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What Makes You Rich Can Make You Poor

How SharePoint Has Become The Best and the Worst Thing Ever

By **Andy Moore**, Editorial Director, *KMWorld* Specialty Publishing Group

There's a great Ry Cooder song: "The Very Thing That Makes You Rich, Makes Me Poor."¹ That should be on the iPod of every IT guy who is coping with SharePoint right now. Because SharePoint has turned into the biggest "the good news is... the bad news is..." story of the decade.

How We Got Here

Full disclosure: I was blind-sided by the rapid and now nearly ubiquitous adoption of SharePoint. So I convened a small roundtable of experts to explain to me how this relatively minor-class Microsoft product has suddenly—to me anyway—become the darling of business and the scourge of IT shops worldwide.

For historical perspective, I went to Miguel Rodriguez, senior product manager for ASG Software Solutions. And he's the right person to go to, by the way. Miguel was a beta user of SharePoint—"So I was not only a user; I was a victim," he laughs—in 2001, when the product was first released.

"There were two flavors of the first version," remembers Miguel. "Windows SharePoint Services, which was free, and the portal/server side, which was not free. The two sides were completely non-integrated... completely separate. That's the reason it wasn't very popular at that point." And why, I assume, Miguel calls himself a victim of the era.

"The second version was even more painful, because some features were removed," says Miguel. "But the tipping point came a few years ago when SharePoint 2007 was released. Microsoft learned from their mistakes, and was determined to capture a lot more market."

I suggest that a free version of software from Microsoft in 2007 was pretty much guaranteed to acquire marketshare. "I guess so. But the free version of SharePoint was like any free-version software... similar to the software that comes with your desktop scanner. For your basic needs, it's good enough. So it was deployed at the department level, and

people got a chance to try it out." But as we'll learn, as soon as companies tried to make it an enterprise standard, it was necessary to go to the "paid" version. There was a certain drug-pusher aspect to it all.

"It was sort of a perfect storm of many things," recalls Stacy Monarko, director of product management for Vivisimo. "Did I predict how big it would become? No. But I can also say I'm not surprised. Organizations have always looked for ways to promote collaboration and information sharing. Then two or three years ago, the walls came down from a cultural perspective. So the need for a user-friendly technology that was easy to adapt quickly grew," she says.

The cultural shift Stacy refers to is the growing adoption of social tools, and the acceptance of information exchange, that we've talked about in these pages before. Up until recently, Stacy says, "Document management was more in the domain of the librarians. But with this cultural shift, there became a need for *everyone* in the business to share information. And an intuitive, easy-to-use collaboration product was already in place—SharePoint—and Microsoft had just the right experience to get it out there. I did not predict it, but it makes sense now."

The Viral-ness of SharePoint

SharePoint was quickly adopted into departments, whether it was R&D or marketing, or wherever. These business unit teams were able to deploy SharePoint on their own, and that's now where the struggle is: these silos of SharePoint need to be dealt with before it can ever be thought of as an enterprisewide standard.

Thus SharePoint is a double-edged sword. Its strength—ease of deployment—is also its fault—multiple, redundant deployments that must be brought under governance. The irony is that this "non-IT" tool is now burdening IT groups exactly because of its "non-IT-ness."



Andy Moore

Andy Moore is a 30-year publishing professional, editor and writer who now concentrates on business process improvement through document and content management. Moore is the publisher of *KMWorld* Magazine and its related online publications.

Moore also acts as the editorial director for the "KMWorld Best Practices White Papers," overseeing their content as well as writing the opening articles for each of the white papers in the series.

Moore is based in Camden, Maine, and can be reached at andy_moore@kmworld.com

"There is a positive side," says Miguel. "It IS very easy to deploy by departments, without the need for IT to get involved. But (and this is a big "but" as we'll learn) as organizations try to adopt it as a corporate standard, they're ending up with all these uncontrolled workspaces, libraries, site collections all over the place that IT has to take care of."

Rob D'Oria is chief technology officer at StoragePoint, and is one of the sharpest pencils in the box when it comes to SharePoint. He helps explain how this dynamic has been allowed to occur: "SharePoint is so approachable, from both the end-user and the IT perspective, that it gets into departments and spreads. Then suddenly it's: 'Whoa, now we've got governance problems and a lack of control.' It's a double-edged sword; you can manage unstructured content, but it's becomes disorganized. There's no information architecture, there's no taxonomy, there's no common metadata. So in one repository it's 'invoice number,' and in another it's 'inv #.' There's no consistency. A whole lot of vendors have popped up to provide solutions to normalize and create a form of control and consistency," over SharePoint, Rob says.

Miguel has the same message. "When a department implements SharePoint, they don't think of it from an information architecture point of view. They say 'OK, it fits my collaboration, or document management, or small portal needs... I don't care what is in that SQL server database. Someone in IT will take care of that.'"

But that's the rub. When IT has to take care of those multiple, huge storage layers, that's when the costs and enormity of the effort comes into view. And that's what's happening around the world right now. That inexpensive portal platform that

Microsoft practically gives away is suddenly a lot more... uh, well it hurts.

SharePoint 2010 is supposed to address this chaos, but the jury's still out, says Stacy, "We won't even know for six months to a year, because the migration from 2007 to 2010 for larger organizations is going to take time. A lot of the attention on 2010 has been spent on the social capabilities... the wikis and blogs, for instance, which are vastly improved. But it's not clear whether the governance issues have been fully addressed."

Records management has been another missing piece. "One of the tenets of records management is you don't want to have duplicate copies of content," explains Miguel. "And SharePoint stores everything in duplicate. You can have versions that are sent to the 'official records center,' but copies of those documents can still exist in the collaboration workspace, libraries, etc." That's not good records management. SharePoint 2010 to the rescue; it has what's called "in-place RM," which means that a document within the collaboration site can be designated as a record, and that is the official single copy.

So What's the Matter?

So we come to the issue that's big and gray and sits in the corner: If SharePoint's so great, how come it hasn't taken over the world? There was a time when we thought that, sooner or later, the "big guys" would finally decide to dominate the document, content and records management markets, absorbing those functions into their infrastructural platforms and it would be "game over" for the content management vendors.

The fact is: It's not clear whether the embedded SharePoint capabilities are everything they should be. "I'm kind of shocked by the number of complementary products that have sprung up that appear to do what SharePoint advertises it should do out of the box," Stacy says.

And thus, a cottage industry of SharePoint "enhancements" has emerged.

"In most cases, these add-on tools take on two important roles: the preventative, and the cure," adds Rob D'Oria. "If you're new to SharePoint, or migrating to 2010 and using that as an opportunity to re-architect, there are tools that prevent some of the challenges of the past from happening. But 2010 tools can also be used to cure some of the problems you're already dealing with," he says.

For example, 2010 has a "managed metadata" function. You create, in advance, a lexicon, or a metabase, of all the various terms that might be used for a particular business function. As long as your tag matches one of those, it knows

what it is. Example: anything called "invoice number" or "inv#" is pointed to the same place.

But you can also lock it down from an admin approach to a pre-derived set of terms that *must* be used. "That's where the governance comes in," says Rob. "If you want to create a new field description, you have to ask for it. I know companies that have implemented very formal processes and workflows to do just that. And that is easier to do in 2010. But you still have to make a willful decision to apply governance."

The relationship between existing content and document management providers and Microsoft, at the moment is "both tense and friendly at the same time," says Miguel. "Many enterprise content management vendors compete with SharePoint,

"The tipping point came a few years ago when SharePoint 2007 was released. Microsoft learned from their mistakes, and was determined to capture a lot more market."

but at the same time partner with Microsoft to bring in something else on top. Someone compared SharePoint to a goose and a dog and a fish; it can fly, walk and swim, but doesn't do them all correctly."

The fragmented departmental implementation of SharePoint is not going to fix itself, either, according to Stacy. "You're not going to convince a large organization that its product design group in Germany should use a tool in the same way your sales organization in North America is using it. So that problem is a weakness for SharePoint. It's a broad solution, but it's not focused to do specific things, such as a CRM system or even Salesforce.com," she says.

Better Than It Was

Microsoft has never promoted SharePoint as a content management platform, so they haven't really addressed the governance issue. "Microsoft puts out best practices articles, and points to partners who can help, but it's still up to someone in the company's organization to make the investment," says Rob. "A lot of times, that doesn't happen. There are multiple parties who have to agree on an architecture, etc." There is more of that happening with 2010, because of the "clear-the-slate" nature of migration, and the seriousness with which IT groups want to adopt, and then control, the various SP farms and repositories. But as a general rule for companies that are still adopting 2007... it's a free-for-all.

But... at least SharePoint is a consistent common denominator. Sure, there might be 25, 30, 100 SharePoint farms in an organization, but at least they "share" the same interface, platform, architecture. So, Rob argues, it's better to have 30 SharePoint farms than to have 30 different ECM, WCM, CRM, ERP applications to integrate.

