

ON-DEMAND DOCUMENT MANAGEMENT 5 TESTS TO SEE IF IT'S RIGHT FOR YOU



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SpringCM

On-Demand Document Management

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Introduction: The Document Management Paradox

How Do You Manage the Unmanageable?

Documents – whether paper or digital – constitute the fastest growing component of most organizations' information assets. U.S. businesses create more new electronic content each year than all the materials currently contained in the Library of Congress.

If you realize the importance of managing those assets better, on-demand may be a more effective and lower cost alternative to installed software. But is it right for you?



Geographically dispersed workforce



The right information, right now



Collaboration on multiple levels

The paradox is that while you want more control, you don't want to impede the flow of good information to those who need access to it. How do you accomplish both? How do you manage the explosion in content and resolve all of its associated problems?

The Problems that Plague You

- **Outdated Information.** You want your field organization and customers to have the latest and most relevant product and pricing information. Because there is no immediate way to share updated material, field representatives use old information because it's the information that's available. As a result, inaccurate pricing and product information goes to the customer. Your organization loses valuable time and business revenue.
- **Blind Spots.** You are still using paper processes in some parts of your company, and these paper processes lead to "information black holes" – documents and other content that are hard to discover, retrieve and manage.
- **Lack of Access.** Your goal is to have geographically dispersed employees, remote workers, distributors, and clients collaborate on projects, contributing information and reviewing that which is created among team members. Projects include: preparing proposals, sharing competitive information, resolving billing disputes, repurposing marketing materials, and much more. Relying on specialized remote access software (e.g. VPN), however, that is not usable on every company's network may mean someone is out of the loop. Your goal is at risk of being realized.
- **Wasted Time.** You send a document by e-mail for several people to review; each edits the document resulting in several uncoordinated yet edited versions. Your company spends time *you don't have* to reconcile the pieces.
- **Technology Roadblocks.** You send out an e-mail only to have it rejected by the receiving party's system as being too large. The data is critical, but cannot be delivered either because the message itself is too large or the user's inbox is full (of other large e-mails and attachments?). Your project is delayed and time spent working around this limitation is a drag on productivity and a distraction from higher-value tasks.

Figure 1.

Enterprise Content Management Defined

While there is no single definition of ECM, most experts agree that ECM brings together many of the technologies listed below. While some vendors still provide technology to support a single function, many vendors are bundling multiple capabilities to address a variety of needs.

Capture and Imaging. These systems convert and store physical paper documents and forms into electronic versions. Optical character recognition (OCR), converts the document to text and/or XML and extracts data and makes these scanned documents readable and searchable by a document management system. As a result, files, or segments of files, are re-usable in other applications.

Document Management (DM). Document management usually consists of a centralized repository in which electronic documents are stored. Revisions to these documents may be carefully controlled through a versioning process (check in/check out). Relevant content in a document management system is searchable using an embedded search engine. Variations in system implementation can make a large difference in the ability to retrieve content and assign security controls indicating who is able to view and edit each document. Add-on features, such as Digital Signatures, can accompany document management solutions.

Collaboration and Workflow. Team collaboration capabilities allow geographically dispersed members to manage group calendars, coordinate document reviews, conduct online discussions, or capture comments. Workflow processes for document routing and forms approval can reduce information bottlenecks by automating structured processes.

Records Management. Governs the archiving and destruction of content according to corporate policies. Electronic documents and e-mails are treated as records that are subject to the same retention policies as physical, paper documents.

E-Mail Management. Allows e-mail messages to be managed alongside other electronic documents. Eliminates searching for important content that lives in two places, the document management system and the e-mail system, by having e-mails centrally stored in context with the content or project to which they pertain.

Digital Asset Management (DAM). Document management features, including check in/check out functionality for managing rich media such as sound, image, and video files. Collaboration tools specific to DAM and Digital Rights Management, for images and proprietary content, are often included in these solutions.

Web Content Management. Manages the creation and deployment of content for Web sites, intranets, and extranets that may start off as documents in a document management system or as images in a digital asset management system. Implements version control and security on Web pages, like document management, and utilizes workflow for approving content and deploying the Web site.

