Fishbowl Solutions
SharePoint Connector for
Oracle WebCenter Content: Pair Collaboration with Content Management

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1 Introduction – Executive Overview

Microsoft SharePoint is a widely popular collaboration system that has become prevalent throughout many organizations. Its popularity and position as one of the fastest growing software products is supported by the findings of numerous analysts including Forrester Research, who recently conducted an enterprise survey and found that 63% of responding organizations were using SharePoint in one form or another. SharePoint's growth can be attributed to many factors, including and in no particular order, its bundling with Microsoft Enterprise License Agreements, its effective seed marketing strategy upon first launch when it was basically marketed as “free”, and the overall ownership of Windows on the desktop and SharePoint being viewed as an Office component. Regardless of how SharePoint got its start and where its position today, it would be difficult to find a more polarizing topic in the Enterprise Content Management (ECM) industry.

The debate and discussion around SharePoint centers on its core ECM capabilities and the overall breadth and depth of those capabilities. Similar to any enterprise software system, SharePoint’s feature set has evolved over the last 10 years, but prior to SharePoint 2007 it was not heavily marketed as an ECM system. However, with the release of SharePoint 2007 and even more with SharePoint 2010, the ECM capabilities now included have caused many to view the product as an ECM system. This has caused both excitement and confusion amongst the ECM customer community, and a “fight or flight” response from legacy ECM vendors. Microsoft’s marketing machine has done a great job with product messaging and positioning, so much so that customers with legacy ECM systems are wondering if they should explore the use of SharePoint within their organizations and either complement existing systems or move to SharePoint exclusively. ECM Vendors who have positioned themselves on the “fight” front have called out SharePoint’s feature gaps, functionality limitations, and overall newness with ECM technology, hoping to hold on to existing customer accounts and prevent any further SharePoint encroachment. Vendors with a “flight” strategy have looked to partner with Microsoft and position their ECM offerings as strategic or complementary SharePoint solution that extends or enhances existing product functionality.

One may argue that SharePoint’s entry into the ECM space has been one of the best things to happen to the overall ECM industry. The topic of SharePoint has caused thousands of new ECM discussions and has helped put more focus on the importance of ECM as part of critical business processes. Thus, one may also argue that SharePoint itself has made ECM relevant again, and for that it should be applauded. However, it is also important to understand that similar to other ECM systems, SharePoint does have its limitations. This white paper will discuss those areas of enterprise content management where SharePoint 2010 is lacking, while also exploring some hidden costs of the system that many people view as being less costly and more cost effective when compared to traditional ECM system like Oracle WebCenter. This paper is meant to be a guide for those organizations considering moving off WebCenter to SharePoint, or those organizations looking to expand their SharePoint use case as it applies to ECM, so that they are at least made of aware of the functionality gaps and overall issues that may arise if and when they go down the SharePoint path. The paper will also to highlight Fishbowl’s SharePoint Connector for Oracle WebCenter Content, and how it integrates the two products so that organizations can fully realize the benefits of each.
SharePoint: Brief Historical Overview

SharePoint’s rise as one of the fastest growing software products of all time did not happen overnight. SharePoint was first conceived in or around 1998, which happened to coincide with the information boom thanks to the World Wide Web. It was during this time that information access and sharing were popular topics, and who better to chart a course then the owner of the desktop – the place where that information would ultimately be accessed and shared. In researching their next great Desktop application, Microsoft interviewed many customers and their findings were what the current ECM vendors already knew, including:

- Companies had more than 1 ECM system in place – most organizations had several
- Email was still the primary means to share information across an organization, but in general information remained siloed
- Users were at odds with IT. Users wanted alternatives when it came to sharing information with others and they were looking at web-based systems to provide the place where content could be uploaded and shared. On the other hand, IT was concerned with rolling out new systems that promised more than they delivered because back then “web based systems” were equated with clunky web sites.