So there's a path-of-least-resistance argument to be made for SP. "Regardless of how many SP farms you have, it's the same interface. That's a problem I won't have to overcome. I won't have to re-train users, I won't have to create multiple integration layers..." It might not be great, says Rob, but it's better than the alternative.

The one area we haven't addressed is storage cost. SharePoint natively stores everything in SQL. Tier-one SQL storage, as it's called, is the most expensive, most highly redundant of them all. For five terabytes of content you might need 30 terabytes of storage. But SharePoint 2007 and 2010 both allow for a solution; you can store the actual large stored objects (referred to as BLOBs) wherever you want, and simply point to them from the SharePoint SQL storage. That makes storage 90% to 95% smaller. That's a big deal, and allows SharePoint to overcome its storage-cost issue pretty much.

So... SharePoint is here to stay, but that doesn't mean it's here to stay in its present form. Nor does it mean anyone has to rip out their legacy systems to replace them with SharePoint. In fact, that "would not be advisable," as Miguel politely warns. But if there are any people on the planet who can guide you through the many decisions ahead, they are on the following pages. Please take the time to think this through. We'll help if we can. ■

1. A little music trivia for you. Interestingly—and completely off the subject—this was the first all-digital recorded album of popular music ever released. 1979. If you're interested—and you should be—here's a link to start with: http://en.wikipedia.org/wiki/Bop_Till_You_Drop. I bought it originally on vinyl, then CD, then downloaded it. So I have now lived with it for 30+ years, and it still holds up.

Microsoft SharePoint and Content Aggregation

Share More Than Just Desktop Documents

By Miguel Rodriguez, Senior Product Manager, ASG



Miguel Rodriguez

Miguel Rodriguez has worked in the software industry for more than 20 years, with more than 15 years of experience related to content management, including imaging, check processing, email and records management.

He has worked for five years with ASG-Mobius as senior product manager for several solutions, including ASG-ViewDirect E-mail Manager, ASG-WorkflowDirect and ASG-TCI for MOSS. Rodriguez also spent five years as a senior product manager for eManage and 12 years at Unisys.

Since its inception in 2001, SharePoint has been on an amazing, and sometimes painful, journey. The first release offered a loosely connected solution—SharePoint Portal Server and SharePoint Team Services 2001. In 2003, Microsoft made two big decisions to increase SharePoint adoption: ensuring that the entry-level solution (Windows SharePoint Services—aka WSS) and the Portal Server shared a common platform; and providing WSS no-charge licenses to anyone owning a license of Windows 2003. Microsoft then crossed the chasm with the release of Microsoft Office SharePoint Server (MOSS) and WSS 2007. The growth in number of licenses in 2003 skyrocketed due to the “free” edition of 2003, but SharePoint 2007 was the real tipping point; Microsoft partners, customers, analysts and the press started to consider SharePoint as a serious unified platform. The fourth generation, SharePoint 2010, built on top of the success of SharePoint 2007 and enhanced functionality in many aspects ranging from records management to social interaction and Web content management.

Current Reality

Given the recent release date of SharePoint 2010, the majority of organizations are using SharePoint 2007, and it’s estimated that many enterprises will not migrate to SharePoint 2010 for some time. Therefore, we’ll concentrate on how customers currently use SharePoint 2007.

There isn’t a straightforward way of describing SharePoint usage, mainly because SharePoint is acknowledged as a “jack of all trades”—providing everything from an intranet portal, to a document management, collaboration, knowledge management platform to a replacement of file shares. Some think that SharePoint is the “Swiss Army Knife” of content and collaboration, but the reality is that, although it fills many gaps, others gaps remain—which require complementary solutions. It is in this area where the power of the Microsoft partner ecosystems shines; part-

ners around the globe provide services and products that complement SharePoint’s core functionality.

Another factor facing today’s organizations is the diversity of content sources, formats and repositories. Research shows that more than half of surveyed organizations have more than one repository, and 15% have more than five repositories—with SharePoint as one of many. With such disparate sources of content, it is difficult for knowledge workers to quickly and easily locate the information they need to make operational or strategic decisions. Integrating all content into one “master repository” is a worthy goal, but typically not realistic due to challenges presented by multiple operating platforms, unique line of business needs, cost (financial and personnel) and the continuing growth of organizations through mergers and acquisitions. SharePoint unites collaboration and document management in a way that is easy for many knowledge workers to learn and use, but it doesn’t address the even broader set of ECM and collaboration requirements of other information workers. Vast amounts of electronically stored information are scattered around the enterprise in disparate repositories and on different platforms, out of sight of SharePoint. That content cannot be migrated into SharePoint due to economic and practical factors, such as the fact that SharePoint stores every document as a binary large object (BLOB) inside SQL Server.

On the other hand, SharePoint can be considered a unifying user interface for multiple sources of information. In every SharePoint deployment, disparate content must be considered from two perspectives: first, how to access and view all content to make business decisions, giving appropriate users access through a single, common interface; and second, where to store the content to meet guidelines for legal and regulatory compliance while keeping storage costs under control, providing a long-term scalable repository and satisfying business and departmental requirements.

To address these two requirements, we’ll focus on two cases highlighting common SharePoint usage:

- ◆ SharePoint is used as an intranet or extranet portal in many organizations. Portal users need to access content not only from SharePoint, but also from other systems. In certain cases, users don’t know where the information is and become frustrated.
- ◆ SharePoint libraries are also becoming an acknowledged replacement of file shares. Organizations have viewed SharePoint as an easy way to add controlled versioning and collaboration features to the sharing of users’ documents, with direct integration to authoring tools such as Word, Excel, PowerPoint or OneNote. SharePoint fosters self-provisioning sites for document workspaces, discussions, projects, etc.; with each new site, document libraries—and therefore documents—are created and stored inside SharePoint database. This uncontrolled growth leads to issues ranging from long-term storage to maintainability and costs associated when SQL Server is used as the store for large static objects.

Case 1: SharePoint as an information portal. Portal users need to search for and access information both inside and outside of SharePoint. However, SharePoint “out-of-the-box” presents challenges for seamlessly integrating external content into SharePoint pages. Structured SQL data and Microsoft-friendly formats are not an issue; the challenge is instead presented by content such as customer invoices, statements, accounting reports and other non-desktop documents generated in a high-volume laser print format and stored on a different platform (e.g., mainframe, UNIX, etc.). In the same way, high volume images (e.g., millions of pages per week/month) and other massive content sources are usually stored in repositories outside of SharePoint. Still,

SharePoint and Partners

The combined goal of Microsoft and its partners is to provide a transparent way of adding and using content in SharePoint, while minimizing any associated overhead.

As an example, the ASG-Total Content Integrator for MOSS solution extends beyond the straightforward migration of content from a database to an external repository. It adds SharePoint's policy granularity regarding what content gets stored where; and can optionally pass metadata to the destination repository. Multiple operation modes such as archiving copies or moving the content out of SharePoint provide alternatives to the plain

transparent mode to address different business and storage management criteria.

SharePoint has made great strides since its inception to provide organizations a unified content management platform. For many organizations, SharePoint as an information portal or a document repository works very well. For larger organizations that need to manage both desktop documents and transactional data in a unified manner with a single view while ensuring they meet governance and compliance requirements, Microsoft's partner network can provide the additional pieces to create a true enterprisewide content management system.

those are also very important pieces of content that users need to access—along with the content residing in SharePoint.

There are two primary options to address users' needs: IT departments develop custom interfaces from all "other" sources to SharePoint, or they obtain a content integration solution developed specifically for SharePoint from a partner (such as ASG's Total Content Integrator for MOSS solution). A content integration solution uses the ubiquity and end-user familiarity of SharePoint to leverage content residing in other repositories, thereby bringing new and added value to information portals.

Content integration extends SharePoint's search capabilities. SharePoint provides search tools for its own content and can crawl across content in external sources, but crawling is not feasible or practical for all types and sources of content. Federation of search and configurable user interfaces are required regardless of where information resides. Search Web Parts can be easily personalized by a SharePoint page designer to meet users' expectations in the context of the page.

Content integration into SharePoint pages also allows automatic content presentation. In many cases, portal applications need to automatically present the information users require in the context of the portal or site page they are using—without forcing the user to navigate to a search page or to conduct an explicit search. In these cases, the flexibility of interconnected Web Parts, the ability to predefine criteria based on user properties or page context and the ability to transform and present content in the same page provide unlimited possibilities to the imagination of SharePoint site designers.

For example, let's consider a "regional sales site" in which a site designer configures the main page with a hidden Web Part to automatically locate the six most recent monthly regional sales reports for the region of the user visiting the page. Another Web Part obtains the information and lists it on the site's page. Finally, the designer specifies a third area of the page, with the content-viewing Web Part presenting the most recent sales

report for that region. This approach offers unlimited flexibility:

- ◆ When a sales executive logs into this page, he automatically sees his latest sales report;
- ◆ The page designer has tools to add value to the portal by automatically presenting content from non-SharePoint repositories; and
- ◆ There is no need for custom development or interfaces and there is no need to train users on two, three or more different user interfaces.

