables, evaluation checkpoints, and budgets.

**Hello, HealthCare.gov!**

Indeed, just after the launch of the troubled HealthCare.gov website, Clay Johnson, a former White House fellow, shared a salient observation at the 2013 Code for America Summit regarding project procurement: As risk tolerance goes down, budget size goes up (because leaders are willing to pour on resources to avoid risk). Yet as budget size goes up, the probability of failure also increases. Why is this? Big projects and big budgets are huge risks because as budgets rise, you’re usually in-
increasing scope as well. When you scope more in, complexity goes up. Complexity increases risk, which in turn increases the chances of failure. But we’re still not done! Big-budget projects also create a “failure is not an option” mentality. This spawns two additional problems. First, when failure is not an option, the possibility of failure is not factored into plans, further increasing risk because no one knows what to do if things start to go south. Second, even when the project should be canceled or folded into a different project, it won’t be. (“They told us failure of this project was not an option!”) That increases risk of completing the project with a bad outcome — the operation was a success, but the patient died.

IT does understand how project risk is tied to financial investment. When asked the two most important ways that respondents evaluate project or portfolio risk, financial investment took the top spot, at 70%, followed by organizational complexity at 54%.

Tech startup leaders also understand how broad scope creates larger investment and thus risk, while smaller initial scope followed by iteration reduces risk. That’s why Google entered the search marketplace with a perpetual beta test frame of mind. It’s why Google Fiber started in one city, not with a regional or country-wide approach.

Enterprises that copy startups avoid risk. Startups aren’t just enterprises built smaller. They’re the product of advances in organizational thinking. For enterprises that are set in their ways, new projects are opportunities for new thinking. GE is the poster child for a huge enterprise successfully adopting Lean Startup principles into its business, which includes projects and products.

The project management office is the perfect place to nurture these principles; as
they start to show benefits to the enterprise, they can spread.

One thing is clear: Simplifying projects into smaller budgets with smaller deliverables and engaging in an “experiment, test, learn” mindset is a fantastically good idea. Do so wherever possible. And where anyone says it’s not possible, demand a darn good reason why not. Maybe building a suspension bridge doesn’t lend itself well to a segmented or iterative project, but there are substantial differences between a bridge and an ERP system. Most relevant is that engineering and materials science are substantially more mature than information technology.

That’s where the DevOps movement comes in. DevOps seeks to remove the manual labor involved in operations and create automation that not only tests software components but also deploys and scales software in a hands-off way, using code instead of toil. Those of us who studied computer science 30 years ago and now have children in CS courses know how very differently student code is graded nowadays. It’s no longer about a teaching assistant visually inspecting work. Instead, students submit their code to an automated system that pummels it relentlessly, like the Terminator, throwing dozens or hundreds of sets of test data at it. “Sorry, your code failed test case No. 536. Go rewrite it.” Not only is this more efficient with the TA’s time, it’s going to produce better coders.

The truth of the matter is that ISVs (especially ERP vendors, who tend to lag behind the technology curve) and most enterprises are doing the equivalent of getting the TA to manually inspect student code. Project managers know that variability is the enemy of
quality, and therefore manual processes are far inferior to automated ones.

DevOps is about process and should matter to project managers. In the same way that we want strong steel in a bridge, we want quality, tested, secure code going into our projects. We do not want the "technical debt" of poor code as a liability weighing on future operations.

Project managers must navigate large projects in a new way. We must get out of moon launch mode. We must demand bite-size deliverables wherever possible — get an iterative learning process; automated build, test, and deployment systems; and a team that displays great flexibility and communication. These are the fundamental ingredients for modern project success.

These are also the qualities that will keep your PMO relevant into the future.

**Death Of The Project Management Office? Not So Much**

We’ve done this survey before, in September 2011 and June 2010. Every time we undertake this research, we wonder: Will this be the year project management takes a hit? Will it be the year business leaders get tired of all of that expensive structure?

The answer, unsurprisingly, is no, because for every case of PMO bureaucracy gone wild there are 10 instances where sensible project management has delivered, on time and on budget, a product that is helpful to customers. Business leaders may get weary of all that structure, but they’re not tired of getting good results most of the time, and they’re scared about what might happen without
the PMO there to herd the cats. The balancing act is to weigh the addition of project bureaucracy (let’s call it what it is) against the higher probability of good project outcomes.

