



The New Standard in Enterprise  
Content Management

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## A Solution Paper From SpringCM

# The On-demand Document Management Advantage

Five Tests to See if Software-as-a-Service is Right for your  
Application

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## The Document Management Paradox

How do you manage the unmanageable? Documents, whether paper or digital, are everywhere, and each year businesses create more content than all of the materials currently contained in the Library of Congress. It's important material often representing the core information flow of your business. You know that this content should be treated as an asset — with a lifecycle and process to manage it better. But the pace of content growth, combined with the prevalent method of sharing through e-mail attachments, means information moves in, out and around organizations with little management or control.

You know the problems first hand:

- You route a document for review via e-mail, but each reviewer edits his or her copy of the attachment, resulting in several uncoordinated edited copies and much wasted time reconciling the revisions.
- You want your organization and customers to have the latest and best information for products, pricing, project status, etc ... But due to the lack of an efficient method of sharing the most current version of documents, old information is routinely dug up and used because it is the first information found. The result: wrong pricing and product information in the field — wasting time and possibly losing business.
- You need remote workers, distributors or clients to collaborate with teams, to contribute information and to review all types of material. Examples include preparing proposals, sharing competitive information, managing projects, resolving billing disputes, developing marketing campaigns and much more. But relying on specialized remote access software that is not usable on every company's network (such as VPNs) means that someone is always out of the loop. Your goal may never be fully realized.
- You send an e-mail only to have it rejected as too large by the other party's mail server. The content is critical, but it cannot be delivered because the message itself is too large or the user's inbox is full. The resulting project delay or time working around this limitation is a drag on productivity and a waste of time.

You know there must be a better way to automate key processes like document approval, expense report routing, approval of training and accounts payable, yet you still use e-mail and route print documents despite the inefficiency

and errors involved. Even though you know that process automation would benefit your business, the large expense and time-to-deploy keeps you from acting.

The demand for access to content has never been greater. The increase in mobile, outsourced and distributed workforces means that access to your information is required in more places — some of which are located outside your corporate firewall. The drive and demand for customer self-service in sales and customer support requires access to the right (and often rapidly changing) information. Yet, in today's era of increased compliance and regulatory scrutiny, the issue of tracking content throughout its lifecycle — from creation through consumption and finally through retention and controlled destruction — is becoming a business imperative with huge consequences for non-compliance.

Enterprise content management (ECM) applications address these and many other business challenges. Proven ECM technologies improve the effectiveness and efficiency of information flow in your business, getting the right information to the right person when and where they need it without compromising privacy and security of intellectual property.

ECM comprises several related technologies. Web content management, document management and collaboration are considered core components; other components like search engines, capture solutions and digital asset management are often included under the ECM umbrella. These components have traditionally been purchased as separate systems, but ECM technologies are increasingly bundled by vendors as suites that encompass these capabilities and reduce the overall cost of a solution. A basic definition of each ECM technology component appears in Figure 1.

### Figure 1. ECM Technology Components

While no definitive classification for ECM prevails, most experts agree that ECM brings together many of the technologies listed below. While “pure play” vendors that provide technology for only one of these functions exist, many vendors package several of these capabilities into suites that are designed for a specific class of problems. These suites tend to offer lower cost due to their out-of-the-box integration, yet some pure-play products have specialized functionality that makes them a better choice for certain classes of problems.