In this example, it is possible to combine documents, lists and other items from SharePoint, output from ERP systems, email, images and reports from non-SharePoint repositories on the same SharePoint page.

By automatically presenting SharePoint and non-SharePoint content in the context of a given page, or by allowing users to find information using focused searches (when they don't even realize that they are conducting a federated search), adds value and dynamism to SharePoint portals and sites. The use of federated search and flexible Web Parts leveraging metadata from multiple sources facilitates reusability across multiple SharePoint sites.

Case 2: Collaboration, document management and document repository. SharePoint has also been used as the "next-generation replacement" of file shares; SharePoint has become a location where everyone can store files to share with coworkers and colleagues. SharePoint provides tight integration with Microsoft Office authoring tools, which streamlines the processes users employ for creating, editing, revising and saving documents to shared libraries. In addition, as organizations and work teams realize the benefits of using SharePoint's native collaboration and document management features, it's not uncommon to experience an explosion of sites, sub-sites, workspaces and multiple other forms of content association. The downside is that every new version of a document, any new workspace or copy of a document, etc. creates a new copy of the file (BLOB)

in the database. Unfortunately, relational databases were designed to manage transactional and relational data, and not designed to facilitate very large repositories for large static objects.

This difference in design presents several challenges:

- ◆ As the database grows so does the time and cost associated with backup, restore, recovery and maintenance operations;
- ◆ Database fragmentation and growth due to the addition, replacement and editing of BLOBs degrades the database performance;
- ◆ Since the same database is used for meta-data, transactional data, workflow and BLOBs, it must use a fast single type of storage, which is usually one of the most expensive storage options; and
- ◆ Large amounts of content files migrated from external systems further exacerbates database problems. Retaining those documents for long periods of time only contributes to additional database growth.

Microsoft has recognized limitations of its approach and has developed methods to externalize the storage associated with SharePoint content. Microsoft thereby leverages its partner ecosystem to provide "externalization solutions;" ASG is one such partner. The combined goal of Microsoft and its partners is to provide a transparent way of adding and using content in SharePoint, while minimizing any associated overhead. ■

ASG provides a full range of practical software solutions that help organizations lower costs, save time and make proactive decisions that drive business success. Well known for its broad portfolio of best-value, results-driven technologies, ASG partners with 85% of the world's largest companies to optimize information management and IT service delivery in both mainframe and distributed environments. Founded in 1986, ASG is a privately held global company based in Naples, FL, with more than 70 offices worldwide. For more information, visit www.asg.com or call 800-932-5536.

Three Ways to Optimize your SharePoint Implementation

By Tracey Mustacchio, Vice President, Marketing, Vivisimo, Inc.



Tracey Mustacchio

Tracey Mustacchio has more than 20 years of marketing, business development and product management experience. At Vivisimo, Mustacchio is responsible for the company's global marketing initiatives, including its go-to-market and product strategies. Prior to joining Vivisimo, she served as chief marketing officer for TraceSecurity, a SaaS-based security compliance provider.

Microsoft SharePoint is a popular and valuable business tool that offers a broad range of useful document-centric collaboration capabilities. With SharePoint, users can work together efficiently to create and manage documents that capture institutional knowledge and convey that knowledge to others.

SharePoint's close connection to Microsoft Office is one reason for its extensive adoption. In fact, SharePoint is one of the fastest growing products in Microsoft history, reaching an estimated 130 million users this year, according to the company. Like Office, it is rapidly becoming a de facto standard for document- and content-centric collaboration.

SharePoint Challenges

The growing use of SharePoint creates both opportunities and challenges. SharePoint's core features and end-user acceptance offer the opportunity to introduce collaboration, workflow and content management in an organization. At the same time, a variety of issues can make it challenging to get the full potential business value out of SharePoint:

- ◆ Fragmented departmental SharePoint implementations;
- ◆ Isolation of SharePoint content from the larger enterprise information environment; and
- ◆ The need for richer functionality on top of core SharePoint capabilities.

I'll explore these issues in more detail, and follow with a strategy that will help you overcome these challenges, multiply the business value of your SharePoint investment, and also increase the value of your other content-centric IT investments.

1. Fragmented departmental SharePoint implementations. While SharePoint is a great aid to collaboration, it is usually implemented initially on a team-by-team basis. As a result, corporate SharePoint deployments tend to be highly fragmented.

Most companies wind up with many small "islands" of SharePoint content, workflows, administration and customizations. So it is difficult—if not impossible—for people in different areas of the company to find and

otherwise leverage content that is not in their particular SharePoint "territory."

2. Isolation of SharePoint content from the larger enterprise information environment. While SharePoint-based content is growing rapidly across most organizations, it still typically represents only a small fraction of the unstructured content that knowledge workers use on a daily basis.

SharePoint can therefore potentially become its own "island" of information that winds up isolated from the larger enterprise information environment. Thus, in some cases, people using SharePoint will miss out on a wealth of information that may be relevant to their immediate needs. In other cases, people using some other system will miss out on the information that is contained within SharePoint. Either way, the isolation of SharePoint content detracts from the business value that people get out of their SharePoint resources.

In the real world, people often neglect to create their content in SharePoint. So it isn't wise to depend entirely upon busy people to ensure the ability of the business as a whole to leverage the content they individually create.

3. The need for richer functionality on top of core SharePoint capabilities. While SharePoint provides a wide range of useful content collaboration and distribution functions, it does not do everything every company needs to fulfill its information-sharing requirements.

Adding this functionality can be a challenge. Not every company has the IT skills to work with SharePoint's underlying architecture. This can pose obstacles to companies that are not Microsoft-only shops and/or that need to integrate SharePoint with other non-Microsoft applications. Given that IT resources at most companies are already stretched pretty thin, it is important to develop strategies that make it easier to enhance SharePoint with the various additional capabilities the business is likely to require.

In other words, while SharePoint is certainly a powerful business solution, it is not by itself the be-all and end-all of content management, collaboration and workflow. Technology decision-makers therefore have to develop a strategy to get maximum value out of SharePoint—so they can meet the

information-sharing needs of the business as effectively and cost-efficiently as possible.

Optimizing SharePoint

Across the board, the three challenges that I have described are symptoms of a single larger issue: *failure to fully optimize an organization's information resources.* As you'll see, these challenges are not unique to SharePoint. Many applications, from transactional business systems to rich media, suffer the same issues. Solve these challenges for SharePoint and you'll be well on your way to optimizing the use of information throughout your organization.

Before diving more deeply into the three major challenges and their solutions, I'd like to introduce the concept of *information optimization.* Information optimization is the discipline of ensuring that all of an organization's information is readily accessible to the employees, partners and customers who need it, in a form that is contextually relevant and easy to use. Information optimization is an ongoing process that seeks to improve information use by understanding and addressing all of the impediments to its effective use. There is also a technology component to the information optimization story, because ultimately you'll need a technology platform that can support the principles and objectives of information optimization.

With this common understanding of information optimization, one can productively explore how to address the challenges to gaining full value from your SharePoint investments:

Unifying SharePoint assets across the enterprise. The ideal antidote to fragmented departmental SharePoint implementations is an information optimization strategy and platform that can unify all of your organization's distributed departmental SharePoint systems and make them look like one. The goal of this effort is to enable SharePoint users throughout the organization to find and make use of SharePoint assets anywhere, regardless of location—but with one big caveat: users must only be able to see information that they are authorized to view. This means that the system used to

Vivisimo In Play

A global consumer products company uses Vivisimo's information optimization platform to drive greater productivity and efficiencies across all of its operating divisions and to gain greater value from its SharePoint investments. From a single point of access, authorized users can browse of all of the organization's information resources across all operating divisions, including internal document-centric systems like SharePoint, distributed

file systems, transactional systems such as SAP, external subscription services and Internet content. Search results contain information about people who may be able to provide assistance in a particular topic, as well as featured links to SharePoint sites that may provide more information. The result is greater overall efficiency and better insights across the entire organization, leading to faster time-to-market for new products.

unify all of the SharePoint content must have built-in security capability that understands and enforces the access permissions and policies of each SharePoint server.

Using an enterprisewide information optimization approach to unify the enterprise SharePoint environment offers substantial advantages over attempting to do so within SharePoint itself. For one thing, existing departmental SharePoint implementations tend to be entrenched and resistant to change. Modifying those implementations to align with an enterprise standard can be disruptive, politically challenging and counter-productive. Attempts to standardize future SharePoint implementations can also slow deployment and limit the ability of individual departments to customize them to meet their business needs.

Each department can be given autonomy to deploy SharePoint in accordance with its own requirements—and to continue enhancing those deployments as necessary. Following an information optimization approach, you can ensure the ability of the business as a whole to leverage information in departmental SharePoint deployments.

Integrating SharePoint with the larger enterprise information environment. This is perhaps the biggest impact you can have. For organizations making a commitment to SharePoint as a core content authoring and collaboration environment, preventing SharePoint from becoming its own information silo is particularly important.

This is where organizations which have implemented an enterprisewide information optimization strategy are well-positioned to gain the benefits of their strategic IT investments.