Microsoft’s initial vision of the product was a system that provided easy access to information and leveraged an organization’s Microsoft Office deployment. The overall goal was to balance usability with manageability. The following is a representation of a slide that SharePoint product managers presented to Bill Gates over 10 years ago.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Customer Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great Integrated Solution</td>
<td>• Easiest place to create and find information</td>
</tr>
<tr>
<td></td>
<td>• Eliminate complex integration work</td>
</tr>
<tr>
<td>Out-of-Box Web Workspace</td>
<td>• Fast solution with desktop touch or coding</td>
</tr>
<tr>
<td>Compelling Office Integration</td>
<td>• Minimize new training</td>
</tr>
<tr>
<td></td>
<td>• Make desktop smarter and leverage knowledge</td>
</tr>
<tr>
<td>Easy &amp; Flexible Deployment</td>
<td>• Use in bottoms-up Team Sites or top-down portals</td>
</tr>
<tr>
<td></td>
<td>• Don’t require changing infrastructure to start</td>
</tr>
</tbody>
</table>

Source: Microsoft SharePoint Team Blog

2.1 2001: The SharePoint Name is Conceived

Before its first release of SharePoint, Microsoft had to come up with a name for the product. In 2000 and 2001, Microsoft was looking to extend its reach throughout desktop applications by capitalizing on the buzz around groupware, collaboration and portals. However, they also wanted to be able to further leverage such products as FrontPage for website creation, and Exchange for search and document management. In doing so, they would be able to provide a
product that utilized the Microsoft Office system that the majority of organizations already had in place, so that these companies could create top-down portals that integrated with bottom-up sites. It was through this integration of content added to web sites with portal pages where users could consume and share this information that the name SharePoint was born, and the first release included two products – SharePoint Portal Server and SharePoint Team Services.

2.2 SharePoint 2003: The Integration of Portals with Content

Even though SharePoint 2001 was adopted very quickly, customers were looking for a more integrated solution in the next release. Essentially, they wanted to quickly aggregate business information, which SharePoint Portal Server provided, with the ability for individuals and teams to quickly access that information via web sites, which was functionality provided by SharePoint Team Services. It would be the confluence of these two products that would fill out the customer wish list for SharePoint 2003, but it was also something that Microsoft had to give a considerable amount of thought before executing on their development strategy for the next version. One bet they had to make was on Web Services, and ASP.Net as the de-facto development platform. On the platform technology side, Microsoft SQL Server had matured to a point that the SharePoint team felt confident that it could scale to serve even the largest company websites. Nonetheless, their interviews with customers vetted out that companies were looking to take Office to the next level and maximize their investment by not only making individuals productive, but also the entire organization. To accomplish this, Microsoft would have to further invest in content management, portals, business intelligence, and workflow technologies – all critical components of an ECM system.

Figure 1-1: SharePoint Strategy 2003.
Source: SharePoint History, by Arpan Shah.

2.3 SharePoint 2007: Content Management Becomes the Focus

As the adoption of SharePoint increased it soon treaded on territory once reserved for the legacy ECM vendors. This was due to the fact that most of the feedback Microsoft received from customers after SharePoint 2003 focused on content management capabilities. Most of these customers had a basic understanding of the core components of ECM, including security, versioning and de-duplication, publishing, and records management. Organizations that had started using SharePoint for website creation and management soon began to inquire about additional product functionality. These organizations were starting to scale up their SharePoint use cases, resulting in vast amounts of content they were adding to SharePoint sites. What
Microsoft quickly understood that a next level of sophistication and functionality was needed to meet the requirements of content-intensive organizations. Prior to SharePoint 2007, Microsoft released their Content Management Server Connector for SharePoint Technologies, which basically provided some code and guidance for web content management and portal scenarios. However, it wasn’t until the official release of Microsoft Office SharePoint Server (MOSS) 2007 in late 2006 where their vision for an integrated platform that delivered web content management, portal and collaboration capabilities was realized. To date, SharePoint 2007 has over 17,000 customers, sold 100 million licenses, and provided Microsoft with over $1.3 billion a year in total revenue.

![SharePoint 2007 Feature Areas](image)

Figure 1-2: SharePoint Strategy 2007 Feature Areas.
Source: *SharePoint History*, by Arpan Shah.