Demand for Access and Control

The larger your organization, the more dispersed the participants in your information chain. When critical business information changes frequently, the more pressing the need to distribute that information to the right people, wherever they are, immediately.

On one hand, the demand for access to content has never been greater. The increase in mobile, outsourced, or distributed workforces means that access to information is required in more places at once – places often not protected by a corporate firewall. Your employees, partners, and customers expect to be able to access relevant and accurate information when they need it.

On the other hand, today's environment of increased compliance and regulatory scrutiny, means tracking content throughout its life cycle from creation through use, and finally through retention and controlled destruction, is becoming a business imperative.

The Enterprise Content Management Landscape

ECM addresses competing issues. Proven ECM technologies enhance 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 the privacy and security of your information assets.

ECM technology is comprised of several core components including Web Content Management, Document Management, and Collaboration. Other components, such as Enterprise Search, Imaging solutions, and Digital Asset Management, often considered part of ECM, have traditionally been purchased as separate systems. Increasingly, however, vendors are bundling ECM technologies as a suite, expanding the capabilities and reducing the overall cost of a single solution. Definitions of each technology that may be found in an ECM suite appear in Figure 1.

Of the components listed here, this paper focuses on two – document management and collaboration (hereafter referred to as document management or DM).

Barriers to Purchasing an Enterprise Content Management System

Traditional ECM installations involve the selection and procurement of generalized content management software, specialized department modules, configuration, customization, hardware, installation, integration, training and, in some cases, additional database optimization. User setup is generally time intensive and static, with upgrades and maintenance to the system supported by the customer, on the customer's premises.

Even though ECM on the whole is a proven category, in which big software vendors generate up to \$1.3 billion in sales annually, many buyers remain disappointed with their investment. Unfortunately for customers, analysts estimate that **up to 90 percent of enterprise DM licensed “seats” are not deployed**¹. Why the gap? A closer look at the dynamics and economics of deploying DM across a large organization reveals several possible reasons:

- 1 **Cost.** A traditional DM software license that is installed in a company, customized for use in a specific application, deployed across a group or several groups, will begin at approximately \$20,000 per department or single application. However, industry analysts indicate that software cost, over three to five years, is typically only 15 to 20 percent of the total project cost. In the end, what looked likely an affordable \$20,000 investment, may likely cost more than \$100,000 – with enterprise-wide systems coming in at upwards of \$1,000,000.
- 2 **Time to Implement.** Often, IT professionals approach projects by designing a complete solution on paper, then developing, and deploying it. This approach of shooting for a 100 percent solution has two consequences. It drives up the cost of implementation, and is frequently off-the-mark as initially designed, requiring updates in the field. The cost of perfect design is too high. In addition, internal and external issues – hardware, software, and other components – can result in a mismatch and costly delays. Consequently, the business value you had hoped for takes too long to achieve.
- 3 **Obsolescence.** Traditional software companies update products once every 12 to 18 months, the reason being that deployed software must be distributed to customers who must perform upgrades to the installed software (usually on their own time). The cost of implementing these upgrades puts the burden on the customer; the customer resists; the software company responds with fewer product updates which in turn have a direct impact on product innovation cycles. Because vendors make improvements at different times, most corporate buyers cannot realize a fully-updated, end-to-end suite on premises. One component or another is always out of date.
- 4 **Difficulty of Use.** Software is often not intuitive, nor easy to use, thereby forcing people to learn unfamiliar processes. If the application is not mission-critical, many collaboration and workflow improvements go unimplemented if the solutions are not easy to use and aligned with current business processes.
- 5 **Functionality Gaps.** Departmental initiatives and needs, which could benefit from ECM, take a back seat to other enterprise-wide concerns such as bandwidth, mobility, ERP systems, and other core process and infrastructure initiatives.
- 6 **IT Prioritization.** Limited IT resources force choices as to what projects IT can work on at any given time. Only 25 percent of IT budgets are spent on innovation or new systems each year; the balance is in maintenance. High-ticket items, such as installed software, compete for a smaller piece of the pie. Moreover, cumbersome approval processes impede projects. Finance departments, recognizing the total cost of deployed software, now require a more complete justification and approval cycle for each application. Even when licenses are purchased, competing priorities inhibit the full rollout of products and services.