The benefit of this optimization is felt in both SharePoint and non-SharePoint environments. First, it ensures that people searching enterprise content will be able to find any relevant documents residing in departmental SharePoint repositories. At the same time, it enables SharePoint users to use any non-SharePoint content—including both structured and unstructured data—that they need for the activities that they are doing within SharePoint.

Again, you want to accomplish this in a way that individual SharePoint implementations are not constrained in counter-productive ways. The same requirements for enforcing access permissions apply when integrating SharePoint content with other enterprise content.

Keep in mind that once you have merged SharePoint and non-SharePoint information and made it so accessible to users, they are going to want to tag, comment, forward and track changes to both types of content from a single easy-to-use interface, regardless of where it came from. And that leads to our next step, which is to build additional functionality into SharePoint.

You can achieve enormous gains in productivity by replacing SharePoint's native search functionality with more advanced, best-of-breed search, clustering and notification capabilities. Ideally this should be done seamlessly with modular Web Parts that snap into place using standard SharePoint configuration tools. While better search will give a big boost to your SharePoint deployment, you should also ensure that the information optimization platform you are using for this project includes other advanced collaborative features such as the ability to annotate and rate documents for relevance, locate subject-matter experts along with search results and create personalized information dashboards.

The right information optimization platform will also enable you to make SharePoint documents and metadata available to other applications through application programming interfaces that will enable your IT organization to integrate that content into other applications as necessary to fulfill specific operational requirements.

Benefits of Optimizing SharePoint

Your company can reap a number of substantive benefits by incorporating your SharePoint deployments into a solid overall information optimization strategy:

Improved business performance. Having the right information at the right time helps product designers design better, manufacturing teams manufacture better, marketers market better, salespeople sell better and customer service departments service customers better.

Improved knowledge worker productivity. Companies today are running leaner than ever. That means that they have to make sure their knowledge workers can quickly find the content they need—and that they don't waste time recreating content that already exists. Optimizing SharePoint will directly

and quantifiably improve knowledge worker productivity.

Reduced business risk. In addition to the upside benefits that result from using information efficiently, there are downside risks when it isn't. Opportunities are missed, customers are misinformed, and operational problems go undetected. SharePoint implementations that are departmentally fragmented, isolated from other content and functionally inadequate can lead to reduced revenues, wasteful spending and erosion of market confidence.

Better governance and compliance. Organizations have substantial responsibilities when it comes to securing sensitive information, maintaining documentation of business activities, providing that documentation to regulators, performing e-discovery and generally keeping tabs on content across the enterprise. But it becomes more and more difficult to fulfill these responsibilities with SharePoint's limited capabilities. That's why you need an information optimization platform with the ability to discover and categorize content across the enterprise regardless of format or location.

Reduced cost of ownership. With resources tight and multiple priorities competing for attention, it's essential to reduce both the cost of SharePoint ownership and the overall effort it takes to achieve key corporate information optimization objectives. By providing a single platform that delivers enhanced search, governance, integration and productivity features for SharePoint—and for every other content-producing application—you can drive down project costs, lifecycle content management costs, and the overhead associated with content-rich applications.

The bottom line is that SharePoint is a great product for any business that wants to achieve competitive advantages improving its collaborative use of information—but it's just one component of an overall strategy for doing so. Given today's pressures for operational excellence, productivity, risk mitigation and good governance, bringing SharePoint into a full-blown information optimization strategy is essential for achieving real business results. ■

Vivisimo helps organizations unlock and optimize the true business value of information—regardless of application or source—to drive innovation, real-time decisions and actionable insight. Visit www.vivisimo.com.

It's Time for ECM to Evolve

By Rob D'Oria, CTO, StoragePoint

With the RTM (release to manufacturing) of SharePoint 2010, I feel comfortable proclaiming that the days of traditional ECM vendors (i.e. FileNet, Open Text and Documentum) are numbered. The picture of a bunch of dinosaurs looking up to the sky as a big fiery ball bears down on them comes to mind. It's appropriate; these dinosaurs have prolonged their existence by adopting a wide array of co-existence strategies in a thinly veiled attempt to pigeonhole MOSS as a complementary offering. It is (and has been since 2007) a viable alternative or replacement, something that has been proven over and over again by partners like the company I co-founded, BlueThread. We took a great platform, filled some gaps, worked with some partners, and made it easier for organizations to adopt it as a true ECM platform.

SharePoint has most of the content management capabilities an organization needs. Out of the box it delivers exceptional forms management capabilities and reasonable records management capabilities that are vastly improved with SharePoint 2010. Add portal, collaboration and business intelligences capabilities that you won't find in any other CM/DM platform and an enormous partner community that fills any real or perceived gaps and it's game over.

And SharePoint's approachability from an IT organization perspective, along with the high rate of adoption within an end-user community, makes it the only viable enterprise content management platform available today in my mind. The expense and complexity associated with standing up and maintaining these legacy CM platforms prohibits them from being deployed enterprisewide. Not to mention the at-times awful end-user experience they surface (going back to the primary co-existence strategy theme). These platforms are at best point (i.e. claims management at a health-care insurer) or departmental (i.e. accounts payable) solutions.

So if I'm even only partially right, why haven't more companies adopted SharePoint to manage all or least most of their enterprises' content? Why do we still see huge volumes of unmanaged content sitting on file shares? Why are organizations still putting their content in underutilized, yet highly expensive, legacy content and document management solutions? Why do they still fill file cabinets, filing rooms and warehouses

with a small forest's worth of paper? I did the traditional ECM thing for 10+ years and have been doing the Microsoft SharePoint thing for going on 7+ now, so I think I know at least some of the reasons why. So here I go, we'll see how I do...

1. Microsoft has to rely on partners to deliver true or total ECM. As a long-time partner, I hear this one a lot. Can someone please define what it means to be a "true or total" ECM platform? That would be like me saying, I'm a true American or a total Italian. To the guy working on the assembly line in Detroit, I am probably a true American because I've never owned anything other than a GM, Ford or Chrysler automobile. But the guy working the line down at the Toyota plant in Georgetown, KY, will very reasonably argue that the cars he produces are every

"SharePoint's approachability from an IT organization makes it the only viable enterprise content management platform."

bit American and would not give me "true American" credit for my choices. Total Italian? I like pasta, pizza and Italian pastries from Sorrento's Bakery in East Hanover, NJ, where I grew up, and my three boys are Nick, Vinnie and Joey. But I'll take a cabernet over a chianti most of the time and if "Jersey Shore" is about being Italian, then I'm officially changing my nationality. So what's the lesson here? This assertion is all about perspective. To some folks, SharePoint OOB will do what they need it to. But if they want to scan documents, they're going to need

something like KnowledgeLake, just like you'd need a Kofax or Captiva if you were going to implement FileNet. If you want to do BPM (not workflow—there is a difference. One makes people more efficient; the other tries to remove people from the process) you're going to need something like K2, just like you'd need Pega or Lombardi if you wanted to do more than what was offered OOB with the others. And if you want to have short, near and long-term storage options for your SharePoint content, you're going to need something like StoragePoint, just like you'd need Tivoli or some other hugely expensive solution if you wanted to do what StoragePoint does with FileNet or any of the others. So with this in mind, maybe (A.) we can agree that SharePoint is not one-size-fits-all and a company's perspective and requirements will ultimately dictate how true or total SharePoint is as an ECM platform and (B.) agree that complementary partner solutions are good and needed and not scary. They should not be seen as evidence that SharePoint is somehow incomplete. They exist to make SharePoint applicable across a wider range of solution patterns and usage scenarios, whether we're talking about ECM or not. They allow organizations to get more out of their SharePoint investments, which I think is good for everyone... the customers, Microsoft, and the partner ecosystem as a whole.

2. SharePoint is incomplete. Somewhat related to #1, but not entirely. This is more about the whole 80/20 rule as it relates to traditional ECM platforms. 80% of the cost is represented by 20% of the functionality. Microsoft is happy, and from my perspective rightfully so, delivering 80% of the functionality for 20% of the cost of traditional platforms. It's that difference that makes it the only true ECM platform on the market because it's truly accessible enterprisewide. That other 20% of functionality is used by such a small percentage of the users within an enterprise that it normally can't be cost-justified. By way of example, I worked with a large Blue Cross Blue Shield that was contemplating a move from Stellent to SharePoint and the Stellent guy (I'll talk more about his kind in #7) couldn't accept SharePoint as a replacement because it didn't have this obscure set of features available out of the box or from a third party. This was a 20,000+ person organization. Anybody want to guess how many people used these features? Less than a dozen! So the rationale for not replacing an expensive and highly underutilized legacy content manage platform with SharePoint was the needs of .06% of the organization's employees. If the job function of these people was mission critical and there was no alternative approach to addressing their requirements, then I guess you may have a justification,

but there was nothing mission-critical about what they were doing and there were several viable alternative approaches using SharePoint's out-of-the-box capabilities and readily available third party solutions. The lesson here: most of what most of an organization's end users will need is there out-of-the-box or readily available from partners. Don't allow the lack of highly specialized and often expensive functionality to hold you back. In all likelihood that specialized functionality is making it harder and more expensive than it needed to be in the first place.

