Best Practices for Government Content Management

IMPROVING GOVERNMENT PERFORMANCE WITH CLOUD CONTENT MANAGEMENT

WHY TIGHTER BUDGETS AND TOUGHER MISSIONS ARE DRIVING THE PUBLIC SECTOR TO ADOPT CLOUD SOLUTIONS FOR DOCUMENT-CENTRIC PROCESSES

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SpringCM®

AGENCIES UNDER PRESSURE

Government agencies at all levels are facing unprecedented challenges—including an aging workforce, increasingly diverse population, relentless security threats, massive infrastructure needs, and the necessity to exercise greater regulatory diligence.

At the same time, economic conditions are making it essential to trim budgets and ensure that every budget dollar is allocated where it will do the most good.

These pressures are exacerbated by the demand for transparency in government. Constituents, the media, and watchdog groups are ready at any moment to pounce on any failure by an agency to fulfill its mission—even if that agency's overall record of performance is positive.

A key factor in any agency's performance and operational efficiency is its use of information. Government is, after all, by its very nature information-intensive—especially in an open and free society. Agencies must therefore effectively manage all kinds of information. This information includes both the structured data residing in databases and the unstructured data that exists in the form of documents, emails, images, and other forms.

Three factors, however, are seriously inhibiting the ability of agencies to use information as effectively as they need to in order to achieve their missions with optimal efficiency:

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INFORMATION OVERLOAD

After years of aggressive IT implementations and widespread use of the Internet, agencies are now faced with a glut of diverse types of information. On one hand, this can potentially benefit agencies greatly—since they now at least theoretically have access to any information they need any time about anything they need to fulfill their mission at any given moment. On the other hand, it has become almost impossible to quickly pinpoint and deliver the "needle" in this massive information "haystack" that any individual government employee or constituent needs, when they need it.

INFORMATION SILOS

Agency performance and efficiency is also inhibited by the fact that information is often trapped in organizational "silos." Each department, agency, and/or bureau tends to implement its own set of systems to address its own specific information management objectives. These disparate systems complicate and fragment the use of information across teams and processes.

INFORMATION RIGIDITY

A third factor inhibiting effective use of information by agencies is the inadequate adaptability of their current systems for managing and sharing information. Agencies must constantly respond to changing conditions—including new legislative mandates, changing constituent needs, and the evolving technical requirements of inter-agency communications. Information management systems that are not sufficiently flexible do not allow for agile, cost-effective response to these kinds of changes.

Government agencies have, of course, made substantial investments in information and process management solutions to address these issues. However, these three issues have escalated to a point that now surpasses the innate capabilities of conventional systems and strategies. In addition, the growing disparity between increasingly ambitious agency missions and ever-tightening resource constraints has made it essential for agencies to pursue new approaches to information sharing, document workflows, and other content-centric processes.

In fact, conventional on-premise software solutions alone have proven to be inadequate for the new challenges that agencies now face. Conventional software is too overhead-intensive, takes too much time and effort to modify in response to changing needs, and does not readily lend itself to rapid, secure integration with systems across and beyond the agency.

The time has therefore come for agency decision-makers to aggressively evaluate alternative ways of addressing the information-related challenges that currently impede agency performance and over-burden agency resources.

THE CONTENT MANAGEMENT CONUNDRUM

For over 30 years, public and private sector IT efforts focused largely on structured data management. This resulted in powerful database-centric applications such as Enterprise Resource Planning (ERP) and Customer Relationship Management (CRM), which contributed significantly to organizational performance.

The world, however, has changed radically. According to IDC, while transactional data will grow at a compound annual rate of 21.8%, unstructured data is growing at a 61.7% annual rate. Institutional knowledge increasingly resides in email, Word and PDF documents, PowerPoint presentations, web pages, video and audio files. This content also forms the fossil record of institutional actions and behaviors. In other words, it is now unstructured data that presents the biggest challenge to performance. So organizations simply must turn their attention to better management of unstructured content if they are to achieve their performance, compliance, and cost- control goals.