- **Capture and Imaging:** scanning and other capture technologies that convert physical paper documents and forms to electronic versions for use in a document management system. This category includes optical character recognition (OCR), a process that makes these scanned documents readable and searchable by the document management system. It may include conversion and extraction to make files searchable and conversion to XML to make files or segments of files reusable in other applications.
- **Document Management (DM):** usually consists of a centralized repository in which electronic documents are stored. Revisions to these documents may be carefully controlled through a versioning (check-in and check-out) process. Content in a document management system is searchable via an embedded search engine (variations in search engine implementations can make a large difference in the retrievability of content) so that related content can be found. Security — who can access and edit highly sensitive documents — can be tightly controlled. Add-on features, such as digital signature, electronic stamping and document distribution can accompany document management solutions.
- **Collaboration and Workflow:** team collaboration capabilities allow geographically dispersed team members to manage group calendars, to coordinate document reviews and to facilitate online discussions about topics or content. More formal processes such as document routing and forms approval can be managed by a workflow system that enables structured processes to be automated and managed more tightly to reduce bottlenecks.
- **Records Management:** governs the archiving and destruction of content according to corporate policies. Electronic documents and e-mails are considered records and, as such, should be managed according to the same retention policies as physical paper records.
- **E-mail Management:** manages e-mail messages as electronic documents in conjunction with traditional electronic documents. It allows e-mails to be centrally stored in the context of the content or project to which they pertain, which eliminates searching in both the document management system and e-mail system. E-mails may be managed as records alongside other electronic documents.
- **Digital Asset Management:** adds to specific features for managing rich media (such as sound files, images, video). Collaboration tools specific to Digital Right Management for images and proprietary content are often included in these solutions.
- **Web Content Management (WCM):** manages the creation and deployment of content for Web sites, intranets and extranets, which may begin as documents in a document management system or as images in a digital asset management system. WCM implements version control and security on Web pages. It can also use workflow for managing content approval and Web site deployment.

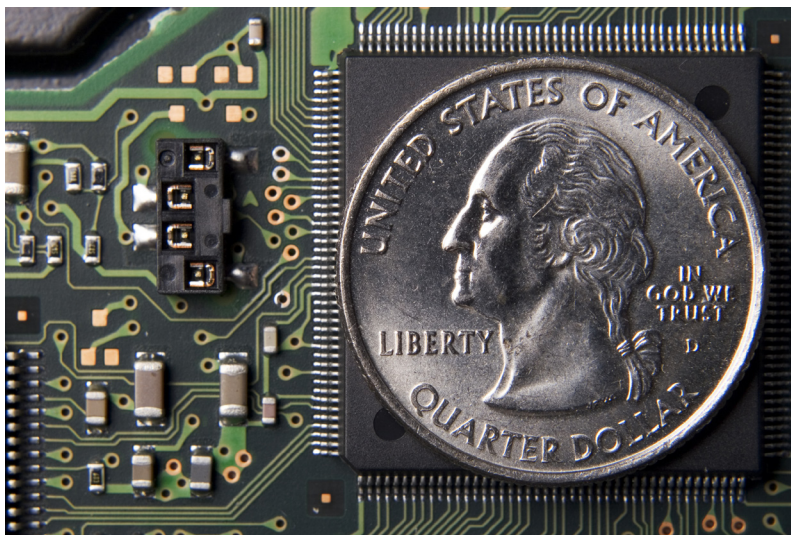
Of the components listed above, this paper focuses on those technologies that manage the document lifecycle — capture, document management and collaboration / business process management (BPM), which we will refer to collectively as “document management.” Although sometimes offered in an integrated suite, these components are often purchased individually.

While large software vendors ring up high dollar sales for ECM products every year, many buyers remain disappointed. Unfortunately for customers, analysts estimate that **up to 90 percent of enterprise document management licensed “seats” are not deployed.** Why the gap? A closer look at the dynamics and economics of deploying document management across a large company reveals several possible reasons.

1. Document management projects are expensive, and software cost is just the beginning. Even though a traditional software license for document management — one that is installed in the company, customized for use in a specific application and then deployed across a group or several groups — can cost as little as \$15,000 - \$20,000 for a department or single application, industry analysts have long said that **software cost is typically only 15 - 20 percent of the project's total cost over three-to-five years.**

Multiple software packages often require integration to solve one business problem. What looks like an “affordable” \$20,000 solution could likely entail a \$100,000 price tag over five years. Leading industry analyst Gartner Group estimates that, “ECM projects average \$500,000 for midsize deployments of 100 users, depending on the functionality required.” That is an average of \$5000 per seat. High-end document management deployments can push up that cost to \$9,000 per user over four years, according to industry analysts eVisory.