### 2.4 SharePoint 2010: Swiss Army Knife of IT

Microsoft released SharePoint 2010 in May of that same year. Prior to its release, Jeff Teper, Microsoft’s corporate vice president of SharePoint Server, hailed it the “Swiss army knife of IT.” In explaining this comment, Teper commented on how SharePoint 2010 built upon the extensive capabilities of SharePoint 2007, including web publishing, portals, content and collaboration, and extended and enhanced the functionality in each of these areas. SharePoint 2010 was further positioned as an integrated system that enabled organizations to eliminate disparate information sources and instead utilize one infrastructure that drove and integrated with business processes. Specific improvements were made to the metadata and taxonomy features, and the process to edit published web content was streamlined. New capabilities included persistent links, digital asset management, and social media. It seemed at the time that the new social media capabilities seemed to garner the most attention. Enterprise 2.0, or the use of Web 2.0 technologies in the workplace (blogs, wikis, instant messaging, etc.), was a concept coined by Andrew McAfee a few years earlier, and in 2010 seemed to be one of the the most popular business topics. Microsoft was looking to capitalize on this with SharePoint’s new social capabilities including an update to the My Site capability which was first introduced in SharePoint 2003. Probably too novel of a concept at that time, My Sites in SharePoint 2010 provided organizations the ability to collaborate across the enterprise by providing the tools to connect with others, track recent news or announcements, and consolidate content and other information to a team site to help facilitate and manage team-based projects.
Overall, SharePoint has evolved from a basic web publishing system and file system with a pretty interface to a software platform that can be leveraged to facilitate business collaboration across the enterprise. However, looking back on the feature and functionality updates to each release of the product, it appears that Microsoft has focused more on providing a system for collaboration rather than a system for enterprise content management. To start to understand the reasons why, one only has to look at SharePoint being hailed as a “Swiss army knife” and understand that these tools do in fact do many things, but they do not necessarily do many things very well. Let’s further discuss this from an ECM perspective by first defining an analyzing what enterprise content management really means.

3 What is Enterprise Content Management

To fully understand ECM, one first has to understand its history. ECM’s roots go back to the early ‘90s when organizations were practicing document imaging, converting their paper documents to electronic images for viewing as part of business process, like accounts payable, but more so for hard copy back up. As the decade progressed and the Internet started to take off, organizations quickly moved to put their “store front” online. To do this however, they had to implement a web publishing system. The early versions of these were utilitarian, and focused more on the publishing aspect of the content and less on the management of that content. Most sites were brochureware, which means they may have looked nice but they weren’t frequently updated. As the dot-com bubble burst, organizations started to focus more on the content of their websites and were more proactive with content updates. Essentially, organizations started to view their websites as the first place where they would engage customers and prospects. They not only focused on getting people to visit their sites, but also getting them to stay. To do this, they had to provide rich and relevant content and produce this content quickly and efficiently. Organizations quickly realized that with all this new content being created – brochures, press releases, graphics, white papers, etc. – they needed a system in place that could push this content out to the World Wide Web, as well as manage and maintain this content so that it could be easily repurposed and reused. This is the time when web content management and document management systems entered the market.
The next evolution of these systems occurred shortly after the accounting and financial scandals at Enron, Tyco and others. The Sarbanes Oxley Act was a key driver in getting organizations to take the management of corporate information more seriously. This and other compliance laws and regulations changed the way organizations ran their businesses, and helped usher in new methods to manage and retain content. Organizations that did not abide by these regulations or were out of compliance faced stiff penalties, so their focus was to have systems in place that could easily show audit trails and systematically manage information as it pertained to the compliance laws that their businesses were subject to. These systems were workflow and records management systems. Workflow provides checks and balances against content that is created and who has the ability to approve business processes and transactions. One of the best examples of this is only having accounts payable managers instead of clerks or associates approve invoices over a certain dollar amount. More than anything however, workflow helps provide an audit trail of where various stages of a business process are at, and who has shared, reviewed, and approved those business processes. On the other hand, records management systems enable organizations to proactively manage enterprise content that must be retained for a set number of years – depending on the compliance law that governs their organization. This is important because this content needs to be available for electronic discovery (e-discovery) during litigation, and companies can be fined heavily if such content is deleted before its retention schedule runs out.

The next age of content management focused on managing content that was part of a customer, colleague, or partner interaction. Very quickly, content management was grouped together with portals, wikis, blogs, and other social components to form Enterprise 2.0. It seemed it was at this point that organizations were focused more on making their organizations more social by providing employees the tools to connect, discuss, and share information. In doing this however, organizations opened up additional avenues for content creation and therefore more content that had to be managed. This also opened up new security risks and lead to additional focus on overall content governance.

The evolution of content management systems is illustrated in the diagram below.