Most of the time, project management techniques and tactics are suffered to live in the same way that the inconvenience of IT security is tolerated. The alternative is worse. In fact, project management offices are still a staple of larger enterprises. Among respondents, 66% have PMOs. This isn’t exactly a growth statistic, but neither is it a huge drop. While we can’t compare directly with 2012 and 2010 because we limited 2014 data collection to organizations with more than 100 employees, this number is still about in line with previous years’ stats. When we do a comparison with shops at the 100-plus level, 62% in 2012 and 70% in 2010 had PMOs.

Despite sensational headlines, such as a Washington Post blog post on “the incredible shrinking project management office,” the demise of PMOs is clearly exaggerated.

Still, because there’s so much watercooler chatter about project management offices being on the way out, we asked about PMO elimination in several ways: eliminated within the past 12 months, 24 months, or “a while ago.” In aggregate, even when we asked in these diverse ways, the sum total of PMOs eliminated at any time among those without formal project management was a mere 10%.

Yes, there’s a small amount of churn on a yearly basis, but this is not the stuff of mass exodus.

Our point? PMOs are not for everyone, but they deliver real advantages. We see plenty of shops that could benefit from formal project management but don’t have the scale to justify dedicating head count. PMOs are expensive, and they need to make sense based on the scale, cost, and number of projects.
managed. But they are powerful, and, generally, effective.

As that Washington Post blog points out, to continue delivering value, the PMO must tailor and measure its activities against the needs of an ever-changing business environment — in that sense, they’re a lot like IT.

**Why Business Units Won’t Run Enterprise Projects**

IT needn’t worry about being shut out of projects, in case that’s a concern. Business units are pretty terrible at running projects that aren’t fully encapsulated in their missions. They have full plates and plenty of other stuff to do, like creating products and serving customers. So just like IT looks to facilities to bore a 4-inch hole through a concrete stairwell and install a conduit to get fiber to the sixth floor, business units look to “someone else” to run projects with any aspect not squarely in their wheelhouses. That’s especially true when a project has technology involved — never mind that tech is embedded in everything.

That “someone else” is generally IT. IT managers are project managers. For organizations that lack PMOs, the No. 1 response to how large, complex projects are managed is that IT managers or executives grab the reins. Take that in context, of course — our respondents are primarily business technology professionals, so you’re not going to hear them say that IT is managing mining operations improvement or beverage manufacturing expansion projects. But in general, when a project has “scary technology” involved, it will be thrown at IT to manage.

And these IT execs are largely working...
without a net. Although most IT organizations work significantly on business projects that impact business units outside of IT, only 9% of our respondents without PMOs have project managers reporting outside of IT. So, don’t comfort yourself that business units will swoop in and rescue IT’s beleaguered project managers. It’s not going to happen for most.

To keep projects on the rails, 73% of respondents use formal project management methodologies, like those from the Project Management Institute or the Scrum Alliance. It’s important to note here that “using” formal project management methodologies does not mean “a maniacal, slavish, inflexible adherence.” Using a methodology means doing things like creating a project charter, not simply having a three-ring binder with lots of boring boilerplate. It means digging into the real reasons you create project charters: To establish roles and responsibilities, identify significant risks, agree on a timeline at the outset, set expectations about communications during the project, and gain formal acceptance of these from a project sponsor.

Methodologies are simply tools — they need the right intentions and business savvy behind them.

One question to ask regularly: “Are we creating more value than bureaucracy?” If the answer is “no,” lighten up. A one-page “risk register” may cover 90% of the probable project risks and take a short time to create, as opposed to a more exhaustive, and exhausting, 20-page matrix.

About 20% of PMO-free respondents have project managers within IT, presumably to make up for lack of a project management office. Of course, 26% also manage large, complex projects with IT staff without “project
manager” in their titles. We have to wonder how that’s working out in an atmosphere where the reward for project success is “more projects.”

The key to success when coordinating projects and project portfolios, with or without a PMO, is to be disciplined about which projects get done with available resources and which are deferred to a time where resources are available. In other words, it means killing projects that sounded great at 2 a.m. over tequila but that don’t look quite as good at 10 a.m. over coffee. It means having difficult conversations with stakeholders. It means making sure IT isn’t perceived as “the no police” (because you’re saying you can’t handle any more projects or undiplomatically pointing out how stupid a project is) or as “the cost shifters” (because you may be asking a bit too bluntly or too often for stakeholders to re-source additional projects).

Avoiding these perceptions requires not only soft skills but also a certain amount of data transparency. Show stakeholders how IT management and technical resources are tied up with other projects, and then offer choices about what to do. This is nontrivial, to be sure, but it can be done with or without a PMO.