2. Implementation project timeline is too long. Often projects are approached with IT professionals who focus on designing a complete solution on paper and then developing and deploying it. This approach of shooting for a 100 percent solution has two consequences:
  - It drives up the cost of customization, adding to the overall project cost.
  - It frequently is wrong as initially designed and requires updates during deployment. The cost of perfect design is too high.
3. Software itself is slow to respond to business needs. Update cycles are infrequent because deployed software — often referred to as “on-premises software” — requires mass distribution and, accordingly, time for each company to upgrade. The cost of upgrades pushes the customer to only want one release per year, ultimately delaying innovation.
4. Software is often counterintuitive and difficult to use.



If the application is not mission-critical, many collaboration and workflow improvements remain unimplemented.

In addition to undeployed seats, other barriers thwart purchase and use, even when organizations' projects necessitate such needs.

1. Department needs don't get top priority. Departmental initiatives and needs that could benefit from ECM take a back seat to enterprise-wide concerns, such as bandwidth, mobility, ERP systems and other key processes and infrastructure initiatives.
2. The cost is just too high. Only 25 percent of IT budgets are spent on innovation or new systems each year. All new projects fight for these resources.
3. Cumbersome approval processes deter projects. Finance departments, recognizing the total cost of software projects, now require more comprehensive justification and approval cycles for each project. Managers are deterred by the extensive and lengthy process involved and elect not to apply for the funding required — or they do apply and are turned down.

Even if you have decided that ECM, or document management, can solve big problems for your organization, you may wonder how you can complete implementation, or where you will find the funds for the project. This point is where on-demand document management will be of great interest to you.

### How is Software-as-a-Service (SaaS) Different from Traditional Hosted Applications and Application Service Providers (ASPs)?

As part of the first wave of Internet-enabled applications, Application Service Providers (ASPs) became popular in the late 1990s. An ASP was a company that licensed a commercial software application (such as a document management system, ERP system, etc ...) or sometimes assumed a company's licenses for its own application and hosted that application in a secure, central facility. It then licensed that application to many companies and customized the package for each customer. The result was, theoretically, a customized version of commercial applications available to users at a lower cost of ownership.

But ASPs soon discovered that the cost of customizing and maintaining customized versions of commercial applications for each user was more expensive than originally predicted. ASPs, in many cases, did not control the feature set or development of the software they were deploying; their ability to make changes or innovate was limited. Customers, many of whom had moved mission-critical applications to the ASP model, soon discovered that ASPs lacked the domain knowledge to effectively customize the applications to the degree they expected, and that the resulting fees made it un-economical. In sum, the cost and innovation advantages proved to be few. As a result of these limitations, the market for ASPs collapsed as part of the Internet bubble in 2001.

#### The Differences Between Traditional Hosted and SaaS Models

	Traditional Hosted / Application Service Provider (ASP)	Software-as-a-Service (SaaS)
Application Deployed	One-to-one: Each customer bears the entire cost of maintenance and customization.	One-to-many: The software, application integration and maintenance cost is dispersed among all users.
Customization	Burdensome: Traditional customization (often through programming) is rigid, expensive to change and increases delivery time (not to mention risk).	Rapid: A true SaaS application is configured, not customized. The result is a low-cost, low-maintenance application with behavior that adapts as your business evolves.
Implementation Timeframe	Long: Customization often means prolonged implementation. If additional products require integration at the hosting center, implementation is further delayed.	Almost Instantaneous: All customers use the same application. You can be up-and-running in record time.
Upgrade Frequency	Infrequently: Because the application is not multi-tenant, each customer's application must be updated individually.	Often: Several versions are released each year. All customers receive the upgraded application simultaneously.
Integration	Expensive and Extensive: Because ASPs customize each implementation for each customer, integration cost is borne by each customer. The cost to customize the application is high because many ASP applications require custom integration for each customer.	Inexpensive: In SaaS models, functionality is integrated once. The integrated functionality is then made available to all users. Cost is amortized among all users.