¹ This is true outside of professional services (e.g. accounting, legal) where the ratio of licensed to deployed seats is much higher.

A Fresh Approach: Document Management On-Demand

An alternative to installed software is emerging. Software delivered on-demand, also known as Software-as-a-Service (SaaS), is growing at approximately 25 percent a year, versus installed software, which remains relatively stagnant at six percent a year growth. While many promising new technologies vie for the attention of IT leaders and CIOs, only a few of these innovations actually end up improving top-line performance or bottom-line productivity. A recent survey of US IT executives by McKinsey & Co. found that only two new technologies were viewed as highly promising tools for obtaining real business benefits – one being Software-as-a-Service.²

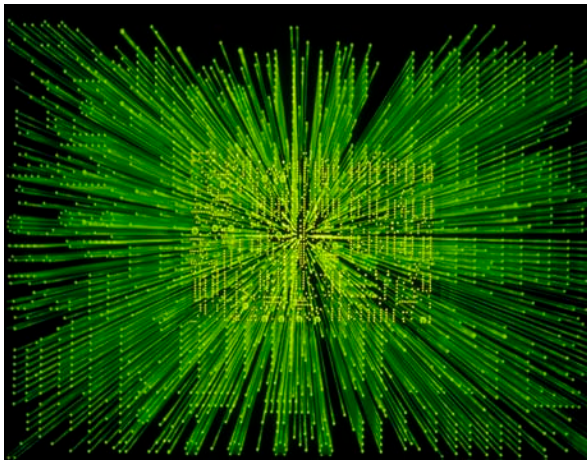
What is on-demand software? At the most basic level, on-demand software refers to an application that is comprised of a single, integrated code base, which is delivered as a service to multiple customers simultaneously, and securely, via the Web. Additional capacity, users, add-on components, or features can be ordered and fulfilled instantly, as the customer demands, and without the technical or licensing barriers common to installed software.

Configurations or customizations are applied to the shared code base, at the account level, which means that frequent updates to the software can be made, while keeping customer preferences and configurations intact. (Note: on-demand is *not* the same as the old ASP model – see *Figure 2* for more information.)

Document Management is especially suited to on-demand because of the the generally challenging nature of deploying a DM system, which requires dedicated hardware, multiple applications from different vendors and, frequently, quite a bit of integration. By pre-integrating components, the on-demand service provider can spread the cost of architecting and integrating the full solution among all customers.

So, what's the difference to a buyer? Imagine deciding you need a DM system, articulating your goals, evaluating providers, and the day you say "go," having all the hardware, software, and services solution immediately available to your team, department, pilot users, or the entire company for that matter. As you grow, you simply log on and add more users, more storage, or more transmission capability according to your needs. That is the power of on-demand.

In addition, there are characteristics of collaboration and access that make DM especially well suited for an online application. These are discussed in depth later in this paper.



The efficiency and security of a single application



Designed from the ground up for multiple tenants and uses

² McKinsey on IT, Summer 2006 issue.

Figure 2.

How Do the SaaS and ASP Models Differ?

ASPs became popular in the late '90s, when the first wave of Internet enabled applications came on the scene. An ASP was typically a company that licensed a *commercial software application* (such as a DM system, ERP system, etc.) or, in some cases, assumed another company's license as its own, hosting the application in a secure, central facility. The ASP then licensed that application to multiple companies, customizing versions of the commercial application, at a lower cost of ownership.

ASPs soon discovered, however, that the cost of customizing and maintaining modified versions of commercial applications was greater than anticipated. In many cases, ASPs did not control the feature set or development of the software they were deploying, so the ability to adapt the product was limited. Customers, many of whom had moved mission critical applications to the ASP model, soon discovered the ASP lacked domain knowledge to effectively customize the applications to their needs, and that the associated fees for doing so were not economical. The bottom line? Cost and innovation benefits were limited.

