



ERP Challenges and Opportunities in Government

FROST & SULLIVAN

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Executive Summary

As state and local governments seek ways to manage through today's tough economic times, many administrators see an increase in ERP operating challenges due in large part to the twin specters of declining revenues, the consequent budget pressures coupled with an uncertain economic future. At the same time, government leaders are looking for ways to modernize and rapidly implement new systems to comply with the American Reinvestment and Recovery Act (ARRA) transparency and accountability requirements. In many respects, the need for greater transparency pre-dates the economic downturn and stimulus package, as constituents demand greater efficiency, accountability and visibility from state and local governments.

Exacerbating the situation is an assortment of staffing issues that predated the economic downturn, but have not abated given little recent change in the IT job market: an ongoing shortage of qualified staff, the high cost of skilled labor, a dearth of legacy application and system expertise and eroding trust in vendor stability. As a result, governments struggle to allocate the financial and human resources necessary for enterprise transformation utilizing traditional IT delivery models. Frost & Sullivan recently surveyed government ERP executives about these concerns and how they affect the needs and requirements of ERP system administrators and professionals.

Among those surveyed, about one third endorsed a managed services approach to ERP. They liked the ready access to subject matter expertise specifically tuned to the requirements of each organization's unique ERP infrastructure. Furthermore, a managed services solution that alleviates the organization from the burden of periodic event management (e.g. a release upgrade) is highly valued. However, more than 60 percent of governments (i.e., local, county, and state level) do not currently utilize managed services for ERP applications. The primary reasons center on concerns over the loss of control and a perception that the cost may be higher than operating entirely in-house.

Governments are recognizing that their challenges, while not unique in an operational sense, require creative solutions. The high degree of familiarity with (and endorsement of) the benefits of managed services for ERP all point to increased adoption. Among those surveyed, all identified IBM, Oracle and CGI as the top three providers of ERP managed service.

This white paper, written by Frost & Sullivan and commissioned by CGI, discusses current ERP operational and management practices, and the challenges and issues faced. The findings are based on a survey of government organizations in the U.S. conducted by Frost & Sullivan on behalf of CGI.

Introduction

The first section of this paper examines perceptions of managed services for ERP, current ERP practices including the challenges faced, and the status of managed services in state, country and municipal government organizations. We will then discuss the needs of government alongside the attitudes of the survey participants towards managed services for ERP. The last part of the white paper highlights the move towards a managed service for ERP solution and summarizes some key takeaways.

In order to summarize the information as an aid to both the analysis and readability of this paper, the governmental organizations interviewed for the survey are categorized, according to their annual budget¹ for ERP systems, in the following manner:

- Organizations with an annual ERP budget of less than \$3 million (numbering about two thirds of the total sample).
- Organizations with a budget of \$3 million or greater, of which under a third in this survey group are classified.

Survey Methodology

Frost & Sullivan recruited and qualified key decision makers for ERP systems and services from state, county and municipal government organizations to complete an in-depth, structured telephone survey of approximately 25 minutes in length. A total of 50 respondents completed the survey between December 2008 and January 2009.

Respondents who indicated a responsibility for ERP applications and systems management and related product and service purchasing within their organizations completed an interview that focused on their organization's current implementation of ERP, their particular challenges, the incidence of managed service usage and experience, and the importance they attach to various managed services features.

Of the total sample of 50 respondents, 29 are at the city, or municipal, level of government, 17 are in county, and four are in state government. All respondents are involved in the decision process for the purchase of IT

¹ Budget figures represent total annual ERP and related services expenditures including all staffing, data center operations, software and hardware purchases, maintenance, updates and upgrades, and application support.

products and purchase. These individuals are mostly senior level executives within their respective organizations with chief information officers comprising the largest group of respondents.

A Word About Frost & Sullivan

Frost & Sullivan is a global growth consulting company that partners with clients to support the development of innovative growth strategies. For more than 40 years, Frost & Sullivan has leveraged its comprehensive market expertise to serve an extensive clientele that includes global 1000 companies, emerging companies, and the investment community.