3. *Anything that cheap can't be any good.* I heard this for the first time about five years ago when I was presenting to the Chicago chapter of AIIM on SharePoint content management back in my KnowledgeLake days. They loved the message, lots of nodding heads, and then the sales guy threw up a slide on what it all costs and the room broke out into laughter. These folks were used to paying upwards of a few thousand dollars per user for FileNet just for document imaging; throw in workflow or records management and you were talking several thousand dollars per user. So a message promoting the idea that you can do pretty much everything you're doing in a FileNet in SharePoint plus some add-ons for the cost of FileNet maintenance was so beyond belief that it amused the 100+ attendee audience we were presenting to. To say the least, it was an eye-opening experience. As SharePoint has evolved and become more prominent in enterprises, the cost of the traditional ECM platforms has dropped, but you still find this attitude from time to time, especially in large organizations.

4. *Best practices, governance and information architecture.* Folks are quick to dismiss SharePoint as an ECM platform because there are not well-established best practices, governance and IA around ECM. That is a debatable point in my mind; there's actually a lot of information out there on these topics. Granted, it's not all good, but there are plenty of knowledgeable folks having thoughtful discussions on these and other topics. I will say that it's equally debatable whether or not there are good best practices, governance and IA available for all the other ECM platforms out there. I guess the point here is if someone asserts that they are hesitant to implement SharePoint for ECM for a lack of the above, ask them to see the above for any of the others. It's just kind of a weak objection and I encourage you to call it out as such.

5. *Conventional wisdom is that SharePoint doesn't scale.* This is almost always asserted by analysts in the ECM space in one form or another. A lot of times it's not such a definitive declaration, it's more of an "at least we don't think it

scales" or "there is not enough evidence to support scalability claims" or something like that. I think there is plenty of evidence to suggest that it scales quite nicely, both on its own and with the help of add-ons. KnowledgeLake published a whitepaper a couple years ago that showed tens of millions of documents managed in a farm with all the content sitting in SQL. It worked without issue. Could they have scaled that out even further and more economically if they remoted the BLOBs with something like StoragePoint? Most definitely yes, but that's more of a storage cost and to some extent a SQL cost consideration rather than a ques-

"There is plenty of evidence to suggest that it scales quite nicely, both on its own and with the help of add-ons."

tion of the architecture's scalability. That being said, there are definitely performance and scalability improvements to be had when you remote the BLOBs from SQL, especially with bulk (think mail room scanning or customer statements imported from a mainframe AFP stream) operations. So analysts, naysayers and the dude from Open Text who calls it "ScarePoint" every time he does a presentation (you know who you are), stop hiding behind a perceived lack of evidence that SharePoint scales or the fear that it actually might.

6. *Risk avoidance.* This is the person who hates keeping all his content in that legacy repository, but is risk averse. No one has been able to convince him that he can easily and without issue move all that content from legacy platform X to SharePoint. No one has been able to convince him that it's an affordable and low- to no-risk exercise. No one has been able to convince him that it can be done in a reasonable

amount of time with little or no impact to business continuity.

I frankly think this starts with a general level of immaturity within the Microsoft partner ecosystem on what ECM is. I hear a lot of partners talk about ECM and proclaim themselves ECM experts, but I don't regularly see evidence to back up the talk. That has translated into failed implementations and burnt fingers and contributes to the myth that SharePoint can't be "my ECM platform." It really speaks to the accessibility and approachability of the platform along with the massive size of the partner ecosystem. It creates a dynamic where an organization has to weed through all the partners out there to find the ones that really do understand ECM, can translate that to SharePoint and in the end help the customers achieve their goals. You think I'm unfairly asserting something here? Go to your local Borders or Barnes & Noble or go search Amazon.com for both SharePoint and FileNet. Not only are you not going to find much on FileNet (or Documentum or Open Text or Stellent), but you won't find anything that ends in "for Dummies." I'm not suggesting that the "ECM experts" in the SharePoint ecosystem are dummies; I just think the ecosystem has generally oversimplified what ECM is and has little expertise with legacy ECM platforms and getting content out of them and into SharePoint.

7. *Job security.* No, this is not the same person talked about in #6. This person likes all the content in that legacy repository. It was hard to stand up, it's hard and expensive to maintain and he/she has created the perception that if anyone other than them even looks at it the whole thing will come crashing down. This is the clown that keeps the person in #6 from doing anything, acting in their own best interests and not the best interests of their organization. They like things just the way they are and there is at least one of these folks in every organization. If SharePoint has any chance at becoming an enterprisewide standard for content management within an organization, these folks have to be disarmed or marginalized. You're also never going to be their friend, so don't waste any time trying to be.

There are most certainly other reasons, but I think this is a good start. Feel free to challenge my lucky seven reasons why more companies haven't adopted SharePoint. ■

If you're currently burdened by expensive and hard-to-maintain legacy content management platforms, or have content in more places than you can count and want to get all or most of it into SharePoint but don't know where to start, then reach out to us. Metalogix has solutions for both getting content from any number of content sources into SharePoint and efficiently and cost-effectively managing it once it's there. We also have partner companies and friends that can help you where we can't and would be happy to point you in the right direction, www.storagepoint.com.

Optimize SharePoint Storage

Ensure Governance, Performance and Scalability

By Christopher Musico, Business Content Editor, AvePoint

Microsoft SharePoint Server 2010, the latest release of Microsoft's best-selling server product, is poised to revolutionize how organizations worldwide connect their people, processes and information. Its release marks SharePoint's evolution from a server application into a full-fledged platform—the world's first “virtual ecosystem” for enterprise-class for collaboration, development and delivery.

When adopting SharePoint, most organizations are seeking to deploy a single platform upon which to unify the presentation, management and findability of their digital assets and work processes. However, in order to meet this objective, key stakeholders must have a good understanding of SharePoint's storage architecture, and how this architecture can affect governance plans and the bottom line. They must develop strategies and adopt tools that enable them to take advantage of all of SharePoint's collaborative and information management capabilities, while addressing the financial and logistical challenges SharePoint's architecture might give rise to. This article is the first step toward this process. Its goal is to review the basic storage architecture and content management capabilities of SharePoint, expose potential pitfalls an organization might face as a result and introduce strategies and tools to help overcome these challenges.

SharePoint Storage Essentials

SharePoint uses a unified storage infrastructure that utilizes a SQL Server database. While SQL is a superior database technology, its use as SharePoint's backend can pose unique challenges for organizations that are looking to centralize the presentation and management of terabytes' worth of data.

Why? Well, first off, SQL is a relatively expensive tier 1 storage media compared to file- and cloud-based storage. It can be quite costly—both financially and logistically—to migrate legacy content to SQL so that it can be managed and presented via SharePoint.

Second, SQL's performance can be compromised when burdened with the unstructured, non-relational data that organizations typically want to upload to

SharePoint, such as Word documents, Excel files, PDFs, PowerPoint slides, audio files, video clips, etc. (These unstructured data are known as binary large objects, or BLOBs). This creates a “catch 22” of sorts: On the one hand you want to keep all digital assets in SQL, so they may be collaborated upon, presented, managed, searched for and governed via SharePoint; on the other hand, placing it in SQL reduces SharePoint's performance and costs a lot of money (both to get it there, and to keep it there).

To address the issue systematically, let's start by breaking out the various types of content you want to manage via SharePoint into three categories. Afterwards, we can discuss how each can be dealt with efficiently.

“Key stakeholders must have a good understanding of SharePoint's storage architecture, and how this architecture can affect governance plans and the bottom line.”

Unstructured data: This data type represents 95% of the content a typical organization uploads into SharePoint. All of the Word files, Excel files, CAD files, PDFs, etc. end-users collaborate upon everyday are unstructured datasets. As we mentioned, a relational database like SQL is not particularly good at handling this unstructured data.

Legacy data: This data type represents all of the digital content an organization have maintained in other systems, be they legacy databases, in the cloud or on disparate file systems. If an organization

wants to present and manage its legacy content via SharePoint, it needs to understand the pros and cons of its options, including migration of the data to SQL, or—for legacy structured data—using SharePoint 2010's native Business Connectivity Services (BCS) to surface and manage the data without migration. The BCS only deals with structured data and doesn't allow for the management of content residing in places like file shares, network drives or file-based cloud storage. For this type of legacy data, another solution must be found.

Inactive data: This represents all of the SharePoint data—be it a document, a site collection, a list, anything—that once was actively being leveraged by end-users, but is now no longer being used, that must be maintained for compliance, legal, search or retention policy purposes.

Unstructured Content—Where should all those BLOBs be stored?