This is particularly true for government agencies. All kinds of core agency processes revolve around a combination of structured and unstructured content—rather than just data residing in a database. Examples of such processes include:

- Electronic Procurement
- Correspondence Management
- Electronic Freedom of Information Act (EFOIA)
- Contract Management
- Grants Management
- Human Resources
- Compliance Mandates
- Case Management

The unstructured content associated with these processes has historically been stored and accessed on network drives and shared via e-mail without being "managed" in any meaningful sense. This has led to inefficient, error-prone processes that fail to leverage the full potential value of available content—while also leaving agencies vulnerable to a wide range of risks, such as the misuse and loss of critical documents.

> *"Cloud computing has a number of advantages, including reduced cost, increased storage, higher levels of automation, increased flexibility, and higher levels of employee mobility. The federal government should be exploring greater use of cloud computing where appropriate."*
>
> ANEESH CHOPRA,
> Federal CTO during
> Confirmation Hearings

Effective management of the content associated with these processes typically requires multiple ECM technologies. Correspondence management, for example, may require the use of imaging, optical character recognition (OCR), and workflow tools. Contract management, on the other hand, may be optimally supported with a combination of version control, document comparison, and e-signature capabilities.

Successful process-specific content management system implementations therefore require agencies to "mix-and-match" ECM functionalities as required to support any given process. Various attributes of these ECM functionalities—such as workflows, document indexing, and search criteria—must also be configured and customized to suit the specific process being optimized. In addition, ECM functionalities must be readily integrated with existing systems inside the agency, linked to systems at other agencies, or extended securely via the web to external constituencies to achieve mission goals for service, transparency, and efficacy.

Unfortunately, traditional ECM models are not always ideally suited for rapid, cost-effective implementation of highly customized, special-purpose content management initiatives today's challenges demand. That's because:

Traditional ECM is too cost-intensive. The conventional on-premise software model used in traditional ECM requires the agency's IT organization to implement and support computing infrastructure, install and configure multiple complex software components, and handle a variety of ongoing maintenance, administration, and security tasks over the lifespan of the software. The cost of all this technology "housekeeping" is substantial—typically around five times the cost of the software license itself—and has little to do with addressing the actual process challenges that are the reason for
the project.

Traditional ECM is too slow to deliver. Because of the time and effort it takes to deploy traditional ECM software, agencies can spend 75% or more of their budgets on implementations before they see any benefit whatsoever from their investments. Those benefits may not manifest for months or even more than a year after the project is launched. This delayed time-to-benefit is often unacceptable for agencies under real pressure to quickly improve their performance and mitigate glaring risks.

Traditional ECM is not nimble. In addition to slowing down initial benefits, the labor- and infrastructure-intensive nature of traditional ECM makes it difficult to respond to changing conditions or new needs. This inflexibility can be a real problem for agencies operating in an environment where new legislation, new security threats, natural disasters, or a sudden shift in media/Internet attention can demand rapid response.

Traditional ECM is closed. While traditional ECM products may provide reasonably robust interfaces for integration with other systems, those interfaces tend to require too much work and expertise to meet the current needs of government agencies. This is in part because most leading ECM platforms have been assembled through mergers and product acquisitions. As a result, their various components have inconsistent proprietary interfaces that are technically difficult to use.

It is for these reasons and others that public-sector agencies have aggressively sought out alternative solutions to traditional ECM in order to address their content-related challenges—and that the software industry has responded with such alternatives.