THE GREAT DIVIDE BETWEEN ASPS AND SAAS

	Application Service Provider (ASP)	Software-as-a-Service (SaaS)
Application Deployed	Borrowed. Utilized other companies' software; not designed for multi-company use, resulting in multiple instances and little cost advantage.	Built. Software developed by the SaaS vendor from the ground up; securely deployed to multiple companies simultaneously.
Time to Implement	Long. Lengthy cycle to install and customize a commercial application.	Immediate. Availability by all customers who use the same application and configure it, within specific limits, for their own use.
Usability	Cumbersome. Customized version of an already complex system requires all the training and adoption of traditional software applications.	Easy to use. Internet applications borrow from consumer expectations on usability that by definition have to be intuitive.
Multi-Tenant Scalability	No. Each customer application is maintained within the ASP's environment; no way to scale across silos.	Yes. Applications are designed from the ground-up to be used in a multi-tenant environment, Systems are configurable so each customer can have a custom experience, yet there is one code base that is maintained and enhanced for everyone's benefit.
Upgrades and Enhancements	Infrequent. Since ASPs often depend on commercial software providers, their ability to upgrade the application was limited. Upgrades were deployed whenever the core application supplier issued them, usually once a year or less. Lack of multi-tenancy made single instance upgrades impossible.	Often. Best practices and ideas are incorporated as enhancements. Since no software is deployed on the customer site, enhancements may be implemented at the SaaS data center and made available to the entire user community; configuration settings allow clients to adopt or reject these changes depending on their needs.
Integration	Expensive. And Extensive.	Inexpensive. Done via XML and Web services.
IT Support	Internal monitoring, depending on the degree of customization and integration, added maintenance requirements.	Included as part of service.

Five Test to Help You Decide

If you are considering a DM investment, independent of feature and functionality considerations, you may be comparing an independent software vendor versus on-demand option. How to decide? Here are five tests that can help you evaluate when on-demand is right for your company.

Test 1: The Reach Test

Do you need to collaborate with others inside and outside your company? Do you work with people in multiple locations, including mobile workers, partners and suppliers around the world? Do you change or add new team members frequently?

One of the most important factors to consider in implementing a DM solution is the type of users who will need access to the system. The more of the following characteristics that apply to your end user, the greater the impact on-demand can have on your organization:

- 1 Do you require collaboration between multiple locations or third parties such as client sites, remote offices, or foreign countries, where PC and network/firewall configurations vary widely and are frequently outside your control? Unlike traditional extranet and intranets, on-demand document management allows users not only to read content, but also add to it if they have permission. For example, you can post competitive intelligence for the sales team, and every member with permission is able to build on that knowledge.
- 2 Do you need to add or delete participants frequently? In situations characterized by the need to add members rapidly, SaaS offers distinct advantages. New users can be provisioned instantly without licenses or technical barriers (e.g. software installations).
- 3 Do you experience varying degrees of proficiency among users? In addition, a good on-demand application will provide offline connectivity as well (e.g. fax transmission), so even those without Internet access can be integral to the process. Where installed software may pose access challenges, user set-up challenges, licensing or procurement challenges, SaaS does not.

Test 2: The Speed Test

Do you need a solution now or three to 12 months from now?

Frequently, business and/or competitive pressures, accelerated project timeframes, and the need to make a fast impact, mean you do not have months to implement a solution. Any delay represents an unacceptable risk.

Most traditional software projects follow a proven process – perform a needs analysis, issue a request for proposal (if a new vendor is to be selected), undertake a vendor selection, and implement the solution (consists of design, development, testing, deployment, and training). Many people are involved – IT to conduct the analysis, purchasing and legal to negotiate the deal, software vendor(s), system integrators or VARs, internal IT to design, customize, implement and train employees – you can see why even a reasonable departmental project can consume more time, money, and resources than originally expected. While this process may work well, it could take months to complete.

With SaaS, once you select your vendor, the implementation is painless – the capabilities you need are available in a turnkey online system, in a standardized format, so you can be up and running literally in hours. All you need to do is define the number of users, provide their e-mail and the system auto configures and alerts them. The highest quality solutions will also offer extensive configurable capabilities so you can quickly modify the look, feel, and behavior of the application to better suit your needs. SaaS solutions are designed for deployment with minimal training, through online webinars, tutorials or wizards embedded in the software that guide users through many tasks, so adoption is rapid and costly training is avoided.