Considering what we already discussed about SQL and BLOBs, the fact that more than 95% of the data a typical organization uploads into SharePoint are BLOBs makes it obvious that SharePoint does not do wonders for SQL database performance. BLOBs result in longer index times, slower response to SharePoint end-users and overall platform performance degradation. Microsoft tried to address this issue by publishing the External Blob Store (EBS) Provider API with Microsoft Office SharePoint Server (MOSS) 2007 SP2, and introducing the Remote Blob Store (RBS) Provider API with SQL Server 2008, both of which enable organizations to leverage a stub-based system to extend SharePoint storage to other media. However, both the EBS and RBS Providers are simply APIs and require significant coding to be effectively utilized.

The good news is that—leveraging one of these APIs—an organization can offload all BLOBs from their SQL database, without affecting end-user experience or the findability of content at all. All of SharePoint's BLOBs can reside on disk-based storage, yet remain fully accessible via SharePoint—thereby easing the burden on SQL, optimizing platform performance enabling the organization to utilize existing storage infrastructure and delivering instant ROI (through reduced SQL costs).

Legacy Content

Many organizations have volumes of legacy content stored on myriad file shares, legacy databases and other storage devices. For governance and productivity, organizations would like to unify management and presentation of this legacy data within SharePoint. However, for financial, compliance or logistical reasons,

many companies do not necessarily want to migrate this data into their SharePoint environments, and often for good reason. Firstly, getting this content into SQL can be costly and time-consuming, even with the use of a great migration tool and proper planning. But even more importantly, this content adds a substantial load burden to SQL, resulting in the same issues we deal with when speaking about BLOBs. (Indeed, most of this legacy content will likely be BLOBs, too.)

For structured legacy data, (i.e. content residing in legacy databases), Microsoft introduced the Business Data Catalog (BDC) with its release of MOSS 2007. The BDC provided IT administrators with a way to present/surface business data from back-end database content, such as from SAP or Siebel, within MOSS without writing any code. With SharePoint Server 2010, Microsoft revamped the BDC and gave it a new name: The Business Connectivity Services (BCS). BCS expands on the BDC's functionality by enabling read and write access to external systems—Web services, databases and Microsoft .NET Framework assemblies—from within SharePoint 2010 and Microsoft Office 2010 applications. However, while developers can now use SharePoint Designer 2010 and Visual Studio 2010 to access external data via the BCS, the BCS can't deliver the same functionality to legacy *unstructured* content, such as content residing in file shares, network drives, FTP sites and cloud stores. If the goal is to leverage SharePoint as the single management and presentation layer for all enterprise content, then surfacing and managing content residing in file shares—without having to migrate it to SQL—is a critical capability.

Inactive Content

Now let's discuss all the inactive or dormant content. What we classify as "dormant" content is anything the company and its end-users are no longer actively using, but must remain accessible for compliance, retention and legal purposes. The challenge here is that dormant content grows quite quickly within SharePoint (imagine how many team sites have been built for projects long ago completed, how many documents are no longer in active use, how active are the first 50 versions of a PowerPoint presentation that now has 100 versions, etc.).

An appropriate strategy would be to leverage the APIs we discussed earlier to offload this dormant content to tiered storage resources, while remaining seamless to the end-user, so that he or she may search for it and collaborate upon it, if need be. An intelligent strategy would automate this process according to pre-established business rules, whereby content that had not been modified or viewed after a certain period of time would be

DocAve for Optimized SharePoint Storage

AvePoint—a SharePoint infrastructure management software provider—has responded to these challenges by developing the DocAve Storage Optimization Suite, comprised of three fully integrated tools to address every aspect of SharePoint storage management.

DocAve Extender for SharePoint is a free tool which automatically offloads BLOBs to disk-based storage the moment it is uploaded to SharePoint, with features including:

- ◆ Secure offloading of BLOB content to non-SQL, disk-based storage—based on customizable file-size triggers—preventing this data from ever entering SQL, thereby reducing database sizes by as much as 95% and optimizing database performance;
- ◆ Seamlessly transfer SharePoint BLOBs to any network addressable storage device, FTP system or cloud storage system;
- ◆ Fully transparent to end-users, who can still leverage all of SharePoint's management and collaboration tools, including versioning, workflows and alerts, on the "extended" content;
- ◆ Full integration with SharePoint search, including FAST; and
- ◆ Total interactivity with client Office applications and other third-party tools.

DocAve Connector for SharePoint enables the migration-free SharePoint presentation, management and streaming of file-share content:

- ◆ Present and manage all content residing in any network file share, FTP site or cloud storage directly through SharePoint;
- ◆ "Connected" content is fully transparent to the end-user, and appears and acts in SharePoint as if it were residing in the SQL database;
- ◆ Fully integrate legacy file-share content with SharePoint search, making it fully discoverable; and
- ◆ Stream and manage audio and video files residing in shared drives via SharePoint without the need to import.

DocAve Archiver for SharePoint empowers administrators to craft an automated, intelligent content lifecycle management protocol over all SharePoint content, based on fully customizable business rules:

- ◆ Offload dormant Sites Collections, Site, Lists, Libraries, and Items to progressively lower tiered storage based on any metadata triggers (e.g. "last modified");
- ◆ "Archived" content is fully transparent to the end-user, and appears and acts in SharePoint as if it were residing in the SQL database;
- ◆ Prune old item versions from SharePoint and offload to lower storage tiers;
- ◆ Optional end-user archiving, for "archiving on demand" in addition to business-rule archiving; and
- ◆ Full integration with other DocAve tools, so that "extended" and "connected" content can also be analyzed by DocAve Archiver, and thereby delivered to progressively lower storage tiers when it meets requirements.

delivered to progressively lower tiers of storage. This enables the organization to further optimize its SQL resources, ensure unfettered access to archived content, take full advantage of existing storage architecture, implement intelligent content lifecycle management on all SharePoint content and save money from day one. Unfortunately, there is no native archiving or content lifecycle management capability in SharePoint Server 2010 to help with this. While the platform's latest release offers a greatly enhanced records center, the key here is that when any SharePoint content is declared a record, the content does not move to an archive. Rather, it remains in SQL, taking up valuable space, reducing performance of the platform and not enabling the utilization of existing tiered storage investments.

As companies consider SharePoint as a mission-critical information management

and collaboration platform, it is critical that proper planning takes place with regard to efficiently managing storage resources and content lifecycles. True deployment success will only be realized by companies who proactively address the challenges of SharePoint storage management.

Native capabilities within SharePoint Server 2010 help to address many of the challenges (e.g. the BCS for surfacing and managing legacy databases), but out-of-the-box SharePoint functionality does not deliver on every front, specifically when it comes to unstructured, legacy and inactive SharePoint data. ■

To learn more about SharePoint storage management, and how AvePoint can help you optimize your storage and content lifecycle management strategies, please visit www.avepoint.com.

A Catalyst For Good Information Management

By Dave Martin, Principal Product Marketing Manager, EMC

Microsoft SharePoint has attained mass adoption beyond everyone's expectations. It is hard to think of any other recent business application that has attracted more organizations and more users since its inception than SharePoint—and it isn't showing any signs of slowing down.

One big thing that SharePoint was designed to do, and does very effectively, is connect information with those who create it. A simple and understandable user experience has been a key reason for SharePoint's success. The ability for individuals within organizations to create a central spot where other individuals can retrieve, consume and affect information in a collaborative fashion has improved productivity, to say the very least. **But**, and I'm not the first person to say this by any means, what makes SharePoint great can also—if left unmanaged—bring an organization to its knees.

Dramatic? A little bit. But let me preface the rest of this article by saying that the benefits of deploying SharePoint can far outweigh any challenges it "might" create... that is, as long as you attend to the development of a solid information management strategy that includes SharePoint but spans your entire information infrastructure.

SharePoint is not the source of the problem. The bigger issue is the ever-expanding amount of corporate information. By 2020 there will be 35 zettabytes of information out there. How much is that? It is the number 35 followed by 21 zeroes. So the problem isn't why we should stuff it all into SharePoint, it is really **how** are we going to stuff it all into SharePoint and once we get it in there *how the heck are we going to manage it... efficiently and effectively.*

Bringing It All Together

I wish I could say that we have achieved the goal of a "paperless society," but I'd prefer to keep our trusting relationship intact. Many companies are still dealing with reams of paper and faced with the challenge of how to integrate that physical content into their information systems so they can leverage its value and manage it more securely. Once you've decided on a capture solution for all this physical content, where should you put it? That's a rhetorical question, of course:

you should put it somewhere where the right people have easy access to it.

Perhaps that's a file share? Sure, we've been dumping information into file shares for years. Even with the advent of enterprise content management solutions, information has still been placed onto insecure network drives. Whatever the reason, we've all struggled to find that magic axis of information enablement, where the back-end systems can do their thing managing the information and the end-users could attain simple access to it.

This brings us back to SharePoint. SharePoint really has become a catalyst for good information management because it connects the people, the content and the technology. On its own it offers an extensive breadth of capabilities, *but* (and there is always a "but") we really should be thinking of SharePoint as *part* of the information infrastructure and not the information infrastructure itself. It's one piece of the puzzle to be sure, but there are many, MANY parts involved in every organization's information infrastructure and it makes sense to figure out how to leverage them all together.

