Managing the Business of Government in a Single Connected System

Integrated ERP streamlines today's work and enables future innovation

The Critical Choice for Modern Integrated ERP

Selecting a new ERP solution involves more than simply evaluating product features. It also involves a higher-level decision about how the system should be deployed across your enterprise and what vendor is providing the solution. This decision can be guided by answering two questions: Can we centralize business applications and data into a single, integrated ERP system for the entire enterprise? Or should we continue with multiple, separate and limited-focus business systems that are specific to a department or function?

As these questions indicate, the choice of a new ERP solution must consider many complex business and technical factors. This paper discusses those factors and describes how local governments can benefit from choosing an integrated and cloud-based ERP solution.

What Makes an Integrated ERP Suite?

An integrated ERP solution is a strategic choice that combines core business software, analytics and productivity tools in a single, central system for the entire organization. For example, Tyler Technologies' Enterprise ERP, powered by Munis®, solution provides integrated applications for financials, human capital management, revenue management and billing, asset management, and content management.

When an ERP solution is integrated by design, it offers built-in connections that deliver more value than custom integrations developed in silos. Integration of budget and human resources modules, for instance, means that budget processes are automatically checked whenever a new position is entered in the HR application. In a non-integrated ERP, an application programming interface (API) script must be developed specifically to handle this transaction.

Hosting an integrated ERP solution in the cloud brings even greater value. The cloud makes an integrated ERP system easier to deploy, scale and maintain compared to the traditional, on-premises approach. Cloud-based ERP solutions provide a common, flexible platform of computing and storage resources to support integrated software modules as well as their data. The cloud solution vendor maintains infrastructure resources and software for the core ERP system and may offer prebuilt integrations and APIs for commonly used third-party applications.

The benefits of cloud-based ERP were proven during the pandemic, as many local governments needed to close offices and move work and services online. Cloud-based and integrated ERP systems enabled cities and counties to sustain revenue streams by offering self-service tools that let citizens obtain information, apply for permits and services, and make payments through digital channels. For back-office operations, remote employees were able to sustain work through online access to the ERP system and use of paperless processes.

The village of Wellington, Fla., replaced its legacy ERP technology prior to the pandemic. The new technology — an integrated, cloud-based **Enterprise ERP** system — helped the village navigate the disruption.

"To have so much of our operations fully in the cloud with the mobile apps really helped us when the pandemic hit," says Tanya Quickel, deputy village manager. "If we had been where we were with our old system, it would have been so much more challenging."

The village deployed this new ERP solution gradually and now uses modules for core financials, payroll, human resources and utility billing, as well as Tyler's Enterprise Permitting & Licensing, powered by EnerGov, solution for permitting.

The Business Value of Integrated ERP Applications

The criteria for a new ERP solution will likely include a long checklist of needed technical and functional capabilities. But it's also important to determine whether a potential ERP solution can deliver significant business value. An integrated ERP system delivers this value in four major areas.

Core business applications in one system. To support a single, central system across a government, a new ERP solution should provide core business applications such as financials, human resources and revenue management. It should also easily integrate with other core software, such as geographic information systems (GIS) for development planning.

Improved service delivery and efficiency. While local economies recover from the pandemic, governments will need to operate with even tighter budgets. These financial constraints make it even more important that governments use technology to become more efficient. An integrated ERP system provides a platform to deliver value-added services and community access apps that increase public satisfaction.

Increased stakeholder satisfaction. Online services, especially when they are tailored with user information, are vital to meet rising constituent expectations for convenient government interactions, such as offering proactive community notifications.

Centralized data. Bringing all key business data into a central system makes it possible to eliminate paper processes, improve information and digital document sharing across programs and departments, and support data-driven decision-making.

Annapolis, Md., showcases the value of a single, integrated ERP system. After initially implementing Tyler's Enterprise ERP just for managing financials, the city has gradually expanded the solution. Today Annapolis uses Enterprise ERP for financials, human capital management and tax billing. Payroll tasks are supported by Time & Attendance, powered by ExecuTime, which gives employees self-service tools to simplify time tracking and scheduling. The city also uses Enterprise Permitting & Licensing to manage permits and online submission of building plans, and Enterprise Service Requests and My Civic to support community incident reporting through a web or mobile interface.

"When evaluating an integrated system, we look at what else the company offers and what they could potentially offer in the next few years that we might be interested in," says Carrie Kramer, management information technology analyst for the city of Annapolis. "Are we setting this purchase up so it could flow into something else? Keeping this in the back of your mind makes things a lot easier in the long run and helps end-users get the most out of a system."

The Technical Value of an Integrated ERP Solution

For IT, an integrated ERP system eliminates or significantly reduces many burdens of maintaining legacy systems, such as:

- Developing, customizing and maintaining interfaces between disparate applications and data sources.
- Managing and maintaining multiple connections to different clouds, technologies and business processes.
- Coping with fragmented organizational and administrative controls across the multiple ERP applications and integrations.
- Dealing with fractured reporting and analytics due to third-party reporting tools required to pull data from multiple, disparate sources.