So if time to business impact is your key project criteria – SaaS offers valuable benefits to your organization. While you may still need to go through an internal purchasing protocol, the demands on your company will be much lower, the risk will be lower (you can generally trial and see your application working as you want it to before you buy), and the ROI will be easier to prove. The key is to select a system that is comprehensive, frequently updated, and which has extensive configuration capabilities.

Test 3: The Cash Flow Test

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. Regardless of software vendors' promises of low license fees, the cost of implementing a traditional DM system involves a lot more than just software. In fact, industry analysts have long said that the cost of a typical installed software package is only about 15 percent of the five-year cost of owning and maintaining that application. So a rough estimate of your five-year cost might be six times the application software license. The reason for this becomes evident when you consider all the different costs that go into a departmental document management software solution.

By comparison, the SaaS model eliminates virtually all these costs, replacing them with a monthly fee. This fee is usually tied to the number of users that you have on your system or some other measure that grows only as deployment, use, or other success criteria grow. The advantages of this approach include:

- No large up-front cost or cumbersome budget approval process with which to deal
- No annual maintenance fees
- Higher link between software value and cash outflow

In addition to having a lower up-front cost, the SaaS model reduces risk as well. Most implementations can be licensed based on an annual commitment.

If making a large financial commitment has limited your ability to take advantage of DM technology, a SaaS solution may be right for you. You will find your economic risk is lower and that by utilizing SaaS, you'll benefit from a product that's more compatible with your needs than a customized, deployed software solution.

Figure 3.

Cost of Ownership Comparison

	On Premise Software	On-Demand Software
Initial Costs		
DM software license fees	Extra	Subscription fees (annual or monthly)
Server with operating system and other software	Extra	Included
Storage, backup systems and associated software	Extra	Included
Implementation services	Extra	Included
Training often required by customer because of customization	Extra	Included
Annual Recurring Costs		
DM system maintenance	Extra	Included
Server operating system and other software maintenance	Extra	Included
Backup and storage subsystem maintenance	Extra	Included
Internal IT support applying software upgrades	Extra	Included
Internal IT support updating application (based on business needs)	Extra	Included

Test 4: The Darwin Test

Is it critical that your software application evolve 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. One of the biggest surprises with deployed software packages today is that they are much more difficult than publicized to update with new functionality or new versions, the reason being customization.

When an on-premise software package is deployed, it is often extensively customized. 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 DM software. As a result, when the application package is upgraded, the company faces a choice:

- 1 **Upgrade the application at high cost and delay** as new features are evaluated, a plan is developed for which will be adopted and customizations are ported 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 followed by testing and debugging and finally deployment and training. For a large enough upgrade, this can actually feel almost like re-implementing the package – with all the associated costs and possible delays and other risks.
- 2 **Continue operating on 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 the company's implementation frozen in time while the underlying software application – and the market – move on.

SaaS addresses this frustration in several ways:

- Since the software package is one instance of the application, upgrades are applied at the data center and available to all users immediately with no installation or delay. Many feature upgrades can then be accepted through configuration screens by the administrator. So new features are immediately available, but each customer retains control over its users' experience by deciding which to accept and turn on.
- With SaaS, because there is no software to install at each client site, functionality, features, and software upgrades may be made more frequently.
- The user community is all using the same core application; as a result, new ideas and feature refinement feedback from each user ends up benefiting the entire user community.
- As a customer, you become part of this virtuous cycle – making enhancement requests that, if accepted, will be seen in the product in much more rapid fashion than previously possible.
- Your customizations are stored above the shared code, which means they are not affected by updates.

In short, 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 has 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 hallmarks of the SaaS business model is the use of the same software application for all clients as opposed to traditional ASPs which took a commercial package, customized it for each client, and then ran each customer's software in its own environment. As detailed previously, this single SaaS application benefits from the collective wisdom of the market and evolves more quickly to meet the changing needs of the majority of customers. There

are bound to be differences in functionality, in comparison with a custom solution. Some customized applications do require specialized functionality that cannot be met by a SaaS application, even with configuration and integration.

However, most well-designed SaaS solutions are robust and offer extensive interface capabilities usually via Web services to expand the core application. Web services enables integration with both internal and other hosted systems. Often referred to as the 80/20 rule, the combination of integration and configuration enables SaaS applications to meet the needs of most applications.