Our consultants, market analysts, corporate trainers, account managers and customer support staff work together to provide market research, growth consulting and corporate training solutions to clients in more than 50 countries around the world.

ERP Systems in Government: Practices and Challenges

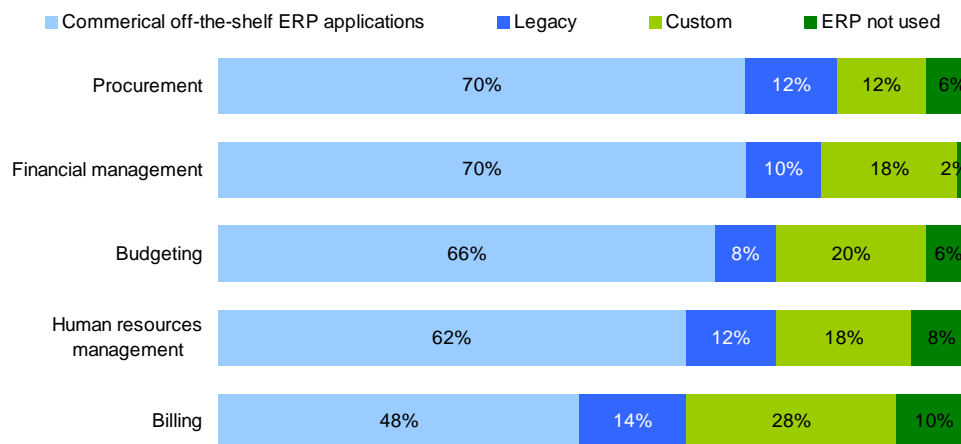
In this section, we discuss current ERP management and operational practices and look at the challenges that these government organizations face with ERP.

A Profile of ERP Usage

Respondents reported a high incidence of usage of off-the-shelf applications for most major ERP categories. One exception is billing, where customized applications tend to dominate. Overall, legacy (e.g. mainframe) ERP application usage is a small proportion of application usage, suggesting a gradual phasing out of these legacy, and often homegrown, applications by all levels of government.

Other application categories mentioned tended to be specific to the unique requirements of, and services offered by, the organizations surveyed. These include asset management, custom applications specific to government such as correctional services, and call center management software.

Figure 1 – ERP Applications in Use



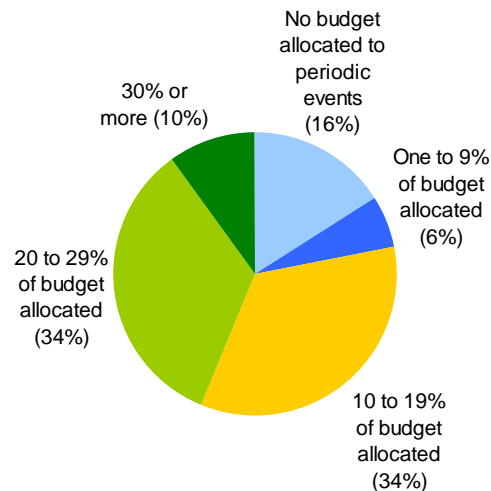
Source: Frost & Sullivan Survey 2009

Out of the organizations' total annual ERP and related services budget, the majority say that more than 10 percent is allocated to periodic events such as implementation and upgrade projects. Two of five report that 20 percent or more of the total budget is allocated to such events.

The study found that as the overall budget for ERP increases, a greater proportion of the budget is spent on periodic events. For government agencies and departments with budgets of \$3 million or more the median

allocation to periodic events is 20 percent, and for smaller organizations this figure is 15 percent. This suggests organizations with more constrained operating budgets are foregoing update/upgrade activities, and the enhanced functionality that further supports their goal for efficiency.