Another complex and time-consuming demand is tracking and coordinating different application development life cycles, deployment approaches and

vendor update schedules. Each new integration or update to the ERP software or an application requires a complex and often disruptive validation process before it can go into production. Different vendor update schedules may extend the time involved, especially to resolve synchronization issues. As a result, the ERP system and its associated applications become increasingly out-of-sync and out-of-date over time.

Even if the IT department has robust capabilities to develop and maintain integrations with vendor APIs, a cobbled-together ERP system will always have significant technical limitations. An integrated ERP system simplifies administration and maintenance because ERP applications run on a single cloud with built-in integrations maintained and updated by the vendor. IT needs to work only with that single vendor for release management and application configuration, as well as application-level training, updates and roadmaps of future capabilities.

Encinitas, Calif. discovered the benefits of working with a single vendor for multiple solutions as it migrated from a legacy ERP system to Enterprise ERP. Over time, the city also implemented Enterprise Permitting & Licensing to manage permitting activities and the My Civic civic engagement solution to provide a central source of community information and incident management reporting via a mobile app.

"You can have a smaller application portfolio so your staff isn't stretched as thin as they might be when supporting separate applications that require specialized knowledge," says David Van Pelt, IT and business application supervisor for the city. "Instead, all of your relevant staff can be comfortable with a single ERP solution, making it easier to support."

An integrated ERP system also provides a better experience for users. Employees and other system users enjoy a simpler and unified interface when working with ERP applications and automated processes. Reports and analytics can easily surface data across all ERP applications to provide new insights. Users no longer need to rely on complex, ad-hoc reporting tools and IT no longer needs to maintain APIs just to view data across disparate systems.

Van Pelt notes that the consistency of a single ERP system reduces the user support demands on IT. "A consistent system interface means once you train users in one area, they can easily learn others," he says.

How an Integrated ERP System Improves Resiliency

The COVID-19 pandemic made clear how much governments need ERP systems to maintain business continuity during a crisis. And experience gained during the pandemic indicates governments will require specific

Reducing the Integration Burden

An integrated ERP solution eliminates the burdens of maintaining a highly customized legacy system.

Ease of integration was top of mind when officials in Wellington, Fla., deployed a cloud-based Tyler Enterprise ERP system to replace aging ERP technology. In use for more than a decade, the old system was heavily modified and struggled to meet evolving needs.

"We customized ourselves into a problem that became unworkable with our old system," says Christine Wadleigh, budget and reporting director for the villiage.

The difficult-to-maintain integrations, along with lack of support for mobile applications or cloud technology, meant the legacy system needed replacement. Enterprise ERP now provides a platform approach that seamlessly combines key business functions.

"The longer you're working with separate systems, it gets very difficult," says Deputy Villiage Manager Quickel. "We really wanted the new solution to be comprehensive so we weren't always fighting to make things work together."

integrated ERP capabilities to support new ways of working and delivering services going forward.

At the top of the list are fully digital processes that enable remote work. Many governments are working toward eliminating the need to accept, store or route paper documents to conduct business. These changes will make in-office employees more efficient, too. In addition, field employees need full information access when they make site visits or meet with customers, vendors, business owners or service providers. Mobile and remote employees want online access tools for administrative tasks, such as entering timesheets.

Constituents, suppliers and others who work with government agencies also expect to use digital transactions and services. Online ERP processes and documents support resiliency during future disruptive events — such as a natural disaster — where employees will need remote access to government applications and data to continue operations.

"With an integrated ERP, there's no need to create a security risk by using a bridge or API to move data between systems," says Brian Paquin, management information technology manager for the city of Annapolis. "We want to use as many of these integrated products as we can so we get the benefit of a single system and the ease of working with a single vendor."

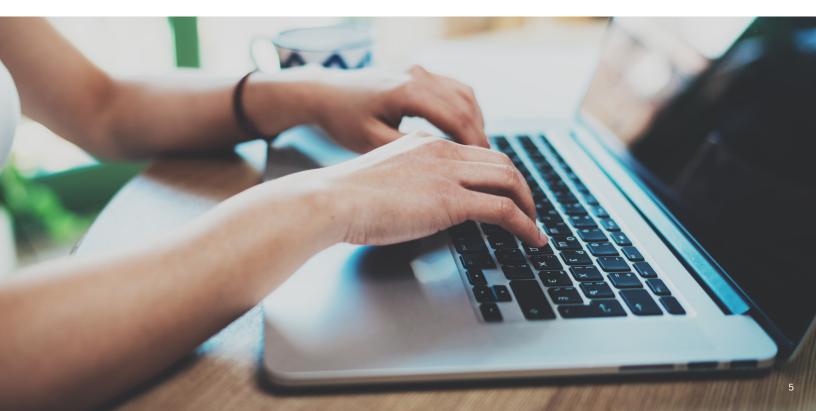## "You can have a smaller application portfolio so your staff isn't stretched as thin ..."