### The New Standard: On-demand Document Management

Software-as-a-Service (SaaS), also referred to as on-demand software, is a practical model that addresses the shortcomings of both old hosted models and deployed software, delivering effective and economic functionality. SaaS is not the same as traditional hosting or the Application Service Provider (ASP) model of the late '90s (see the table for the differences); it is a new standard that changes the whole model under which software is developed and delivered. New Internet technologies and a new business model make it possible for on-demand software companies to deliver a single common application (with the ability for users to configure their own experience) to many companies cost-effectively and securely. Companies such as salesforce.com have shown the overwhelming market appetite for solutions that can be delivered quickly, securely and reliably for a monthly per-user fee.

SaaS applications are designed from the ground up to be configurable and deployed in a multi-tenant environment — something that the ASP hosted solutions were not designed for. The business and value proposition of SaaS makes it attractive for applications that span multiple sites or between a company and its customers, distributors and partners. SaaS, when designed intelligently, can be deployed quickly, upgraded with new functionality frequently and can reduce the burden on internal IT — features that ASPs could not deliver.

The promise of hosted applications — lower cost of ownership and fewer systems for IT to worry about — is finally available to companies that adopt SaaS. When a true SaaS application is used, the additional benefits of rapid deployment, constant innovation and flexibility make SaaS the viable application model.

SaaS works well in many situations, but it is not a universal solution. The key question is simple: How do you know when SaaS is the right choice for document management?

#### Five Tests for the SaaS Advantage

While no guide is absolute, we have provided some practical questions for you to consult as you evaluate your project. Each question addresses a different facet the SaaS

advantage. If you find that your project shares several of these characteristics, a SaaS solution can deliver great project success at a dramatically lower cost than deployed software.

#### Test 1: The Breadth Test

##### Do you need a solution that integrates many different ECM components?

If your application needs one or more components not often found in an off-the-shelf and integrated package, SaaS is right for you.

Examples include:

- The ability to receive and send faxes directly from the application
- Optical character recognition (OCR) to transform faxes and scanned materials into text-searchable documents
- Scanner integration to convert paper documents into electronic content
- E-forms for combining form-based data with other documents, or for augmenting document processes with structured data
- Zone OCR to read specific fields on forms and to extract key information for indexing and organizing your content
- Ability to view less-common proprietary file formats such as CADs
- Advanced Workflow for document-centric process automation

Integration costs for these components in a deployed software model will introduce all the complexities and time delays that you don't want. In many ECM suites, each of these add-ons can exceed \$25,000, not including customization and maintenance. Configuring the various user interfaces to work in tandem is often challenging. If you won't use these components frequently, justifying the expense is difficult.

SaaS addresses this challenge directly. By integrating multiple technologies once and distributing the cost among all users, SaaS delivers broader functionality than other options at a dramatically lower cost. A component that costs as much as \$25,000 to license would require only \$10 - \$20 per month, per user in a SaaS environment.

### Test 2: The Speed Test

#### Do you need a solution that works now, not in three months or a year?

Most traditional software projects follow a proven process: needs analysis; RFPs (if a new vendor is to be selected); vendor selection and then implementation, which consists of design, development and testing; deployment; and training. This process has worked well for decades, but it requires months to complete. And consider how many organizations may be involved: IT to perform the analysis; purchasing and legal to negotiate the deal; software vendors to promote their solutions; system integrators or VARs (or internal IT) to design and implement the customizations; and training to make end users productive.

In many situations — either due to competitive pressures, project timeframes or the need for immediate results — you do not have months or even weeks. The looming risk of delay is unacceptable. You need a solution and you need it now. If your situation mimics the above description, a SaaS document management solution is well-suited for your project.

You can often evaluate a SaaS solution for a trial period in which you receive 30 - 70 percent of your final configuration. If you subscribe to a SaaS solution after a trial period, final deployment is further expedited because your business process is largely configured.

SaaS solutions are developed to meet the majority of many industry-specific needs. Because these development efforts involve input and refinement from hundreds of customers, SaaS solutions deliver comprehensive functionality out-of-the-box with the following capabilities:

- Secure document sharing (with security down to the document level).
- The ability to share documents with people inside and outside the company. Unlike traditional extranets and intranets, on-demand document management allows users not only to read content but also to modify it (if the users have proper security permissions).
- The ability to easily incorporate e-mails and attachments into the repository alongside corresponding documents.
- Document version control via check-out and check-in functionality to manage edits and to ensure that all team members access only the latest and most correct information.
- Shared task lists, action items and other collaboration capabilities to keep teams synchronized.
- Routing and approval workflows to automate key processes and to bring visibility into the process status.

