Government and Legacy ERP:
A Broken Model

Technology is all about buzzwords. But for far too long, the biggest buzzwords surrounding enterprise resource planning (ERP) systems have been antiquated, cumbersome and expensive.

Take, for example, a small city in New Hampshire that had been using the same ERP system for 30 years. The legacy system workhorse for three decades was a broken-down mule — and could not deliver status updates and analysis that officials needed to improve services. Or there’s the agency in California that had hundreds of employees marking down hours on Excel spreadsheets, with payroll departments entering information by hand to generate paychecks.

Unfortunately, these examples are the rule, not the exception. According to Government Technology magazine’s article, “CIOs Seek Ways to Improve Legacy Systems,” old systems are found in all state governments, irrespective of geography. New Jersey’s payroll system dates back to 1969, and the state’s Motor Vehicle Commission uses a mainframe system that’s 30 years old. Likewise, Arizona’s state financial system, which is used by 90 percent of the state’s agencies, is 25 years old.¹

Too often, state and local governments are living in the dark ages when it comes to their ERP systems. This is not by design. Historically, it has been prohibitively expensive to upgrade or move to a new system and there often weren’t enough perceived benefits of doing so. Now, agencies have much smaller budgets to work with and at the same time, aggressive mandates to change. Most organizations can’t afford to continue operating in the same way. Efficiency and transparency are the name of the game. While there’s enormous pressure on governments and private companies alike to limit non-essential spending, maintaining the status quo is creating more costs and headaches.

It’s time to create a new buzzword within ERP: Cloud. This white paper will explain how finance and human resources (HR) in the cloud can create cost savings, provide a modern platform for government agencies and unlock data previously held hostage in silos.

Legacy Software: A Breaking Point?

On-premise, aging systems have reached the breaking point with many state and local government agencies. These legacy systems are built on decades-old client/server and mainframe technologies and have simply become too expensive to maintain. It is like continuing to repair a 15-year-old car: Where is the ROI in that? Large amounts of money are spent on maintenance, but as soon as one problem is fixed another one appears.

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that the employees who know how to work on these systems — the COBOL programmers and C++ developers — are rapidly retiring and are difficult to replace. In this world of legacy software, IT staff who must spend time keeping applications up and running have few additional hours to develop new services and enhancements for clients and constituents.

Even more critical is that the core functionality of legacy ERP is failing to keep up with modern demands. In an era of government accountability, these systems are poor conduits of information. Agencies must typically request reports from IT, which can take days or weeks. Older systems also aren’t keeping up with online trends. Collaborative workspaces for managing projects, approving expense reports or sharing operational data are commonplace, and help employees be productive from any location. Governments need these Web-friendly capabilities as much as their private industry counterparts.

Since most of these legacy systems are built on older, inflexible technologies, it means that making a change in a process or workflow is costly or even impossible. Governments need agility and flexibility with their information systems, as employee and constituent demands often fluctuate.

Legacy systems are also clunky to use, in stark contrast to the intuitive user experience with today’s mobile and Web applications. In modern applications, consumers and businesses conduct transactions and consume information by touching or clicking a few buttons. These open architectures enable easy exchange of data and small learning curves. Government organizations, like the private sector, can reap significant benefits from a self-service, consumer IT model to support larger numbers of users and the growth in online transactions, and to improve compliance and manage growing volumes of data.

Finally, the technologies of today — smartphones, tablets, mobile apps and Web email — have dramatically changed user expectations. The confusing navigation and complicated features of legacy applications may cause users to walk away. They will use something else, or develop a workaround that introduces security risks or snags workflow.

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and taxpayers a bundle. Agencies are spending half of their annual IT budgets, or $35.7 billion, maintaining and supporting legacy systems, and nearly half of all existing IT applications are based on legacy technology in need of modernization, according to a 2011 survey conducted by MeriTalk and Unisys. A Colorado Financials Audit in 2011 found that the average age of state financial systems in the U.S. is 11 years (36 states). The oldest financial system is 29 years old. Can governments afford to wait? Leaner and meaner is in demand not only due to shrinking government budgets, but also because of constituent demands for better operations and results. Moving away from on-premise, legacy systems is a critical first step to help government organizations meet financial challenges and deliver on their promises.