![Figure 1-4: Systems of Record and Systems of Engagement.](aiim.org)

Source: [AIIM, Systems of Engagement and the Future of Enterprise IT: A Sea Change in Enterprise IT](aiim.org)
3.1 Enterprise Content Management: Defined

The Association for Information and Image Management (AIIM) defines ECM as “the strategies, methods, and tools used to capture, manage, store, preserve, and deliver content and documents related to organizational processes. ECM tools and strategies allow the management of an organization's unstructured information, wherever that information exists.” This definition illustrates that ECM is both broad and deep. The basic principle with an ECM system is that it must provide content lifecycle management – from creation through deletion – while also providing specific and deeper functionality in specific areas relative to business processes. Most ECM systems include some or all of the following components:

- Document Management
- Records Management
- Web Content Management
- Digital Asset Management
- Records Management
- Business Process Management (automated and human-based workflows)
- Transactional Content Management
- Document Capture
- Document Output Management (document renditions)
- E-Mail Archiving

SharePoint, and specifically SharePoint 2010, does include most of the list above from an ECM components perspective. However, if we go back to the statement of SharePoint being the “Swiss army knife of IT”, it is the breadth and depth of these capabilities that must be analyzed. If an organization is going to truly leverage SharePoint, they are going to want to make it a key part of this infrastructure. For Microsoft (SQL and .NET) shops, SharePoint is probably the obvious choice to achieve this. For customers with different technology stacks, such as Oracle, utilizing SharePoint and making it a key piece of their infrastructure will be difficult and costly.

3.2 ECM as Infrastructure

As ECM evolved so too did the realization that content really drives business processes, and therefore it better be made available in-context of business processes and integrated with other core systems and applications. This could be accomplished by making it a part of an organization’s IT infrastructure.
Positioning ECM as infrastructure is new for most organizations because for many years content management was typically viewed as a departmental system that did not have a deep enterprise impact. However, as the illustration above depicts, ECM represents an important layer of mission critical applications that all have content and data flowing through them and need to be surfaced to the employees, partners, and customers. Fragmented, disconnected content repositories are not able to do this, and therefore do not provide as much value to the organization. This also applies to point solutions for specific business processes that may be very efficient with one or two processes, but extending them to other areas of the business is both costly and complicated. The key point with making ECM part of an organizations infrastructure is that the ECM system that is chosen should support the technology stack and infrastructure already in place. It should offer the same development platform and be supported by the same database, which helps to cut down on the amount of customization and ongoing maintenance needed. Effectively, an organization should be able to implement their ECM system and focus on configuring it to maximize user effectiveness, and not have to create custom components to make the system work with other information systems and applications.

It is very difficult for software systems that do not support the technology and development platforms to make their way into an organization’s overall IT system. SharePoint has been the exception. Microsoft’s ownership of the desktop has positioned SharePoint as just another Microsoft business productivity tool that anyone using similar Microsoft products, Office for example, should be able to use. After all, SharePoint was meant to provide a web-based system that helped users organize and share their business content, and for this reason, business units loved it and clamored for more. On the IT side, even if SharePoint did not align with the organization’s infrastructure, they initially did not see any reason to prevent its use – one such reason why it has realized exponential growth. What IT teams quickly found out was that as more and more SharePoint was being used, even if the use case was bucketed as “collaboration”, the amount of content that was generated from that collaboration had to be managed. With users having the ability to set up SharePoint sites with little IT involvement, content in those sites could double and even triple in no time. IT started to ask the question about how to manage all this content in SharePoint, which lead to the analyzing the ECM capabilities that SharePoint had to offer.
The next two sections of this paper will focus on some of SharePoint’s ECM components and the gaps that exist in them, as well as some hidden cost of SharePoint deployments.

### 3.3 ECM Use Cases for SharePoint

There has been a lot of analysis and study done over the last five years to find out how organizations are using SharePoint for ECM. The AIIM organization has followed SharePoint use cases very closely, and in June 2011 released a study entitled “Using SharePoint for ECM. How well is it meeting expectations?” The study was put together from the findings of a survey that went out to 674 AIIM members. Here are some findings of that study:

- 36% say they have SharePoint “in use across the enterprise for content management.” Included are 11% with no other content systems; 19% running unconnected ECM/DM/RM systems
- 25% consider their stored content in SharePoint to be doubling every two years or less and 5% have over 10TB of data already.
- Collaboration and intranet are the most widely used application areas, then document management and search.
- For content, most have less than a terabyte (TB) stored in deployments — 17% have more than 20TB — and many believe that the amount of content stored is growing at a rate of between 20% and 30% per year, with a further 28% estimating that it is doubling every year.