With a SaaS solution, you can be up-and-running literally in hours.

You simply define

how many users and provide their e-mail addresses; the system alerts them to initiate their accounts. The highest quality solutions will also offer extensive, configurable capabilities that enable you to modify key aspects of the application's appearance and to better suit your needs.

If rapid deployment is your key project criterion, SaaS offers undeniable benefits. While you may still need to follow internal purchasing protocol, the demands on your company will be much lower. The risk is diminished because you can generally see your application working during the trial period, and the return on investment will occur almost immediately. The key is to select a solution that is comprehensive, frequently updated and complete with extensive configuration capabilities.



### Test 3: The Cash Flow Test

**Is your project restricted to a limited budget? Do you want to limit your upfront budget and link cash outlays to benefits received?**

Implementing a new software system in any company involves effort. It also takes money. And regardless of software vendors' promises of low license fees, the cost of implementing a traditional document management system involves much more than just purchasing and installing

- No annual maintenance fees
- A direct link between the value the solution provides and how much you pay

In addition to lower total cost of ownership, the SaaS model drastically reduces risk. Most implementations are licensed upon an annual commitment. If the product does not live up to its promise, or if your needs change, your risk is capped at that commitment.

If a large financial commitment has limited your ability to

Initial cost:	Deployed	SaaS
» Document management software license fees	Yes	Monthly Fee
» Server with operating system and other software	Yes	No
» Storage, backup systems and associated software	Yes	No
» Implementation services	Yes	No
» Training that often requires unique training material due to customization	Yes	No
Annual recurring costs:	Deployed	SaaS
» System maintenance	Yes	No
» Server operating system and other software maintenance	Yes	No
» Backup and storage subsystem maintenance	Yes	No
» Internal IT support applying software upgrades	Yes	No
» Internal IT support updating application based upon business needs	Yes	No
» Monthly subscription fee	No	Yes

software. As mentioned previously, the cost of a typical installed software package is roughly 15 percent of the five-year cost of owning and maintaining that application. Simply put, a rough estimate of your five-year cost may be six times the application software license costs. The reason becomes evident when you consider the varied costs associated with a deployed document management software solution.

By comparison, the SaaS model eliminates virtually all these costs by replacing them with a modest monthly fee. This monthly fee is usually contingent upon the number of users in an account or a similar measure that increases only as deployment, use or other success criteria flourish. The advantages of this approach include:

- No large up-front cost (or cumbersome budget approval process)

take advantage of document management technology, a SaaS solution provides the functionality you want without the economic risk. As the next tests will reveal, a SaaS solution will probably give you a better product that offers more of the necessary functionality in the basic solution.

### Test 4: The Evolving Needs Test

**Is it critical that your software application evolve easily as your needs change and new technologies emerge?**

As highlighted earlier, with deployed software packages you incur the cost of maintaining and updating the application. But one of the biggest surprises with deployed software packages is the difficulty created when launching new functionality or installing a new version, primarily due to the customization required for deployed software.



Although these customizations enhance the utility of the software, the more extensive customizations often cannot be automatically migrated to the next version of the underlying document management software upon upgrade. As a result, when the application package is upgraded, the company faces one of two choices:

1. Upgrade the application at high cost and experience delay as the new features are evaluated, a plan is developed for which features will be adopted and customizations are migrated over to the new version.

Applying upgrades often requires technical experts to design the project and the same process as any software development project: development, testing, debugging, deployment and training. For a large upgrade, this process can feel like re-implementing the package.

2. Continue using the older version of the software package and do not take advantage of the upgrade, thereby foregoing the benefits of product evolution and essentially leaving your organization's implementation stuck in time while the underlying software

application, and the market, move on.

SaaS eliminates this frustration in several ways:

Upgrades are applied at the data center and are available to all users immediately with no installation or delay. The administrator can often approve upgrades through configuration screens.