There is Another Way: Finance and HR in the Cloud Bring Big Benefits

“The flexibility available today in private – and even public – clouds changes the question from ‘Why cloud?’ to ‘Why not cloud?’”

– TODD SANDER, EXECUTIVE DIRECTOR, CENTER FOR DIGITAL GOVERNMENT

In the span of just a few years, cloud computing has come of age, changing the game for IT organizations worldwide. Accessing applications and infrastructure online is transforming and modernizing IT operations without requiring expensive software licenses and additional staff. Cloud software and cloud infrastructure companies amortize the delivery of high-quality technology across many users, so that governments can provide new or better services with fewer resources and less waste.

Moving finance and HR to the cloud can also empower government to help its community survive tough times. The savings from cloud software help governments invest in more public-facing services. The cloud also enables faster exchange of information among government workers, which in turn increases productivity and accountability.

Finance and HR in the cloud also improve talent development programs and provide an array of easily accessible self-service tools for employees, such as comprehensive benefits administration and online payroll and tax data. Flexible cloud software can help automate hundreds of business processes so that an agency can operate more like a private enterprise but without the overhead of maintaining and updating a sophisticated software package. Online financial management helps track funding, spending, transactions, approvals and compliance initiatives more efficiently in one unified system that saves decision-makers time and also enables sophisticated business intelligence.

State and local governments and public institutions are moving to the cloud and realizing many qualitative and quantitative benefits in the transition. Here are two examples that demonstrate how this evolution is taking place.

Nebraska Unifies HR Processes to Focus on Talent

The state of Nebraska needed a simpler, more affordable way to manage HR processes and its 18,000 employees spread across 80 agencies. The state’s legacy ERP system was expensive to maintain, according to Dovi Mueller, HR administrator for the state: “In times where economics play a big part in what you do, especially in the public sector, we’re always looking for ways to lower our cost and get a better product.” Employees didn’t like the old system, and often complained about it. “They don’t understand it,” she says. “It’s difficult to use.”

In addition, employees had been unhappy with the features of a separate self-service benefits enrollment tool. The state decided to replace the existing system with a more unified and comprehensive system for managing and developing talent.
After adopting HR in the cloud, Nebraska employees are finding that the system is much easier to use, and the IT department is no longer needed to create reports, since users can now run their own reports anytime from within the system. “If you want to find out something about yourself, you go to the ‘All About Me’ page,” Mueller explains. “If you want to create a new position, you put in ‘Create Position.’ The ease of use is a big win for us.”

From a technology perspective, the new system is saving time, money and hassles. The cloud model means no need for capital expenses on hardware or other infrastructure and staff has more time to focus on strategic projects benefitting the state. The automatic updates, which occur three times a year, are an enormous convenience. All employees are using the most current version and the state has the latest innovations in ERP technology.

Finally, the new system is helping Nebraska operate more holistically, instead of as 80 disparate agencies, Mueller says. “We are now starting to come together with one process for recruiting, one process for employee learning and performance development, and one process for open enrollment.”

Cornell University Goes Self-Service

Cornell University, an innovative Ivy League university with 14,500 faculty and staff, experienced the same realization as did many organizations in late 2008: The market downturn was going to necessitate cost cutting across the board. Since then, Cornell, comprised of seven undergraduate colleges and three professional colleges on the Ithaca campus, hired a consultant to help analyze areas for cost cutting. One area was in IT, and specifically, HR. The existing on-premise ERP system was difficult to maintain and upgrade, partly due to customizations, and didn’t offer easy access to data for decision-makers or employees. “We decided we could get a more efficient service by going to the cloud,” says Mary Opperman, Cornell’s vice president of human resources and safety services.