SPRINGCM DELIVERS ON SOLUTIONS AND PROTECTS CONTENT:

- 128-bit encryption and SSL v3
- Role-based access control to document-access level
- ISO 27002, NIST 800-53 based security controls
- SAS 70 Type II Certified
- CoBiT and ITSM v3 based guidelines
- Yearly security assessments and quarterly audits
- Full infrastructure redundancy at all levels of the architecture
- Load-balanced internet server farm
- Hardened operating systems that follow Center for Internet Security's standards
- SAN equipment with xPB capacity
- Redundant SAN processor and switch connectivity
- RAID architecture optimized for performance, reliability and availability
- Hardware encryption and compliancy-based storage options
- Offsite data center
- Daily tape backups

THE SOLUTION: CLOUD CONTENT MANAGEMENT

The Cloud offers a new model for agile, cost-effective implementation of content-centric applications. Also called Software-as-a-Service (SaaS), Cloud offers agencies a way to access a complete set of specific, rapidly configurable ECM functionalities on an on-demand basis via the web and to configure solutions to meet challenges rapidly.

Under the Cloud model, cloud content management vendors can build and pre-integrate a full set of ECM technologies—and continue building out those technologies over time—with much greater ease than a vendor operating under a conventional deploy-by-installation model. Cloud vendors can also implement a unified set of integration interfaces, security mechanisms, and performance management tools across all ECM components and all users. This further drives down costs for both the vendor and the agency, while also simplifying setup.

Other advantages of the Cloud model include:

- Elimination of hardware acquisition and ownership costs
- Rapid deployability and time-to-market
- Fast, easy customization using web-based tools rather than "under the hood" software configuration
- Elimination of support and maintenance costs
- Complete upward and downward scalability
- The high availability provided by the service provider's more robust and redundant infrastructure
- Built-in security that provides greater protection and configurability at lower cost
- Pay-as-you-go contracts that keep expenditures tightly aligned with real needs
- The ability to quickly and cost-effectively launch small pilot projects without massive upfront investments of budget and personnel
- The recovery/continuity provided by off-premises processing, storage, and tech support

These advantages are driving broad adoption of Cloud solutions across all markets. The impetus for adoption in the public sector is particularly strong. For example, the OMB spotlighted cloud computing in its Analytical Perspectives document on the 2010 Federal budget, pointing out that:

> Cloud computing is a convenient, on-demand model for network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, services) that can be rapidly provisioned and released with minimal management effort or service provider interaction…Cloud computing will help to optimize the Federal data facility environment and create a platform to provide services to a broader audience of customers.

For agencies of all types, the benefits of using a cloud content management solution can be dramatic:

Better delivery of information when and where it's needed. The rapid, low-hassle deployability and easier customization offered by Cloud solutions means that agencies can quickly address their most pressing information delivery challenges by creating special-purpose content-centric application on the fly.

Vastly improved allocation of financial and human resources. Cloud content management eliminates the need to devote money and people to low-value technology infrastructure maintenance and software ownership—so that those resources can instead be allocated to tasks and projects that have much greater positive impact on agency performance.

"I'm all about the cloud computing notion. I want access to information wherever I am. I am killing projects that don't investigate Software as a Service first… Cloud will do for government what the internet did in the nineties."

VIVEK KUNDRA
FEDERAL CIO,
The Wall Street Journal

More nimble responses to changing conditions. The flexibility of cloud solutions enables agencies to more nimbly respond to respond to crises, sunsetting processes, and other issues that can result in sudden changes to capacity and feature requirements.

Reduced organizational risk. With on-demand, cloud solutions, agencies don't have to put inordinate amounts of time, money, and people-hours on the line every time they want to try solving an operational problem with ECM—so the risks associated with such projects failing to deliver projected gains is greatly reduced.

Easier approval of high-impact projects. Because Cloud reduces risk—and because it makes it so much easier to launch pilot proof-of-concept projects that can readily be expanded if they turn out to be successful—project champions can more easily get approval to move ahead with initiatives that can improve agency services and conserve agency budgets.

Improved inter-agency workflow. The simplified web services integration used by cloud content management platforms makes it much easier for agencies to collaborate with each other. This eased collaboration improves services and prevents mandated integrations from becoming huge resource drains.

More positive agency branding. In addition to improving services and controlling costs, agencies that embrace cloud content management will enhance their reputation for innovation and efficiency—and will demonstrate their support for the vision cast by current leadership of government IT.