Figure 2 – Budget Allocation for Periodic Events



Source: Frost & Sullivan Survey 2009

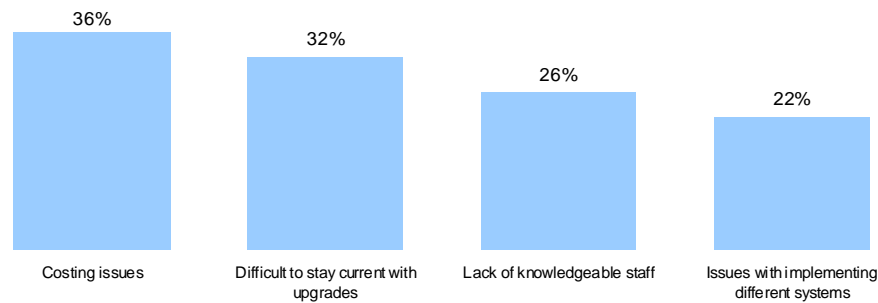
ERP Operating and Maintenance Challenges

ERP systems present a myriad of challenges to administrators, and according to survey respondents these tend to be related to the all-encompassing area of cost or the more specific problems associated with upgrading and maintaining the application. One respondent put these challenges into context, “maintaining experienced staff with legacy knowledge is becoming increasingly challenging as the city budget contracts.”

In this environment, ERP administrators are tasked with maintaining legacy systems, maintaining customizations from release to release and training staff on new features, while integrating new, distributed systems that are generally on different, more modern platforms. Doing so in an era of declining budgets and staffing shortages has many of these administrators “stymied” as they can’t shed maintenance costs, including legacy technology, and, while more robust in its capabilities, the newer technology is often more expensive to operate than the legacy architecture it is succeeding.

“In 10 years, our IT staff has decreased from 300 to 90.”

Figure 3 – ERP Operating and Maintenance Challenges

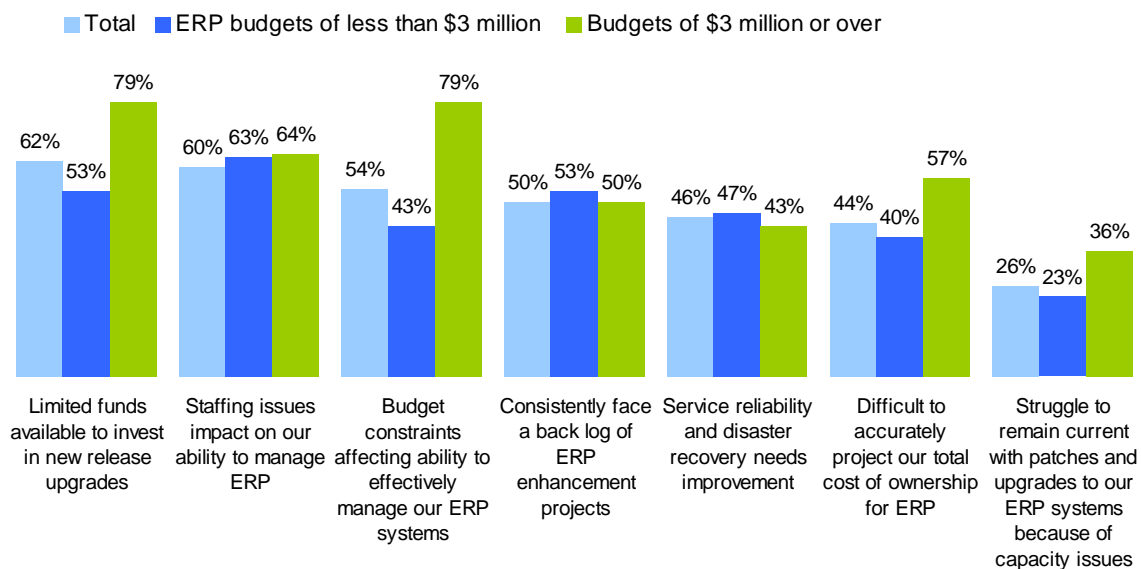


Source: Frost & Sullivan Survey 2009

Rating The Top Challenges

Governments of all sizes share a common set of issues and challenges in operating and maintaining their aging ERP systems and disparate applications. Most agree that a host of staffing challenges is impacting their ability to manage ERP, and they consistently face a backlog in enhancement projects as the demand for efficiency increases. Those in organizations with ERP budgets of \$3 million or more say they are particularly challenged by funding and budget constraints.