The report also showed that organizations are managing many different file types in SharePoint, but more traditional ECM capabilities such as document capture, workflow and records management are underused. Furthermore, there were questions asked about integrating SharePoint with other software systems and applications. The following graphic illustrates the findings to those questions:

![Figure 1-6: Which Enterprise Systems have been Integrated with SharePoint.](source: AIIM)

In looking at the findings from this report, it should be apparent that SharePoint is primarily being used for collaboration. It should also be apparent that traditional ECM functionality
(capture, workflow, records management) have not been heavily adopted. Furthermore, the bar chart above shows that integrations with other enterprise systems has not been undertaken as well. One can argue the reason for this is that most organizations have not upgraded to SharePoint 2010 and that may indeed be true. However, it is interesting that with so many deployments of SharePoint why the percentage of organizations using traditional ECM functionality and integrating it with applications isn’t higher.

3.4 Cracks in the SharePoint ECM System

According to Jerad Spataro, Microsoft’s senior director of SharePoint product development, 58% of SharePoint customers use it straight out of the box for either ECM or collaboration. The remaining SharePoint customers have turned to Microsoft’s vast partner and ISV community. “Microsoft paves the road and we come along and fill in the cracks,” said Bill Evans, vice president of the SharePoint business unit for Aliso Viejo, Calif.-based Quest Software. “There are lots and lots of cracks.”

By sharing developments with its vast partner network, Microsoft enables ISVs to design specific products to take up the slack. “There are serious gaps in SharePoint as a technology,” agreed Richard Harbridge, senior SharePoint evangelist for Allin Corp.’s consulting and IT services division. “The vendor space for building applications on SharePoint is huge, and there’s a reason for that.”

Some of those reasons are highlighted here by Alan Weintraub, author of the Forrester report “Putting Together the SharePoint ECM Puzzle.” Weintraub points out in this report that gaps do exist in SharePoint’s ECM offering, and it is best for organizations to understand some of those gaps so that they can look to other vendors to fill them. The SharePoint gaps that Weintraub highlighted include:

- Records management: SharePoint does not meet the DoD 5015.2 specification, which is increasingly used as the industry standard, particularly in the US.

- Large file management: SharePoint 2010 enables enterprises to store documents and content outside the SQL Server. Remote blob storage integration with SharePoint enables enterprise CMS systems act as the external repository for SharePoint.

- Digital asset management: While SharePoint 2010 has some basic digital asset management capabilities, for advanced features such as image and video rendering and metadata extraction it requires the integration of a separate DAM tool.

- Search federation: Federated search offers search across SharePoint and enterprise CMS repositories, enabling the retrieval of documents without having to know in what repository they are stored.

In fairness to SharePoint, Weintraub also points out that the 2010 version includes major improvements in some ECM areas. However, as the AIIM and Forrester reports indicate, major gaps still exist and organizations will likely have to turn to other vendors to fill those gaps. Tallega Software, in their white paper titled “Is SharePoint a Document Management System?” pointed out further gaps in SharePoint’s ECM features:
• Reporting: SharePoint falls short in this area because of the lack of a true report management and workflow solution. The current version’s report management capabilities are woefully inadequate for most reporting needs (i.e., forms management, overlays, indexing, etc.) and no ability to distribute reports. Couple that with very rudimentary workflow features and you find yourself needing two different add-on products to perform two fairly basic features that are provided in most document management solutions out of the box. Auditing is another subject for discussion; which by the way requires another add-on product.

• Capture/Scanning: Microsoft has been clear that SharePoint does not provide scanning capabilities natively and they have no intention of providing it in the future. Consequently, there is no shortage of scanning solutions that scan directly to SharePoint. The point is, the majority of document management solutions provide this capability as part of their offering. Even if it’s not out of the box, integrations are already available and supported for the leading capture solutions.

The ECM component gaps highlighted above all come as additional costs that organizations typically do not plan for and are part of a much larger hidden cost expense of implementing and utilizing SharePoint.