Cornell is in the process of transitioning from a third-party legacy ERP system to HR and payroll in the cloud. Managers will be able to get the data and reports they need at their desktops through the manager self-service application. Employees will also be able to manage their benefits, view payroll receipts and change their payroll deductions, among other tasks from their computers. Managers will have information they need to manage their teams, and can use the application for performance management, hiring and promotions, and organizational modeling. “It’s an incredibly dynamic tool for managers, as well as for HR,” Opperman says.

Another advantage is flexibility, common with cloud software. While the system has pre-built processes, it is designed to permit a great deal of flexibility in how those processes are used. “The system is able to respond to the way we do things,” Opperman says.

For IT, HR and payroll in the cloud will make life much easier, since all clients are on the same version and upgrades and maintenance are handled by the vendor. Opperman is confident that the system will also give time back to managers in her department: “We want people to spend less time collecting and more time considering data.”

Opperman adds, “Whether here in HR or out in the colleges and units, this system allows us to focus less time on process and more time on why we are here in the first place — serving and supporting our students, faculty and staff.”
How Finance and HR in the Cloud can Change Government

Moving to the cloud for a core IT system is not a simple decision. Despite the proven economic benefits of Software-as-a-Service (SaaS), if an agency has been using a system for 15 or 20 years, change doesn’t come easy. Yet cloud software offerings have matured profoundly in the past few years, and there is now a wealth of sophisticated solutions that a government agency can afford. Without the hassle of purchasing licenses, updating infrastructure, buying more storage and servers, configuring and maintaining the software and operating a help desk, once implemented, finance and HR in the cloud can be much easier to use and more affordable. Instead of being on call 24/7 to troubleshoot application issues, IT can now work on supporting strategic projects across the organization. Here are some of the other benefits:

Cost savings for leaner government: First and foremost, cloud software can bring savings of 25 to 50 percent, compared with maintaining an on-premise system. These savings come from the subscription model, which reduces the requirements for internal infrastructure and staff to support the system. IT spends far less time training users, since the software is intuitive and consumer friendly. Best-in-class cloud software also includes comprehensive integration platforms that make it easy to connect to other third-party systems already installed.

Unlocking the data: On top of these savings is a whole new way of working — smoother, Web 2.0 style features mean that employees can extract and share data and conduct analysis like never before. Government can operate more like a private business, with detailed reports available in minutes, which gives employees real-time, actionable information on operations to make the best decisions or to improve processes or services. The cloud also automatically creates a community of users all working from the same version, so that people can share best practices easily.

Modern platform: Public cloud solutions deliver the best economics and agility, due to the shared services delivery

Finance and HR in the Cloud: What Should I Look for in a Solution?

- **True cloud**: Public cloud, or SaaS, is most affordable for companies and organizations because it is based on shared infrastructure versus private, dedicated servers. This delivery model brings benefits such as frequent, across-the-board upgrades, rapid on-demand provisioning and optimal performance through dynamic server/resource allocation.

- **Frequent updates**: A significant advantage of the cloud is that SaaS providers can release and automatically distribute product updates frequently, as much as three times yearly. Ensure that your SaaS partner is committed to this level of ongoing innovation.

- **Actionable analytics**: Finance and HR in the cloud should enable users to request data, and view metrics and reports from within the system instead of needing to access a separate analytics source. The average user can create a report with a couple of clicks.

- **Integration**: Finance and HR in the cloud should provide out-of-the-box integration with common business systems, and tools for custom integrations when needed so that integration is not costly or time consuming.

- **Business process customization**: Most organizations have a few unique processes or ones that frequently change, so finance and HR in the cloud must offer the ability to easily configure and adapt workflows and processes as needed. A business analyst or power user should be able to do the customization, without IT intervention.

