SharePoint 2013:
Key feature improvements

What you need to know about the latest release

by Dan Barkley

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Background

SharePoint 2013 builds on the solid foundation of SharePoint 2010. This whitepaper discusses the significant Enterprise functionality that is new or has been significantly enhanced for SharePoint 2013. We have attempted to focus more on the internal, "behind the firewall" functionality that has the potential to most dramatically affect end-user adoption rather than produce a laundry list of feature upgrades As such, the whitepaper will cover social, mobile, ECM and some of the key search improvements.

It is expected that this information will be valuable to those considering an upgrade from previous versions of SharePoint to the 2013 release. In particular, we believe the information herein would be most relevant to mid- and senior-level decision makers organziations currently using (or investigating) SharePoint 2010. A subsquent whitepaper will focus on building the business justification for an upgrade but the information included in this paper should form the basis of such thinking for those engaging in similar exercises already.

Social and collaboration

There are several social and collaboration-related enhancements in SharePoint 2013 that help to significantly increase the level of engagement and value of enterprise content within an organization.

SharePoint 2013 builds on the valuable social features from SharePoint 2010, which introduced the ability for users to tag and rate content. This is valuable on many fronts. Because ratings can influence search results, it raises the visibility of the content such that other users are made aware of content others find valuable or useful (or not useful as the case may be). Content creators and publishers can also use ratings to help guide their work. They learn what users like or dislike and what they find valuable. As well, content creators can use feeds as a channel to advertise their content to get broader exposure. This is very important for things like company-wide notices or policies that require very broad exposure.

For SharePoint 2013, the ability to 'follow' content (similar to how a user would follow another user), provides the ability for a user to keep up to date with content they are very interested in. Also new for SharePoint 2013 is the consolidated news feed on a user's My Site where users are notified of any activity associated with the content or people they are following, as well as any other relevant information (e.g. mentions or "likes" on their own content, company feeds). See image below:
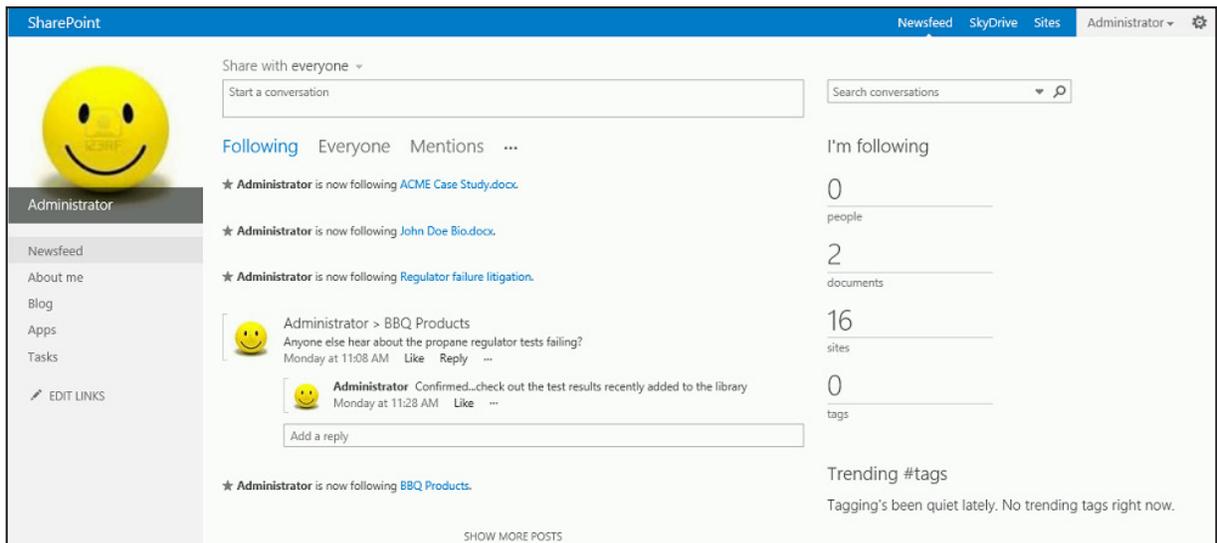
This helps to prolong the life of content as people can stay engaged with the content they find valuable and as a result will have fewer tendencies to "see it one day and forget it the next". As well, it helps maintain the engagement between users and other user, group and company activity as there is a consistent feed of relevant and targeted information.

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The social improvements in SharePoint 2013 also help to broaden the scope of enterprise content to more than just documents. Wikis and blogs are now considered to be enterprise content within any modern intranet. With SharePoint 2013, user, group and company feeds, discussions and postings also become more valuable as enterprise content, and consequently must be managed as such.

SharePoint 2013 also introduces "Community Site" and "Community Portal" site templates. These templates provide a true forum experience with categorized discussions, membership, and moderator capabilities like reviewing posts, assigning badges, classifying members, etc. These sites allow an organization to bring the "internet collaborative community" experience in-house, all within the intranet infrastructure. This avoids the need for custom or other third-party tools, and may even provide an opportunity to streamline and remove the overhead and expense of additional tools.