Because there is no software to install at each client site, software upgrades may be made more frequently. New features are added almost quarterly.

The user community accesses the same core application, meaning new ideas and feature refinement feedback from each user benefits the entire user community.

As a customer, you become part of this cycle, making enhancement requests that, if accepted, will be seen in the product in much more rapid fashion than previously possible.

If you want to be in a position to take advantage of new functionality, and the wisdom of others in your market, the SaaS model offers distinct advantages.

### Test 5: The 80/20 Test

**Can you accomplish your goals with an 80 percent solution — one that provides all the key functionality that you need but maybe not every bell and whistle that you desire?**

One of the SaaS business model's key differentiators is its use of the same software application for all clients as opposed to traditional ASPs that took a commercial package, customized it for each client and then ran each customer's software in its own environment. As explained above, a SaaS solution will benefit from the collective wisdom of the market and evolve more quickly to meet the changing needs of the majority of customers.

But we realize that some functions may be configured differently than a custom solution. (Not to say that SaaS solutions are not expandable.) Most well-designed SaaS systems offer extensive interface capabilities, usually via Web services that enable integration with both internal and other hosted systems. The combination of integration and configuration described earlier enables SaaS solutions

to meet the needs of most applications. The mixture of integration and configuration is typically referred to as the 80/20 rule. But some applications may require specialized functionality that a SaaS application cannot provide, even with integration and configuration.

How can you tell which side of this line your application falls on?

1. Begin by writing a definition of what you want to accomplish. Be careful to indicate the other systems, facilities, groups and companies that will affect the proposed application. Sketch the workflow of the business process detailing what happens at each stage. Focus on the business processes you need to support, not the technical details.
2. Share that definition with the vendors you are evaluating. You can conduct this initial research through a formal request for proposal or an informal e-mail.
3. Request a demonstration of the SaaS system as it applies to your requirements. Evaluate its ability to meet those requirements carefully. A vendor may not be able to show you every feature configured to your exact needs but should explain how the software's own configuration or integration capabilities could meet those needs.

After such an evaluation, you should have a clear idea of how much application coverage the considered SaaS application will provide. Ultimately, it is a tradeoff between the incremental benefit of a truly customized solution and the cost, deployment and evolution benefits of SaaS.

### The Right Document Management Model for many Situations

Document management, either as a stand-alone technology or as part of a broader ECM initiative, enables an organization to effectively and efficiently control and leverage its content. While an on-demand approach may not be the best fit for all projects, it is usually the right choice if your situation incorporates the following characteristics:

- Broad use across many uncontrolled IT environments such as third-party sites and multiple companies
- Need for rapid deployment — no time for long purchase

cycles and implementation

- Lack of a large up-front budget or the time to get one approved
- Need for rapid change and evolution over time but within an envelope of common functionality
- Desire for new features that are useful to others with similar problems
- Deployed easily without specialized support
- Lack of dedicated IT support

While SaaS document management solutions boast significant advantages over deployed models, the best way to determine fit is to evaluate your options through a free trial.

### About SpringCM

SpringCM offers enterprise-class document management, capture, collaboration and workflow delivered as an on-demand service. Designed and built by ECM industry veterans, SpringCM is easy to configure and rapidly deploy, resulting in low-cost, low-risk ECM solutions not previously available without significant time, risk and capital investment. Industry leaders such as General Electric, Avon, Cox Communications, Stratus Technologies, Comcast and HealthNet all rely on SpringCM for mission-critical content management across finance, logistics, contract management, corporate legal, distribution and compliance.

### About the Author

Dan Carmel brings more than 20 years of executive leadership experience to SpringCM. Prior to joining SpringCM as CEO, Dan was president and CEO of Itemfield; vice president and general manager of the Legal/Professional Services business unit for Interwoven; and vice president of Marketing and Business Development for iManage.

During Dan's career he has been instrumental in guiding new ventures to become market leaders in CRM (Vantive), Internet Commerce (Selectica) and International Payments (Sonnet Financial). Dan holds a BS and MS in mechanical engineering and applied mechanics from the University of Pennsylvania and an MBA from the Stanford Graduate School of Business.



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