David Van Pelt, IT and Business Application Supervisor, city of Encinitas, Calif.

Kramer agrees and notes, "Because we have a small IT staff for all of the city's needs, it's nice to have one main vendor contact if we have a problem with any of the ERP modules. It's also helpful to have a single, consistent support process instead of needing to follow different procedures for different modules."

Encinitas used Tyler's Enterprise Permitting & Licensing solution to deploy a public self-service portal before 2020, which positioned the city for the disruptions brought by the pandemic. This portal allows constituents to view information, pay bills, submit permit applications and upload documents for the planning department.

"The portal was a lifesaver during the stay-at-home orders, especially for digital planning documents," says Van Pelt. "With online submissions, people didn't need to leave paper documents at the city hall door."

ERP capabilities that improve revenue collection are another important factor for crisis response. ERP systems that support online and kiosk options help

the community — government's customers — make timely and convenient payments for bills and fees when physical offices are closed. It is also easier to adjust standard business processes that are defined in an integrated ERP system.

These are some of the reasons why movement toward integrated ERP continued throughout 2020. York County, Va., replaced a 30-year-old mainframe system with Tyler's Enterprise ERP in the cloud for human resources management and payroll. This system now helps the county reduce process redundancies and save staff time.

And Sugar Land, Texas, transitioned to a cloud-based Tyler ERP solution for financial planning from a legacy "green screen" system, according to the Center for Digital Government's 2020 Digital Cities Survey. The new system offers more robust tools for financial management and provides critical data for decision-making by city managers.

For example, Sugar Land's Office of Performance and Accountability uses data to understand how city agencies can optimize performance and deliver better services. And a new Department of Innovation will explore smart city ideas that utilize data for better governance.

Making the Budget Case

Given the scope and impact of an ERP system, the budget case for modernization needs to be thorough and compelling. Several factors can help make a strong case in favor of an integrated and cloud-based ERP solution.

Begin by calculating the expected cost reductions for system licenses as well as maintenance and technical support contracts. These numbers may be the easiest to identify. It's also important to include costs for all computing hardware that can be eliminated with the move from on-premises to a cloud solution.

As budget shortfalls curtail hiring of new and replacement employees, cities and counties will need technologies that can improve efficiency. Estimate the potential cost savings generated by eliminating paper forms and manual data entry, as well as errors assocated with these processes. End users can help identify potential time savings to inform these calculations.

Wellington created budgets and accumulated funds that would support a multi-year transition to the new ERP system. Staff also started early to build council support when the budget came up for approval.

"Our council heard us talking about the need for a new ERP system year after year, so they were prepared for the magnitude of it when we kicked off the project," says Quickel.

When Separate Systems Make Sense

In many instances, an integrated ERP solution delivers important benefits. But here are some scenarios where maintaining separate systems may make sense:

The solution must meet unique business functions of a department that would be difficult to support in an enterprise-level ERP system.

Applications and data need only limited integration and reporting.

Recently Implemented systems have an active vendor support contract and deliver adequate functionality and performance for their target use cases.

Systems have the necessary internal technical roles or resources to adequately support reporting and integration needs.

Also important to council support was building a common understanding that the new system would be an organization-wide project, not one limited only to the finance or IT departments.

Tip: Budget calculations can be easier to develop by starting with one use case that will deliver fast, clear savings. Include metrics that can be monitored after the new solution is implemented to determine the actual improvements gained.

Practical Advice for Planning and Implementation

The experience of local governments offers a valuable guide for planning and moving to a new ERP system.

Setting realistic expectations about the project scope as well as the work and time involved is important to set up success. Quickel notes, "It's important to solidify staffing before you proceed on such a big, impactful project."

As the project rolls out, a key strategy is to deliver training and positive experiences that encourage user adoption.

"With an integrated ERP, there's no need to create a security risk by using a bridge or an API to move data between systems."

Brian Paquin, Network Engineer, city of Annapolis, Md.

"If you don't set up the new system correctly, information and processes won't flow, which makes more work for your users and then they won't like the change," says Kramer.

On the other hand, a well-designed system implementation promotes a positive user perception.

"Once they become comfortable with the new system, they have a hard time remembering how they did things the old way," says Paquin.

After deployment is complete, it's also important to sustain continued support for the new ERP system.

"You need political will for the long term so that leaders and business users aren't distracted by the

next new shiny thing for their department," says Van Pelt. "Leverage positive citizen feedback and demonstrate the value of the core enterprise system, then everybody will come along."

Better Business Management with an Integrated ERP Solution

The demands of post-pandemic recovery and the need to replace legacy systems are pushing local governments to consider new ERP solutions. A cloud-based and integrated ERP system offers a modern solution in the key areas of business functionality, employee and constituent access and experience, and ease of implementation and maintenance for IT. Just as importantly, a modern integrated ERP solution offers the flexibility and capacity to meet unpredictable business and public service demands, positioning your agency and the community it serves for the future.

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