Agencies of all types have to get better at managing, distributing, and leveraging the growing volume of content dispersed across their computing environments, the broader government landscape, and the Internet. This cannot be done with legacy tools that are locked into the on-premises software model of high ownership burdens and inadequate responsiveness.

Every agency should therefore strongly consider the adoption of cloud content management as part of its total technology and best practices portfolio. By doing so, agencies can substantially improve their individual performance—while at the same time making an important contribution to the larger, highly positive shift taking place in government IT as a whole.

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SPRINGCM CLOUD ECM SOLUTION

SpringCM offers a complete Cloud ECM platform that integrates more than 25 technologies spanning all aspects of ECM. The SpringCM platform can be used to create or customize almost any type of content-centric application by simply configuring the metadata, workflows, e-forms, reports and other features as needed.

The SpringCM platform provides a simple way to configure and deploy multiple process-specific applications on a unified platform, without having to vet and integrate a new solution each time. Cost-effective deployments can be made for three to 30,000 users. SpringCM's consistent, intuitive GUI ensures that users will be able to utilize multiple SpringCM applications with minimum training. Its enterprise-class web services ease integration and extensibility. SpringCM applications are available for a low monthly subscription fee which can flexibly increase or decrease as usage needs change. And, like all Cloud solutions, SpringCM doesn't require agencies to install hardware or software on-premise.

THE SPRINGCM PLATFORM INCLUDES:

Capture
SpringCM's platform allows paper and electronic documents to be captured from inside and outside the agency via any necessary method—including e-mail, fax, scanning, and manual upload. All content undergoes OCR (Optical Character Recognition), enabling full-text search.

Document management
SpringCM's comprehensive version control ensures that everyone sees the right content, while eliminating the need for endless e-mail threads with multiple attachments. Documents can be organized and secured in traditional folder hierarchies with comprehensive audit trails. They can also be indexed with collaborative tags and/or metadata.

Workflow and collaboration
SpringCM provides Document Rules and Basic Routing and Approval workflows that allow users to set up simple processes and sequential workflows in minutes. Advanced Workflow streamlines even the most complex processes with full business process management capabilities. SpringCM also makes it easy to extract information from e-forms and insert it as required into customized documents.

Delivery
SpringCM ensures that documents get into the hands of all appropriate agency personnel, partners, and citizens. The use of SpringCM as a delivery mechanism also saves space your mail servers and reduces the need to send e-mails loaded with attachments that might be filtered out or inadvertently forwarded to inappropriate recipients.

Records management
SpringCM's built-in records management allows users to define retention schedules for electronic documents, consolidate diverse content types into a single searchable repository, create automated retention policies based upon record classification, and support other key agency requirements such as e-discovery, legal holds, record declarations, and destruction workflows.

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Reporting
With SpringCM, agency managers can get all the insight they need to improve processes and troubleshoot problems from simple drop-down menus. They can also view users' document activity and generate other management reports without having to engage skilled programmers.

Security
SpringCM's comprehensive security capabilities meet ISO 27002 and NIST 800-53 specifications—providing managers with role-based control of access privileges at the document, folder, or individual level. With 128-bit encryption, SSL v3, and operating systems hardened to Center for Internet Security standards, SpringCM offers security that is as or more effective than on-premise document management and workflow software packages that cost much more.

Reliability
SpringCM delivers field-proven availability through full infrastructure redundancy at all levels of its hosting architecture—something no agency could afford to provision in its own data center. SpringCM enhances this infrastructure redundancy with advanced server load balancing, optimized RAID, and offsite data backup.

ABOUT SPRINGCM

SpringCM is the recognized market leader in enterprise-class cloud platforms for managing content and business processes. SpringCM's affordable, rapidly deployable solutions enable organizations of all kinds to address their most critical Enterprise Content Management (ECM) and Business Process Management (BPM) challenges. SpringCM's solutions are trusted by customers such as the Department of Energy, Comcast, and Siemens. SpringCM partners include salesforce.com, Microsoft, and Ricoh.com.

For more information, please email: sales@springcm.com or call 877.362.7273.

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