Common, key functionality available in a full DM suite includes:

- **Secure File Sharing.** With security down to the document level, many people prefer a SaaS solution to deployed solution because it is totally outside the company's internal network and, therefore, secure even from administrators.
- **Multiple Methods of Capture.** Ability to easily associate e-mails and fax attachments into the repository alongside documents.
- **Multimedia Capabilities.** Ability to handle text-based documents as well as images, audio, and video.
- **File version control.** Including such features as check in/check out, helps control the document editing process and ensures that all team members are accessing the latest and most accurate information.
- **History and Audit Trails.** View complete version history and access records for any file.
- **Document Security.** Rights and permissions assigned down to the document level on a user by user basis.
- **Organizing Tools.** Features like notes, calendars, and actions items that help keep teams in sync.
- **Routing and Approval of Documents.** Automated workflow to support key processes and bring visibility to process status.
- **Advanced Search Capabilities.** Full Text search and advanced field-based search capabilities including by document type and custom index fields.

Does an on-demand solution cover you basic needs?

- 1 Begin by writing a definition of what you want to accomplish. Who will use it and for what purpose? Indicate the other systems, facilities, groups, and companies that will interact with the proposed application. For each process, sketch the workflow, detailing what happens at each stage. Because you are not maintaining the application, you do not need to be concerned with technical infrastructure, i.e. what operating systems, hardware, etc. are supported, but rather, you can focus on the business processes you need to support.
- 2 Share your definition with the vendors you are considering. They know what can be accomplished with integrations and how to get the most from their application. This can be done through a formal request for proposal or just an informal e-mail.
- 3 Request a demonstration of the SaaS system as it applies to your requirements and 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 configuration or integration capabilities will meet those needs.

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

Summary: The Right Document Management Model for Many Situations

Document Management, either as a stand alone application or as part of a broader Enterprise Content Management initiative, is a powerful technology that enables an organization to control and leverage its information assets. While an on-demand approach may not be the best fit for all projects, we have outlined its usefulness when your situation has the following characteristics:

- You collaborate with people inside and outside of your organization or who are mobile or in multiple locations, with mobile or frequently changing participants.
- Time to implementation matters.
- You prefer cash outlays that are connected to and timed to coincide with the business benefits you receive.
- You like the idea of no internal IT support requirements, and frequent feature upgrades.
- You require the most commonly requested DM functionality in a configurable, end-to-end solution.

If you identify with the above needs, a SaaS Document Management solution may have significant advantages over the deployed model. The best way to determine fit is to evaluate your options through vendor discussions and free trials that expose you to working software. A good definition is all you need to get started – the benefits of improved productivity, increased revenue and reduced cost await.

About SpringCM

SpringCM is the simple, smart, secure source for on-demand document and content management. The company is meeting the real need of businesses to manage the explosion of documents and other content types – from capture, storage and search, through collaboration, workflow, and document process automation. All this is immediately available with SpringCM for an affordable monthly subscription fee.

SpringCM deploys software-as-a-service (SaaS) to put document and content management within practical and affordable reach of mid-market businesses. For customers that means they don't have to purchase hardware, software, or use available IT resources. With SpringCM, they can be up and running minutes, not months.

Headquartered in Chicago, with offices in California and New York, the company was spun out of ADEXS, Inc., which was founded in 1999. Foundation Capital out of Menlo Park, CA funds the company. Foundation Capital was also an early investor in industry leading content management companies such as Documentum and Interwoven.

About the Author

Christine Mason serves as CEO of SpringCM. Before that she was Chief Executive Officer of Open Road Technologies (now Intellect), a venture-backed advanced search technology company, and as managing director of ClickMarkets, an early stage venture accelerator, whose companies include Mobitrac, LeadAmerica, and Holisticare, among others. Christine also co-founded and served as Chief Marketing Officer for MetalMaker, Inc., an Internet supply-chain service offering to the global metals industry. Previously she worked in mergers and acquisitions, post-merger integration, and new market growth with global companies such as Price Waterhouse Coopers, and Kraft General Foods among others. Christine serves on the Board of the Software and Information Industry Association, and is a member of the Economic Club of Chicago. BA, Northwestern University. MBA, Graduate Kellogg School of Management.