- **Organization management**: Finance and HR in the cloud should support multiple organizational structures, reflecting the diversity required for modern governments. This includes the ability to restructure organizational charts, reassign reporting relationships and assign workers to multiple organizational types.

- **Support for multiple mobile platforms**: Managers and employees want and need access on the go from their own devices, whether they are on tablets, smartphones, netbooks or laptops.

- **User community**: In the cloud, all users should be on the same version, which supports the sharing of best practices and information among users from different organizations and agencies.

- **Government requirements**: The system should support unique government processes such as grant and fund management and specific workplace regulations.
model. Organizations receive automatic upgrades to the latest technology and all the minor updates and security patches in between, with minimal effort. Since all customers receive upgrades at the same time, software companies can spend more time supporting the latest version and developing new features. This means that all customers benefit from more frequent and valuable updates to improve efficiencies and knowledge within their organizations.

**Organizational visibility and standardization:** Employees go to one place to view their benefits, retrieve operational data and conduct transactions, instead of combining manual and automated processes. From one place, senior leaders can view organizational status in all departments or drill down into a specific function. Managers can update organizational charts, change workflows, search for skill sets when a new project launches, monitor financial key performance indicators (KPIs) or understand benefits usage across the workforce. Holistic intelligence in turn gives governments the means to understand their deficiencies and strengths at any time, and where improvements can begin. That’s responsible government, with the help of the cloud.

**Getting Started in the Cloud**

Organizations such as Cornell University and the state of Nebraska are reaping the benefits of finance and HR in the cloud, yet most government IT directors are still waiting for this transition to occur. Research shows that 36 percent of organizations are still investigating solutions. Minimal organizational change. The state of Illinois has saved more than $2 million annually by migrating to a cloud-based email system. Moving an entire business application suite to a new platform takes considerably more effort, even with a cloud-based system. Replacing legacy ERP requires an organization to change outdated processes. Government entities operate underneath regulations and unique requirements that can make change more arduous.

Governments may also be hung up on nightmare legacy ERP deployments of the past: budget overruns, timeframes that extended from months into years, systems that, when finally deployed, were unpopular or didn’t work as intended. IT directors may also worry about security, despite the fact that in some cases, a cloud vendor may be able to deliver stronger security than internal IT staff.

No matter the challenges, the benefits of finance and HR in the cloud can outweigh any hesitations. Federal cloud initiatives are paving the way for state and local government cloud initiatives. The Department of Health and Human Services is saving 60 percent by moving its back-office systems to the cloud.

A New Jersey public transportation system decreased the average response time to customer inquiries by more than 35 percent and increased productivity by 31 percent after adopting a cloud solution.

Understanding the real risks and taking care to select the right cloud partner can help an agency move faster toward a modern application environment. When it comes to security, auditors can help qualify vendors and agencies can look for certifications, such as SAS70 Type II certification.

Another concern is reliability. In a shared services environment, will data and applications be subject to increased outages and regular periods of slow performance? IT organizations should ask vendors about their capabilities for redundancy, failover and SLA guarantees.

Finally, preparing for the transition to finance and HR in the cloud entails strong business and IT alignment. While the cloud may seem “simple” it often requires even closer relationships between IT and agency department heads. If a department wants to add functionality or procure a new service, it should consult with IT and not go off on its own to the vendor. This helps manage risk, cost and enables IT to influence the broader cloud strategy in the organization. Government employees need to understand the benefits of moving to a new system; IT can help clear up any concerns that users may have regarding access to data, security or functionality.

**Endnotes**

2. www.meritalk.com/fedappmod  
3. www.leg.state.co.us/OA4/oauditor1.nvd/All/96/1594f6b9cfa6  
Workday is the leader in enterprise-class, software-as-a-service (SaaS) solutions for managing organizations, combining a lower cost of ownership with an innovative approach to business applications. Workday delivers unified Human Capital Management, Payroll, and Financial Management solutions in the cloud.

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www.centerdigitalgov.com

Acknowledgements:

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