As you might expect, executive fiat lives on. We asked how projects get canceled or deferred, and the top response by far is that “executives decide,” at 63%. Forced ranking, in vogue 10 years ago, came in at a lowly 19%. We understand that forced ranking can be tough, and certainly IT can’t always force-rank between business units. But you can force business units to prioritize the projects that they’re asking for.

Fiat goes only so far. Busy executives don’t have the time to make informed decisions on...
killing or deferring as many projects as the typical organization needs them to. They will exterminate only the worst ones, or finally jump in to defer a few projects after employees quit, burn out, or otherwise implode from overwork.

If you don’t have a PMO, think “virtual PMO” composed of project managers without the title. The work of portfolio management and project triage must be done. We recently laid out a three-part prioritization plan by project management expert Frank DeLuca: One, set up a good, fast, and inexpensive program that will make the best use of pricey IT resources. Two, take inventory. Three, don’t make prioritization a popularity contest; run the numbers.

Other steps IT can take without a PMO and to minimize the role of executive fiat include:

- **Add “project” to “management.”** IT managers probably get together regularly to go over problems and upcoming events. Add to the agenda an action step of reviewing project load and deciding what to do (other than jump out of the window) about that load.

- **Get governance.** If you already have some sort of IT governance board in place, whether it’s for governance of ERP or business applications, you may be able to leverage it into a review board for project triage and ongoing project assessment.

- **Play well with others.** Sometimes a small group of co-workers from different business units can be quite effective at project triage. The key is to involve people who (a) understand the business enough to know what the organization’s priorities are, (b) have the organizational skills to rank projects by those business priorities, and (c) have the authority...
to make decisions or enough credibility with upper management to recommend decisions.

The Team Factor

Of all the ingredients for project success, the squishiest is the necessity for an adaptable, communicative, skilled project team. How do you measure that? How do you develop that? How do you know when you’re succeeding?

Our respondents cite staff technology skills as the top project success factor, weighing in at 48% versus 12% saying “soft skills.” Well, arguing whether tech skills are more important than people skills is like debating whether the engine or the transmission is more important. Sure, great tech skills are needed for technologically complex projects, but a room filled with people with great tech skills who can’t cooperate or communicate will produce nothing but arguments and a massive waste of time.

To race in the same direction on a project, you need to communicate. Our respondents rank email as their most important method of communication, followed by narrowly scoped team meetings. We’ll leave the email bashing to others; the fact is that written communication of some kind is needed. We won’t be shocked when such communication inevitably moves to wikis and social media. The PMO could lead that charge, but we doubt it — OCD project management types tend to have more love for their full and organized inboxes than the rest of us do.

It’s no surprise that tightly scoped meetings rank near the top of the list and that less-structured meetings are toward the bottom. Take a roomful of people, add chaos … it’s not pretty. Indeed, one indicator that team management is less effective than it needs to be is when meetings are so broad and unfocused that people start pulling out their smartphones. News flash: The way to get people to pay attention isn’t to establish dopey ground rules that include “no smartphones.” It’s to engage and interest people so much that they don’t want to pull out their phones. Keep your meetings tight and focused, and give people something interesting or important to do during them. Save the monologues for the big stage.

Patrick Lencioni’s book *Five Dysfunctions of a Team* describes a lack of trust among members as a key reason teams fail. Yet complex, cross-departmental projects frequently require teams to come together from different business units. So how do you build trust among folks who may have never worked together before? We asked our respondents to
call out the most effective ways of building trust, based on successful projects that they’ve experienced.

That mentor who told you to build relationships over coffee or a sandwich was right: Those who eat together appear able to project manage together. The No. 1 response (30%) for building trust on a team was breaking bread outside of the office. However, coming in at a close second (27%) are 360-degree leadership feedback systems and models such as the Leadership Practices Inventory from the Leadership Challenge.

There were significant “other” responses (15% as opposed to the usual 1% or 2%) so we dug into the data further. One-on-one communication, sharing information, and spending time working together were key themes. We produced a word cloud on freeform responses: “work,” “working,” “together,” and “goals” jumped out at us.

Leadership attributes among team members, such as putting forth work, communicating, having goals, and being open seem to be top of mind for this group of respondents. It’s not just about personality assessments or exogenous events like lunch. Sometimes, each team member must prove him- or herself through action. Training in leadership frameworks can help, but the project manager must also be courageous enough to hold team members accountable and ask line managers to replace team members who are useless, in the same way that line managers must manage morale among their teams by correcting or pruning back.