So what do you do to stop the digital deluge of information from overwhelming your information infrastructure? What do you do to avoid having SharePoint become a clog in your information infrastructure's plumbing?

The first and most important thing to do is understand what you really have. Perform an audit of all the information in your organization and divide it into a few basic piles:

- ◆ Business-critical content people are using regularly;
- ◆ Business-critical content that must be kept in line with corporate policies or industry regulations that is no longer being accessed; and
- ◆ Content that should be deleted.

Once you've figured out what you have, you'll likely know where it should live.

Regardless of where the information goes, it should all *appear* in SharePoint as that will be the ubiquitous access point. Also, it's common sense to believe that information under long-term preservation requirements should likely be stored under a more cost-effective tiered storage architecture in some sort of archive managed against compliance, but what about "active" content?

Making Content Available to Users

Active content is just that: information that users are actively working on or referencing. Immediate access is required to ensure the SharePoint user experience goes unaffected, but that doesn't necessarily mean the content itself has to live within the SQL Servers that support SharePoint. The common term is "externalization," and with regards to SharePoint it ultimately means moving or redirecting content normally bound for SQL Server to a lower and more cost-effective tier of storage.

With externalization in place, the content "BLOB" (binary large object) is redirected to the repository of your choosing and the metadata continues on its path to SQL Server. What this does is ensure the transparency we are all so eager to maintain. With the metadata in SQL Server, SharePoint believes the content itself is living natively within its four server walls. For example, if a file has been externalized, it can still be immediately accessed directly through SharePoint.

For many organizations, simply moving the files and content into cheaper storage is only the tip of the iceberg. They also have broader business needs that must include information created in SharePoint. This is where SharePoint often plays a role in the greater and existing information infrastructure. SharePoint content can also be natively stored within an existing and established ECM environment. Many ECM systems have been highly tuned to support business process services and transactional content management capabilities, and additional retention and formal and federated records management. By connecting SharePoint to an ECM system, companies can better utilize the information they have and involve it in important business processes to bring further value.

Finally, as the amount of information continues to grow, a large portion of it naturally becomes inactive over time. Content and site retirement can help reduce the load on the SharePoint environment. Moving this information to a compliant archive ensures continued accessibility to users while securing the content under long-term retention. This is another important consideration when incorporating SharePoint into your information management strategy.

Hopefully this gives you some good insights into how to best utilize SharePoint within your organization and how to tie it together with the systems that make your business run so that you can be even more effective. SharePoint can be a powerful tool when the information delivered in it is properly managed, controlled and archived. Avoid headaches later by thinking through all these aspects as you incorporate SharePoint into your stable of business applications. ■

For more information, visit EMC.com/sharepoint or email sharepoint@emc.com.

Collaboration Needs Records Management

Without RM, Chit-Chat is Highly Risky

By Noel Rath, Worldwide Product Marketing Manager, HP Software & Solutions

Collaboration is a process where people and organizations work together toward common goals. This may involve the sharing of ideas, planning an activity, delivering a project or reviewing outcomes. Collaboration is intrinsic to what we do in business. Whether it was building the pyramids, designing a new bridge or undertaking medical research, we have always collaborated. Until recently, evidence of collaboration was documented on paper and laboriously recorded. We now collaborate in an electronic environment using multiple technological tools, information from many sources and various content types. A collaborative activity is no different from any other business process in that it needs to be recorded for operational and recordkeeping purposes.

Microsoft SharePoint is growing as a tool of choice for organizations wanting to leverage their investment and gain productivity benefits through collaboration. Teams become more productive through the sharing of discussion forums, calendar items, blogs and wikis and documents in team collaboration.

But these new items of content created in a business process are legally “discoverable” and must be managed as business records. If evidence of collaboration is not collected, a black hole of information will exist as to why certain decisions are made. A blog or wiki or discussion forum could just as easily expose an organization to legal risk as does an email if unmanaged as a business record and not retained or disposed of according to business rules.

Maintaining controls and recording activities and outcomes are not only required by legislative requirements but good governance. It is both necessary and beneficial to record what is created and collaborated on for operational and historical purposes. Without control and good record keeping, collaboration and ad hoc processes are no more than idle chit chat, albeit well intentioned. Implementing retention policies over this content will deliver benefits such as: the ability to

comply with legal requirements; reduction of the risk of adverse business consequences; and being prepared to bring all relevant information to hand when defending or prosecuting legal action.

RM and the Collaboration Process

Consider any major development, construction or research process or a response to a man-made or naturally occurring event. With collaboration and communication

“It is both necessary and beneficial to record what is created and collaborated on.”

tools enabling rapid decision-making, evidence of these activities needs to be captured and managed according to the retention rules of the business. When the discovery of uncontrolled information relies upon trawling through disparate information stores, and you need to link the context of the content item to the business activity that created it, seamless capture is critical. Records management solves this problem with content proactively captured in context with business activity.

SharePoint provides a great collaboration platform where various content types are used to communicate, share information, plan and make decisions. Organizations need to also consider all content types and not just those coming from one technology source when looking at compliance with legislation and regulations. Content emerges from all over—Office documents, various email systems, a diverse range of business applications that are core to business operations, ad hoc processes and collaboration

with blogs, wikis, discussions and other new content-originating sources.

The Need for Governance

Collaboration is a free-flowing interaction between people and groups toward an outcome. Records management is a mandatory requirement of business that puts structure around the capture and management of its business transactions according to business rules. So how do we bring this free-flowing collaborative environment together with enterprise records management mandates without impacting the productivity of the knowledge worker and burdening them with administrative tasks? How do we do this in accordance with the broader needs of the enterprise?

Enterprise governance requirements need to be part of your information management project. Start from the enterprise requirement and establish enterprise information governance solutions that have transparency for records management as a fundamental design concept. The many ways content is created and evolves through collaboration and ad hoc processes is expanding. This necessitates administrative-set processes to capture and

manage content according to recordkeeping business rules and without burdening the user. Consider solutions that provide for transparency of the capture of the record of activity during ad hoc and collaborative processes, because the last thing we need to do is overload users with additional administrative tasks such as classifying items as records.

Systems that embed the records management rigor into all information management systems are important capabilities and should be at the forefront of the design of an enterprise information governance strategy. By doing this you can deploy SharePoint with confidence that you will be prepared for legal discovery, investigation and audit. ■

Noel Rath is focused on marketing HP TRIM Records Management solutions. For more information about HP TRIM please visit www.hp.com/go/hptrim.

To learn about how HP TRIM enterprise records management provides transparent records management for SharePoint visit: www.hp.com/go/hptrimsharepoint.

A Safer Journey to Social SharePoint 2010

By Brian Kellner, VP of Products, NewsGator Technologies

My kids love *The Oregon Trail* computer game. It's a simulation of pioneers traveling west across the US. Watching them play, it struck me that there were some parallels between the challenges faced by those settlers and a company heading down the trail of enterprise social computing on SharePoint 2010. Doesn't sound like an

tried some others with names like Blather and Chitter. Joe makes a note to check for holes in the old network security fence down on the south forty.

The initial group of settlers has seen a demo of SharePoint 2010, and several are happy. They remember the old SharePoint, and they think this looks a whole lot nicer.

“When the boss says you’re going west there’s nothing to do but get moving.”

obvious match? Well pull up a stool and have a listen—it's about getting to where you are going, while keeping all the settlers happy.

Our hero Joe, a hard working guy who tends to all the collaboration critters, was called in by his boss and given the job of setting up SharePoint 2010. Turns out, the management team is convinced that it will solve all their social business problems. Joe has a slew of chores and not a lot of hands, but when the boss says you're going west there's nothing to do but get moving. Joe is a seasoned hand with a difficult journey ahead, so he breaks down his challenge into a few parts.

First, he figures he better get a good idea of where he's headed. It's awfully hard to plan a journey if you don't understand the lay of the land. He picks a star cowhand to set up a SharePoint 2010 server that they can show off like a prize bull. There's no substitute for live demonstrations and hands-on work.

Second, Joe sets out to gather the team of pioneers who'll be blazing the trail with him. They have tendered lots of requests for collaboration and knowledge sharing from across the community. Joe soon realizes these folks had scouted some social territory of their own. They know things about Facebook and Twitter, and they've

They like the tagging and rating and the wiki, but it isn't that grand social homestead by the river they pictured. They tell Joe it doesn't have communities like they need, and it doesn't work like Blammer or Stutter. They want to comment on things in the activity stream, use hashtags and target microblogs to individuals and groups. They also want to engage through their email and mobile clients, since so many of those buckaroos are on the trail all the time.

The NewsGator Solution

Suddenly Joe finds himself in a box canyon. His boss had told him to head one way, but the settlers are angling for something different. Now, because this is a story about Joe and his journey, we'll go a bit through this part and just say that Joe finds himself a pretty nifty way out of this particular pickle. By grabbing a solution called Social Sites from a company called NewsGator, he makes SharePoint 2010 so social it had all the settlers humming. What really lit Joe's fire is that they don't need to buy new equipment or hire any new hands. The social business software installs directly on SharePoint 2010 Servers and runs as a managed service application.