4 SharePoint’s Hidden Costs

A common theme initially with SharePoint was it was less expensive than other ECM systems. This may have been true from strictly a license perspective, but organizations found that the license cost would actually be just a fraction of the total cost when services were factored in. Microsoft’s own calculations on SharePoint point to customers spending six-to-nine dollars on professional services for every dollar spend on SharePoint licensing.\(^7\)

One of the most significant costs that organizations will incur is adding licenses for SQL Server. Most SharePoint implementations will require a dedicated computer for SQL Server and larger implementation may require more than one. Organizations will typically have to purchase additional licenses for SQL Server and Windows Server licenses. That means that organizations that are not currently supporting SQL Server will have to, and with this comes the additional costs of performance tuning and database maintenance. This will require a dedicated database administrator, which given SharePoint’s viral growth may require a full-time employee to manage the vast amounts of content and data.

4.1 Storage Costs

The ability of SharePoint users to set up SharePoint sites and upload content as they desire starts to fill up storage system very quickly. Don Jones, a senior partner and principal technologist at strategic IT consulting firm Concentrated Technology LLC, discussed some of the costs associated with managing SharePoint content in his article titled “Prepare for the hidden costs of SharePoint Server 2010 implementation.”\(^8\) Highlights of some of those costs include:
• SQL Server Database Storage: Binary Large Objects, or BLOBs, not only take up a lot of space, they make SQL Server perform a lot of work that it wasn’t optimized for.

• Remote BLOB Storage (RBS): Gets the file attachments out of SQL Server and back where they belong: On an NTFS partition. Factor in some extra costs and expertise to get RBS working -- and to keep it working, since it adds some complexity to tasks like backup and recovery.

• Storage Management: Specialized backup and recovery software to enable quick, easy recovery of individual items.

• Compression and De-duplication: Requires a SharePoint companion solution that can compress and de-duplicate both primary storage as well as backups. Such solutions have their own acquisition and maintenance costs, but they’re a must-have that many organizations end up adopting sooner or later.

4.2 Security Costs

There are also the costs with proactively managing the accessibility rights of the many SharePoint users. Managing security within enterprise systems is an arduous task, and depending on the type of organization may require very granular security settings. It is this level of granularity that tends to increase the costs of managing SharePoint security. Jones points out some additional security costs here:

• Report Generation: View into every resource a particular user has access to or whether change logs showing all modifications to security permissions over a given period of time. For this, SharePoint’s built-in security management tools aren’t up to the task. This would apply to any organization that is subject to industry or legislative rules (e.g., HIPPA, SOX, GLB, PCI DSS, etc.).

• These tools will have to be purchased from a Microsoft SharePoint ISV, which means additional license and maintenance costs. Some of these may also require SQL Server licenses, Windows Server licenses and accompanying maintenance charges. Also factor in some expertise to set up, maintain and use, meaning more training costs.

To be clear, the costs discussed above are not hidden in the sense that Microsoft deliberately is “hiding” them from customers. Instead, these are costs that organizations may not have thought about when purchasing SharePoint. It should also be understood that most enterprise software systems are going to have some element of “hidden” costs. Nonetheless, it should be noted that SharePoint customers are typically surprised at the amount of additional costs necessary to get their SharePoint system up and running. This points to a lack of understanding of SharePoint’s capabilities as well as a plan for what customers will use SharePoint for, and what business problems they are trying to solve. Many SharePoint implementations instead focus on rolling it out and seeing what sticks, which leads to the issue of trying to manage end-user behavior and expectations. This is something that most organizations using SharePoint haven’t done a good job with and has resulted in a major governance dilemma.
5 SharePoint Governance

SharePoint sprawl happens frequently within organization. SharePoint requires hardware or a server to run on, and these servers are managed by IT. Additionally, IT typically owns and creates the SharePoint site collections, which are requested by business users. However, at the next level down, or the site level, users can create the individual sites within the collections. This process is easy, intuitive and quick.

As discussed previously in this paper, SharePoint is comprised of many components to enable users to create websites, store and share content, and collaborate using social media tools. However, the most widely used type of site is a Team site. It is here where a few individuals, a small group, or even a large team can collaborate on a project. Team sites have many benefits, including providing one location where team members can share news and information instead of disparate locations or through email. Team sites are also the main reason why SharePoint use can spiral out of control and virally sprawl within an organization. This is because the members of Team sites have the ability to create as many sub-sites as they like, and with each of these sub-sites there will be additional document libraries, workspaces, and content. This immediately results in the use of additional disk space, which many not seem like a big deal given how cheap disk space has become. However, as Brian Posey points out in his article “Get control of SharePoint sprawl”⁹, filling up disk space has several side effects that can impact a business, including the following:

- **Ever Increasing SharePoint Database Size**: Users will expect the backup of SharePoint data on a regular basis. Because of that, organizations may have to invest in a higher capacity tape drive, or they may need to devise a backup strategy that allows the back up an ever-expanding data set within an allotted backup window.