Figure 4 – Ratings of Top Challenges (Overall Agreement)



Source: Frost & Sullivan Survey 2009

Managed Services for ERP: Perceptions and Adoption

Government at all levels report difficulties managing their operations in the face of the economic realities of budget constraints, skilled labor shortages, increasingly complex applications and the need for efficiency required to meet the demands of their constituencies. The problems are substantial and becoming increasingly more difficult to solve.

The survey asked respondents to indicate what first comes to mind when the term managed services for ERP is mentioned. The responses suggest that, while well established in the private sector, government is becoming more familiar with the terminology and understands the common features and benefits of the offering. Most say that managed services for ERP is an IT outsourcing or full application hosting service, the latter representing the most common definition of the term when looking across solutions and industries. Few are unable to offer a definition.

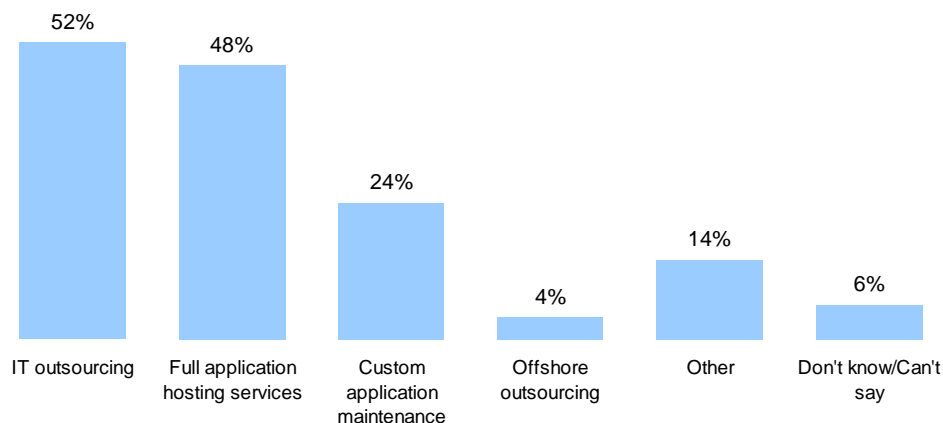


Figure 5 – Top-of-Mind Definition of Managed Services for ERP

Source: Frost & Sullivan Survey 2009

Managed Service for ERP Adoption Rates in Government

Two-thirds of government organizations surveyed for this study report that they have already implemented managed services for ERP applications in some form. Applications already outsourced to a managed services provider center on human resources management, but also include a high incidence of procurement and financial management applications. Frost & Sullivan suspects some of these engagements may be more analogous to augmentation of internal IT staff on a multi-year basis vs. full transition of technical ERP management, or its functional operations, to an outside provider, delivered as a service.

Presently, the adoption of managed services is concentrated in larger government organizations (i.e., those with budgets of \$3 million or more). It is within these larger organizations where budget constraints are having the most impact on their ability to maintain systems completely in-house. Still, smaller government organizations are beginning to signal that these same challenges are becoming acute and their consequent interest in a broader, complete managed service is growing.

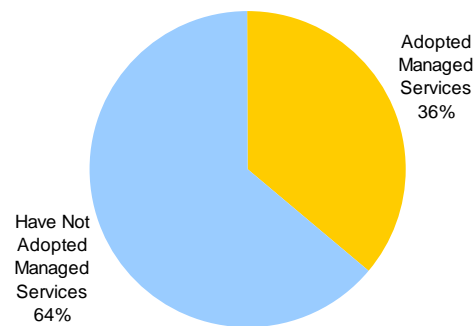


Figure 6 – Adoption of Managed Services for ERP

Source: Frost & Sullivan Survey 2009

The government issues that spurred the move to managed services for ERP are compelling and real for government at all levels.

- ☐ Minimizing staff challenges, such as headcount reductions as a direct consequence of budget constraints.
- ☐ Improving their ability to manage the increasing complexity of ERP applications, and maintain these with updates and upgrades while simultaneously modernizing to improve efficiency and existing services and taking advantage of new capabilities.
- ☐ In the face of these challenges, governments are striving to improve system reliability such that it is on par with commercial standards.