Joe is in IT architect heaven, but still has to deal with full deployment. He knows where he's going, but has some tough decisions ahead. You see, Joe's been using MOSS 2007 for a long time. His team built some mighty fine applications on it, and he's trying to decide just what to do with it all.

His next hurdle is migration. Just as in the days of traveling the Oregon Trail, a good guide can make all the difference. He knows he isn't the first to travel this path, so he finds himself a couple of experienced guides to show him the ropes. Some have staked out nice terrain on MOSS 2007, but haven't claimed My Sites. Joe is astonished to see folks had settled on a plan of a separate SharePoint 2010 farm with My Sites, while taking their time bringing along their MOSS 2007 upgrade. This is a whole lot like a settler leaving his wife and kids back at the settlement and sending word for them later.

Joe is especially pleased that he's able to set up NewsGator on his new SharePoint 2010 farm without having to worry about the old farm. He hollers with joy when he finds he can bring notifications from the 2007 farm into the new activity stream on 2010. It turns out that this clever managed service application has a bunch of nifty APIs to gather events from a whole lot of other places. And NewsGator has a slick little module to send over messages for changes in lists like documents, wikis, blogs and discussions from the old MOSS 2007 farm.

So at the end of his journey Joe got SharePoint 2010 up and running, and the settlers are happy. When his boss asked him what he learned from his journey, he summed it up: “I reckon it's like darn near every journey. You gotta know where you're going; you gotta get all folks on the wagon; you gotta get the right tools and good guides; and you gotta break the journey up into steps and do the first steps first.”

So, there, my friends, is a tale of making SharePoint 2010 social. It sure conjures up images of a Conestoga wagon rolling over the plains to me. And now that you know the secret of Joe's success, it's time to stake your own social SharePoint 2010 claim. ■

Visit www.newsgator.com or contact insidesales@newsgator.com.

Five Steps to Embed Compliance in SharePoint

By David Gwyn, Vice President R&D and Collaboration, HighPoint Solutions

In highly regulated industries, organizations often turn to enterprise content management systems like Documentum that are built to cope with stringent controls, audits and regulations, despite costs and maintenance requirements which exceed those of SharePoint. Most firms assume compliance cannot be embedded into SharePoint since the platform allows for constant changes and evolutions from end users without involving IT. However, new tools and processes being leveraged in the life sciences industry point to ways companies can constrain SharePoint to achieve compliance.

1. Establish a comprehensive information architecture. Information architecture is a conceptual model that illustrates how information is labeled, organized and made available. It is as critical to the deployment and use of SharePoint as it is to traditional content management solutions. Since SharePoint is designed to be a viral platform that is not completely within the IT group's control, standards must be established and enforced to achieve business goals. This important requirement is often overlooked.

Traditional system designs focused on document taxonomy and metadata, which define how documents will be classified and tagged. A more complete SharePoint model includes:

- ◆ Site hierarchy;
- ◆ Navigation;
- ◆ Look and feel;
- ◆ Content lifecycle management;
- ◆ Personalized content; and
- ◆ Content types and metadata.

2. Embed repeatable, secure processes with stringent workflows. Business processes that ensure compliance can be built into SharePoint through several mechanisms. One example is Nintex Workflow, which provides a drag-and-drop graphical tool for creating workflow steps. Not only does the graphical model encourage broader use, but select components or entire workflows can be reused, allowing firms to establish consistent methods for managing the content lifecycle and controlling approval processes.

Furthermore, Nintex Workflow offers the capability to extend the platform to external partners by automating the addition of users to the Active Directory and establishing

appropriate security models. It can also be leveraged to support approval workflows for site creation, which addresses one of the more difficult areas to manage within SharePoint.

3. Enable digital signatures. Many industries have been leveraging the value of electronic signatures for years, e.g. for signing an email or entering an ID and password to authenticate an approval, but a digital signature is the only legally binding method in the electronic world. It not only provides the ability to sign the document, but also securely seals it against changes.

ARX CoSign adds digital signature capabilities that can be embedded within a SharePoint/Nintex workflow. The combination of SharePoint, Nintex and ARX expands collaborative possibilities well beyond traditional content management solutions. External parties can be sent documents to digitally sign through workflows that automatically provision the credentials without the need for IT support.

4. Institute auditing capabilities to deliver the evidence required by government agencies. Answering the question of "Who's been doing what to my SharePoint content?" is managed through the configuration of audit settings. These settings allow SharePoint to track user activity in a secure repository that includes not only behaviors such as check-in and check-out, but also activities such as viewing or downloading content.

Additionally, the use of tools such as Axceler's ControlPoint software provides the ability to audit your SharePoint site to analyze user permissions at any point in the SharePoint farm, even down to the document level.

5. Develop a proper governance structure. Since SharePoint is typically not locked down and the structure can be changed by many users, a governance structure is necessary to ensure that the compliant processes you implement with workflows and digital signatures remain that way. In more traditional content management systems, the deployment and use of the system was controlled by the system architecture. Content was organized in folders and the cabinet/folder hierarchy was typically



David Gwyn

David Gwyn is vice president of R&D and collaboration for HighPoint Solutions. With more than 20 years of experience in the life sciences industry, Gwyn is a seasoned executive with extensive skill in delivering Documentum and SharePoint. He is a member of the Project Management Institute, International Institute of Business Analysis and the Drug Information Association.

controlled by IT, thus providing a virtual vaccine against the viral spread of an uncontrolled taxonomy.

Since SharePoint is designed to reduce the need for IT involvement and put more control in the hands of end-users, procedural controls must be established to ensure that the proliferation of sites, libraries and folders does not reach pandemic proportions. This is managed through an effective, multi-tiered governance structure that provides guidelines and scope at each level to provide boundaries on end-user creativity. These levels often are segmented at the farm, site-collection and site tiers, with each level building details on the decisions made in the tier above.

Prove it Through Validation

By defining a robust information architecture that defines what and how content is stored and the ways in which it can be found, users are more likely to follow procedures and use the system as intended. By leveraging powerful workflow tools and digital signatures that actually improve the business process, activities are controlled and streamlined in a manner that offers value to the business community, rather than constraining it. By configuring SharePoint to capture these activities in the audit log and establish appropriate layers of governance to review and monitor usage, the necessary controls and safeguards are put in place.

A question that Microsoft is constantly addressing is: "Can SharePoint be validated?" While the answer to this question is clearly "yes," many still question how it is achieved. By utilizing a risk-based approach and following the steps above, one can clearly show that major risks have been mitigated and addressed. ■

HighPoint Solutions is a premier provider of specialized IT and consulting services for the life sciences and healthcare industries. Additional information is available at www.highpoint-solutions.com.

For more information on the companies who contributed to this white paper, visit their websites or contact them directly:



Software Solutions

ASG Software Solutions

Worldwide Headquarters
1333 Third Avenue South
Naples FL 34102

PH: 239.435.2200 or 800.932.5536

Web: www.asg.com



HP Software

19111 Pruneridge Avenue
Bldg 44M, MS 4086
Cupertino CA 95014

PH: 877.686.9637

Contact: hptrim@hp.com

Web: www.hp.com/go/hptrim



Unleashing the Power of SharePoint™

AvePoint, Inc.

3 Second Street, Suite 803
Jersey City NJ 07311

PH: 201.793.1111

Fax: 201.217.8709

Contact: sales@avepoint.com

Web: www.avepoint.com



Metalogix Development

2232 South Main Street
Ann Arbor MI 48103

PH: 734.212.1012

Contact: info@storagepoint.com

Web: www.storagepoint.com



where information lives®

EMC Corporation

176 South Street
Hopkinton MA 01748

PH: 800.222.3622 or 508.435.1000

FAX: 508.497.6904

Contact: softwaresales@emc.com

Web: www.emc.com



NewsGator Technologies

950 17th Street, Suite 2500
Denver CO 80202

PH: 800.608.4597

FAX: 303.552.3901

Contact: insidesales@newsgator.com

Web: www.newsgator.com



Highpoint Solutions

Parkview Tower, Suite 450
1150 First Avenue
King of Prussia PA 19406

PH: 800.238.1230

FAX: 610.233.2999

Contact: salesrequest@highpoint-solutions.com

Web: www.highpoint-solutions.com



Vivísimo, Inc.

1710 Murray Avenue, Suite 300
Pittsburgh PA 15217

PH: 866.296.8484 or 412.422.2499

FAX: 412.422.2495

Contact: vivisimo.com/html/contact-about

Web: www.vivisimo.com

Produced by:

KMWorld Magazine
Specialty Publishing Group

Kathryn Rogals
561-483-5190
kathy_rogals@kmworld.com

Paul Rosenlund
561-483-5190
paul_rosenlund@kmworld.com

Andy Moore
207-236-8524 Ext. 309
andy_moore@kmworld.com

For information on participating in the next white paper in the "Best Practices" series, contact:
paul_rosenlund@kmworld.com or kathy_rogals@kmworld.com • 561-483-5190