- **SharePoint Upgrades**: When SharePoint data expands uncontrollably, future upgrades or migrations to new versions are complicated because each SharePoint site requires planning and testing. The worst part is that organizations may end up wasting time planning for the migration of SharePoint sites that haven’t even been used for quite some time.

- **Retention Policies**: SharePoint sprawl is caused by the unplanned creation of SharePoint sites. The problem is that any one of these sites could potentially contain data that is subject to regulatory requirements. Furthermore, if users are creating sites in a chaotic manner, it is safe to assume that there has been no regard for retention policies, metadata or taxonomies.

Once SharePoint sprawl is underway it is very difficult for organizations to keep it under control. Sprawl happens so frequently because organizations fail to put a governance plan in place. It isn’t that Microsoft doesn’t understand or recommend a governance strategy; in fact they have their own definition from TechNet:

“Governance is the set of policies, roles, responsibilities, and processes that guide, direct, and control how an organization’s business divisions and IT teams cooperate to achieve business goals.”
Rather, organizations have been so quick to jump on the SharePoint bandwagon and implement the system as quickly as possible that a governance strategy typically looks like this:

![Typical SharePoint Governance Strategy](https://via.placeholder.com/150)

**Figure 1-7: Typical SharePoint Governance Strategy.**

Source: [SharePoint Reviews](https://example.com)

SharePoint governance has been typically a reactive response to SharePoint sprawl. The reason for this, which has already been discussed in this paper, is that most organizations did not plan for the system to grow so quickly throughout their organizations. Additionally, governance is not technology and you can't throw software and hardware to enforce and manage it. Rather, governance is a strategic plan meant to outline how the product will be used and by whom, as well as a means to help members of a system implementation think about the decisions that will need to be made regarding use and management and how those decisions will be measured. This doesn’t get considered with most SharePoint implementations, and the perception may have been that SharePoint governance is not necessary. In fact, Jeff Teper said as much when he stated that “governance is not an issue in SharePoint 2010.” at the 2011 SharePoint Conference.

Organizations probably have some sense of how they plan to use SharePoint and what they are looking to accomplish in doing so. From an ECM perspective however, the important questions that need to be asked before SharePoint is implemented and used aren’t being asked. Back to Brian Posey’s article, “Get control of SharePoint sprawl”¹⁰, he lists out some of these questions:

- Will you be building a centralized or a decentralized system?
- Who will be allowed to create new SharePoint sites?
- Will all users be allowed to create sites at will, or do you want to limit site creation rights to supervisors or managers?
- How will lifecycle management work for sites?
- Who will be responsible for managing and maintaining SharePoint?
- Will the SharePoint administrator also manage the underlying SQL Server database, or will that responsibility fall to a separate database administrator?
- What types of auditing will be used?
These are truly the important questions organizations need to consider regarding how content will be stored, accessed, retained and managed. Because these questions are not typically asked, organizations seldom to realize their vision for how SharePoint will be used, and it will continue to sprawl out of control.

6 Collaborate in SharePoint: Storage and Manage in Oracle WebCenter

The previous sections of this paper were meant to provide the reader with some understanding of SharePoint’s evolution, and how that evolution has positioned the product as a collaboration system that includes some ECM capabilities. SharePoint’s growth cannot be refuted, but it is rapidness of this growth that has caused many issues for organizations including the additional costs incurred to reign in and manage its sprawl. Nonetheless, SharePoint’s popularity will probably continue to increase, which means that the content created and uploaded to SharePoint sites will continue to grow as well. Organizations will continue to be challenged with properly and proactively managing this content and its associated sites, and will be forced to determine if it is possible to do so strictly by using SharePoint and its ECM components.