Given these clearly defined issues, how then to explain the low adoption rates reported for a full managed service for ERP applications? This survey reveals several explanations and also points to an emerging change in attitudes towards managed services as an understanding and appreciation for its benefits takes shape.

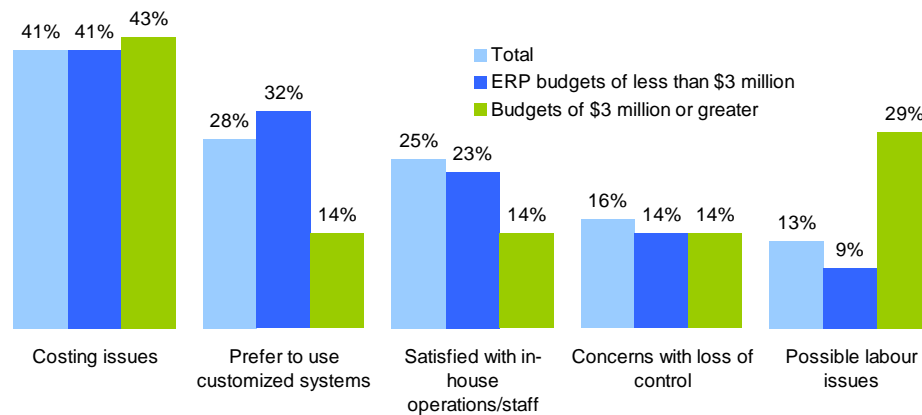
Respondents to this survey who have not yet adopted managed services indicate cost concerns as a significant barrier. Yet, many of these same

“We have been slow in adoption due to politics and a misunderstanding of the cost and operating benefits.”

people recognize that it is a misunderstanding of the cost and the potential benefits within their own organization that are the true barriers to adoption.

Others, and notably in larger government organizations, say managed services have not been adopted because of labor issues such as the presence of unions and the lack of political support to reduce personnel. As one respondent described his situation, “We’re a union shop. It would [be] difficult to accomplish this in this labor environment.” Such a situation is perceived to be a permanent barrier to managed services adoption when in fact it may only require that transition take place over an extended period of time in conjunction with a retiring workforce and voluntary turnover.

Figure 7 – Why Managed Services Have not Been Adopted



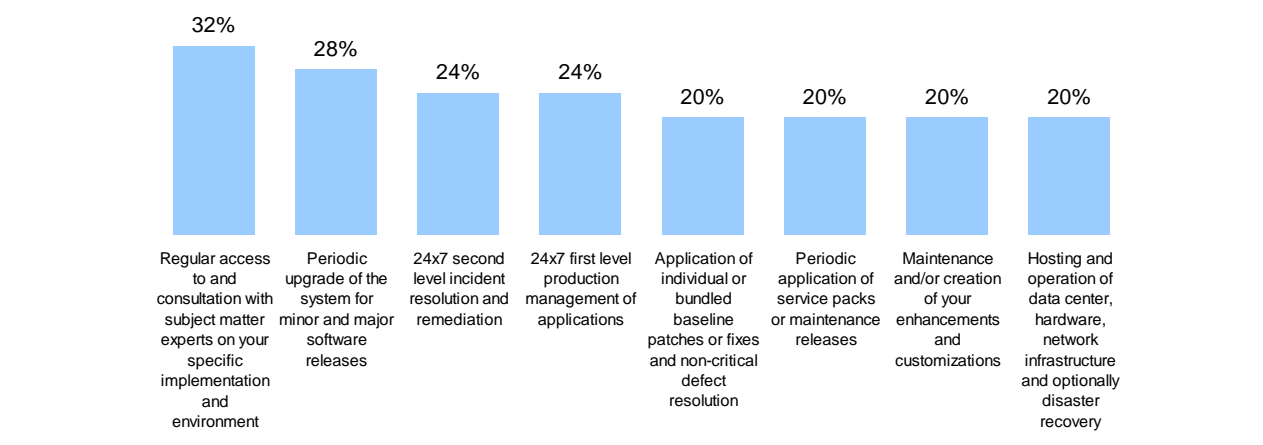
Source: Frost & Sullivan Survey 2009

Recognized Benefits of Managed Services

The survey asked respondents which features of a managed services solution seemed most critical to their organization. Most responded that those related to either access to experts outside the business or the management of upgrades. Patches and fixes were critical because they alleviate one of the most pressing issues they face, as well as addressing skilled staff shortages and the consequent impact of maximizing the efficiency of their operations.