Communication and organizational tools are a must for efficient teams, but again, as in 2010 and 2012, low-tech is in favor. Spreadsheets beat out commercial project management systems as the tools most commonly
used among respondents. This is even more interesting given that our 2014 research disqualified respondents at organizations with fewer than 100 employees. These shops can afford more sophisticated tools, yet they continue to use lower tech.

Finally, the lowly status report is the top “tool” used by our respondents, at 70%. This is probably because it works. Executives don’t have to learn a new UI, and if the status report is done well, they quickly get a sense of whether the project is on or off the rails. Perhaps one of the most important functions of the PMO is to give project sponsors a true picture of the status, beautiful or ugly. From that flows the ability to keep team members accountable and inspire action. And so it makes sense that good project managers keep communication tools as simple as they can.
APPENDIX

2014 Enterprise Project Management Survey

IT Project Management Tools

What tools are used to manage IT projects in your organization?

Figure 15

Note: Multiple responses allowed

Data: InformationWeek 2014 Project Management Survey of 421 business technology professionals at organizations with 100 or more employees, February 2014

Detailed Answer:

- Status reports: 70%
- Project plan documentation: 68%
- Spreadsheets: 63%
- Commercial or specific project management software: 53%
- Help desk, work order, or task tracking system: 49%
- Time reporting at the project level: 45%
- Communication templates: 36%
- Quality assessments: 31%
- Real-time status dashboards: 29%
- Earned value management reports: 25%
- Homegrown, in-house project management software: 20%
- Word processing forms: 18%
- Earned value management reports: 18%
- Other: 10%
- None: 3%
- Other: 3%
- None: 1%
Figure 16

Which of the following best describes your job title?

- Executive IT management (C-level/VP) 39%
- IT director/manager 32%
- Line-of-business management 6%
- Non-IT executive management (C-level/VP) 5%
- Consultant 6%
- IT/IS staff 3%
- Other 4%

Data: InformationWeek 2014 Project Management Survey of 421 business technology professionals at organizations with 100 or more employees, February 2014
Figure 17

Revenue
Which of the following dollar ranges includes the annual revenue of your entire organization?

- Less than $6 million
- $6 million to $49.9 million
- $50 million to $99.9 million
- $1 billion to $4.9 billion
- $500 million to $999.9 million
- Don't know/decline to say

Data: InformationWeek 2014 Project Management Survey of 421 business technology professionals at organizations with 100 or more employees, February 2014
What is your organization's primary industry?

- Consulting and business services: 18%
- Financial services: 12%
- Government: 12%
- Healthcare/medical: 8%
- Insurance/HMOs: 5%
- IT vendors: 6%
- Logistic/transportation: 4%
- Manufacturing/industrial, non-computer: 9%
- Media/entertainment: 2%
- Telecommunications/ISPs: 6%
- Other: 15%

Data: InformationWeek 2014 Project Management Survey of 421 business technology professionals at organizations with 100 or more employees, February 2014
Figure 19

Company Size
Approximately how many employees are in your organization?

- 1,000-4,999: 23%
- 5,000-9,999: 11%
- 500-999: 10%
- 100-499: 22%
- 10,000 or more: 34%

Data: InformationWeek 2014 Project Management Survey of 421 business technology professionals at organizations with 100 or more employees, February 2014
Want More Like This?

**InformationWeek** creates more than 150 reports like this each year, and they’re all free to registered users. We’ll help you sort through vendor claims, justify IT projects and implement new systems by providing analysis and advice from IT professionals. Right now on our site you’ll find:

**2014 IT Budget Outlook:** Is the IT budget moving out of IT’s control? Maybe — 37% of respondents say the rate of outside spending is on the rise, up from 22% last year. Just 21% of CIOs retain full spending authority. What is in our control: how we respond.

**Beyond IT Service Management:** If the world weren’t changing, we might continue to view IT purely as a service organization, and ITSM might be the most important focus for IT leaders. But it’s not, it isn’t, and it won’t be — at least not in its present form.

**Moving Legacy Apps to the Cloud:** Can you run that old ERP system on AWS or CloudStack? Yes, and it just may save you money. However, CIOs need to ensure that teams set expectations, use the right tools for the right use case, and test before leaping. Oh, and don’t get stopped by the application life cycle police.

**PLUS:** Find signature reports, such as the InformationWeek Salary Survey, InformationWeek 500 and the annual State of Security report; full issues; and much more.