Organizations that determine the ECM capabilities offered by SharePoint do not meet their needs can pair SharePoint with a true, enterprise content management system like Oracle WebCenter Content. Doing so can satisfy user requests for easy collaboration, with IT’s requirements around governance, scalability, and security. Fishbowl Solutions has made this possible with its SharePoint Connector for Oracle WebCenter Content. Fishbowl’s SharePoint Connector provides the ability for SharePoint and WebCenter to co-exist, allowing organizations using both systems to fully exploit the benefits of each without having to ultimately pick one over the other. In doing this, organizations are able to harmonize user needs for easy and intuitive collaboration with best-in-class content management paired with industry leading infrastructure.

6.1 Robust Storage Provider

The connector operates as a storage provider, and organizations can choose to utilize the connector to store content in the Oracle Database or WebCenter’s file store provider. This is a very important capability as prior to SharePoint 2010, Microsoft SQL Server database had size limit of 200 GB for collaboration and 1 TB for document archive. And even today, SQL server documentation states that it is a best practice to keep database sizes less than 100 gigabytes. Compare this with Oracle’s limitless database size as well as its full-featured indexing capabilities, and organizations would experience reduced database management as well as faster content retrieval times just by avoiding SQL Server.

6.2 Maintain SharePoint User Experience

Along with providing these robust storage capabilities on the back end, Fishbowl’s SharePoint connector maintains the SharePoint user experience. This was very important because for all of SharePoint’s limitations, the user interface is not one of them. SharePoint users enjoy their experiences, but ultimately, they do not care where the final storage location will be for their content. Fishbowl’s Connector achieves this and does not disrupt their SharePoint interaction.
Instead, the act of creating, saving, or editing content in a SharePoint site automatically stores it in Oracle WebCenter.

6.3 Flexible Connector Configuration

There are also options and rules with which content from SharePoint gets stored. The connector allows organizations to choose the content to store based on file size, extension or based on folder location or library. These configurations can be made for each SharePoint document library.

So effectively, Fishbowl’s SharePoint Connector for Oracle WebCenter helps organizations achieve an integrated, end-to-end collaboration and ECM system that exposes the capabilities of both systems but ensures that content resulting from collaboration is managed and maintained by one system of record, which can then be surfaced to other Oracle applications and systems.

7 Conclusion: SharePoint is a Collaboration System

One of the goals of this paper was to help readers understand what exactly SharePoint is, and more specifically, if its ECM capabilities truly make it an enterprise content management system. The sections of this paper were used to help provide an answer, including an historical overview of SharePoint, which was included so that the reader could start to paint the picture of how the system has focused more on collaboration capabilities and less on content management. To highlight this, one only has to look at the name SharePoint — a software system where sharing content comes first, and finding and collaborating on that content at and from a very specific place comes second.

It was also the goal to recognize and acknowledge that SharePoint does indeed include ECM features and functionality, but it is the breadth and depth of these capabilities that need to be
analyzed. Additionally, the purpose was to call out specifically the ECM gaps that exist in the product, while also pointing out some hidden costs that organizations may be surprised to encounter. Another important theme addressed in this paper was governance, and how this process of strategically planning for the where, why, and how SharePoint will be used is addressed before the product is implemented.

However, the primary goal was to help Oracle customers, and more specifically Oracle WebCenter Content customers, understand that even if SharePoint has popped up all around them, there are not enough compelling reasons to stop using Oracle WebCenter Content and begin using SharePoint. They should recognize that SharePoint is a collaboration system that does not have the same level of ECM capabilities needed to drive their content-based business processes. That being said, the two systems can co-exist, and there are numerous customers using SharePoint for collaboration and Oracle WebCenter Content for all things content management. In doing this, these organizations have realized the benefits of an end-to-end collaboration and ECM system that includes these capabilities:

- Manage all content resulting from collaboration: For any Word Doc, Excel Spreadsheet, form, image, etc., used as part of the collaboration process, that content will ultimately reside and be managed in Oracle WebCenter.

- Maintain SharePoint user experience: Ensure that SharePoint users can continue to create and contribute content while in SharePoint and use it as the primary system for collaboration.

- Configurable, yet transparent content storage: Provide organizations with flexible rules for which content that resides in SharePoint gets moved to WebCenter. This includes the ability to holistically manage all content or select content based on characteristics, such as file size. The content storage options that the connector facilitates have all been validated by Oracle.¹¹

- End-to-End content lifecycle management: Enable organizations to effectively manage content through its lifecycle, and in turn, reduce the amount of orphaned content and ungoverned SharePoint sites that could lead to security and accessibility risks.
8 Notes

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