“If we lack the technical know how and experience to deal with a critical issue, SMEs can be a valuable resource, and good insurance.”

Figure 8 – Interest in Managed Service Features (Very Interested)



Source: Frost & Sullivan Survey 2009

Indeed, staffing issues related to shortages, cost, retiring workforce and evolving skill sets dominate reasons provided for interest in a managed service:

“Mostly it is the availability of qualified staff to perform these functions. Problem solving capabilities outside of our experience and skill sets.” — a CIO responding to the benefits of regular access to subject matter experts

“With assistance in this area, our staff would have more time to address other issues.” — an IT director responding to the benefits of baseline patches, fixes and non-critical defect resolution

Vendor Attributes Sought

When asked to describe the main criteria used to select a managed services provider, respondents indicated the experience and reputation of the vendor, the “organizational and operational” fit of the vendor to the infrastructure, and systems managed are the most heavily weighted qualifications. Of course, cost plays an important role – half mention this as a key concern, but overall an excellent track record and a good fit with the organization are critical attributes for a managed services vendor to hold. This underscores the growing expectation that a managed service provider will have a high degree of expertise in the applications and/or domain around which they are providing the service, as well as proven experience and the capacity to keep pace with the demand for services and evolving service capabilities such as operational assessments, strategic planning, systems integration and change management.

Looking to The Future

The survey also asked respondents to provide insights into their medium term plans for managed services ERP. Over the next two years, most government organizations surveyed (72 percent) predict their usage of managed services will not change. This is based largely on the uncertainty of budgets and a lack of clarity in what may be forthcoming. Still, there are some who will continue, at least in the short term, to rely on their own in-house expertise and continue to build on this capability.

Of those who intend to increase their managed services usage, the overwhelming rationale is the need to remain current with upgrades and new application adoption. These executives reason that managed services is the “most efficient way to achieve” this goal. Frost & Sullivan suspects that the current economic environment may increase the number of organizations willing to consider managed services as the budgetary pressures on state and local governments have increased significantly since these interviews were conducted.

Summary

As we examined current ERP practices and challenges, perceptions and usage of managed services, and general trends, we found significant differences in current behavior between smaller organizations and larger organizations. In particular, despite tough times, governments with annual ERP budgets less than \$3 million are less likely than their larger counterparts to rate funding and budget constraints as challenges. Yet, needs and requirements are similar between the two size tiers with regard to the staffing issues faced and the backlog in ERP enhancement projects driven by demands for modernization and efficiency. In addition, smaller organizations may not fully be aware of challenges still trickling through the flow-down of government budgets, or they may be more willing to accept a less-than-ideal level of efficiency and maintenance from their ERP systems.

Despite these differences, the industry has a firm grasp on the potential offered by managed services, which points to a growing maturity in government as it embraces alternative approaches to meeting ERP requirements in increasingly uncertain conditions, and a willingness to explore the opportunity that managed services presents. Additionally, government executives clearly identified those who they believe are the leading providers of such services, naming IBM, Oracle and CGI as the top managed services companies.

However, the cost of periodic event management remains a challenge. The annual budget allocated to periodic events, such as implementation and upgrade projects varies greatly, but is as high as 40 percent of the total ERP budget, which underscores the impact that staffing shortages are having on government's ability to manage this area.

What is important in ERP management and operations is clearly recognized and endorsed by the survey participants as the key strengths of a top tier managed services solution. By alleviating the government organization of the requirements for periodic event management layered onto consistent service delivery, providing expertise as needed, and helping organizations push forward with modernization and the efficiency that comes with it, a qualified provider offers the desired mechanism to undertake the projects that are essential to the constituencies' needs. In fact, a trusted partnership with the qualified provider could provide the single point of accountability governments are looking for to maintain the tightest control of and accountability over precious budget dollars.