SkyDrive integration with SharePoint 2013 allows file synching to My Site libraries from different platforms (Windows, Mac) and devices (Android, IPhone/iPad, Windows Phone). This is important as it provides another route to get important enterprise content 'managed'; content that may not otherwise find its way into the ECM system.

Takeaways

~ Several social and collaborative enhancements in SharePoint 2013 help to increase the value of content, by broadening its reach and channels for exposure, as well as prolong the life of the content. These enhancements help an organization get the most out of the content it produces and manages.

~ Benefits from these enhancements will be realized quickly for organizations that are already operating in a collaborative way within an earlier version of SharePoint.

Mobile

Mobile functionality overall is much improved in SharePoint 2013 from SharePoint 2010. There are several new features and enhanced functionality, but the most notable is the "contemporary view". This is a mobile-targeted HTML5 based view intended for modern smartphones and tablets. With the contemporary view, there are more commands and functionality available along with better built-in navigation and pagination. In conjunction with Device channels (also new for 2013), specific mobile views can be defined from a single publishing site. For example, one view could be created for smartphones and another for tablets; each refined to maximize the usability for the end user and to make the most effective use of the available screen area. This is accomplished by using the same source content rendered through different master pages, page layouts and style sheets. If a mobile device does not support HTML5, it's possible to revert to the classic view or view the regular web page, as shown below [screenshot courtesy of Microsoft].

classic   contemporary   full screen UI
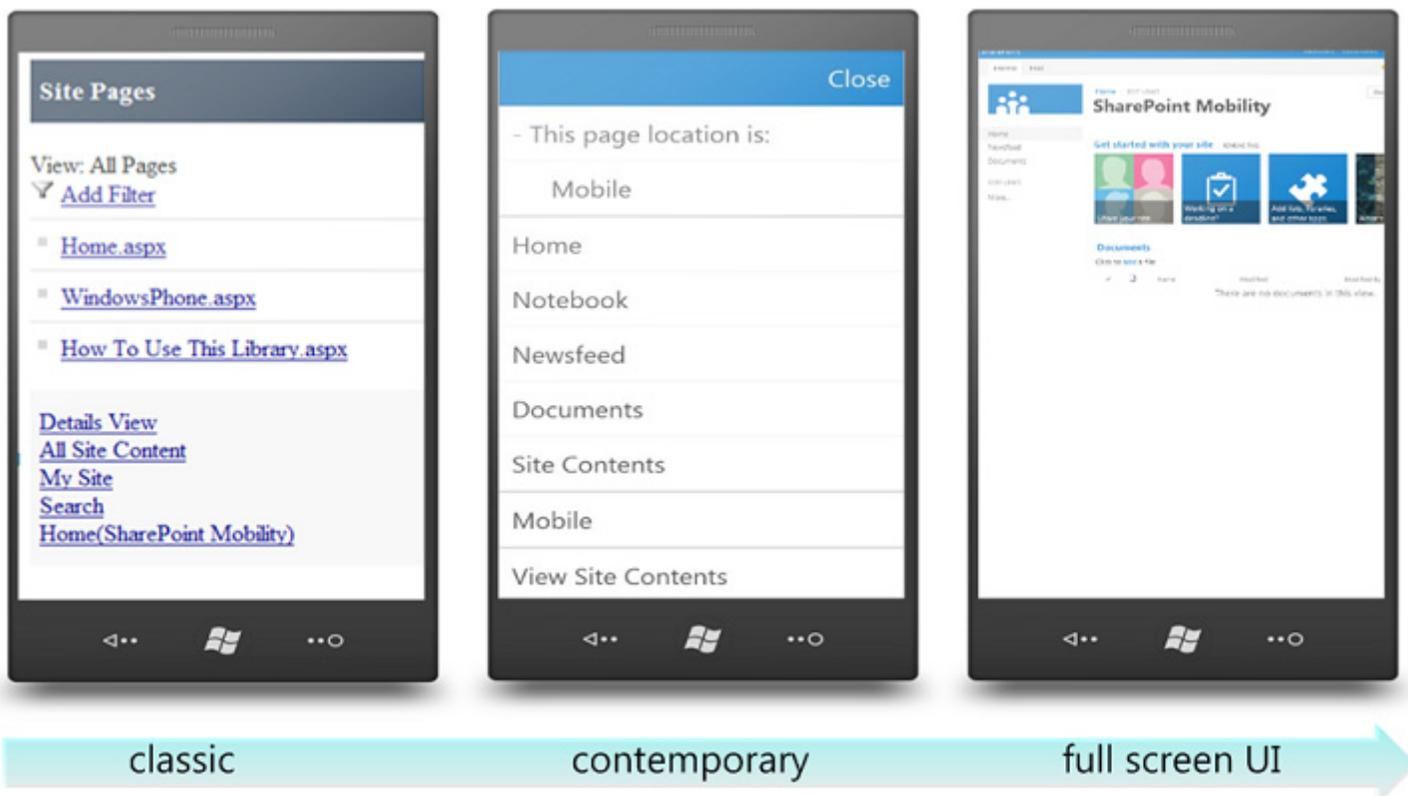
Another important enhancement is for Microsoft Office Mobile Web Apps which improve the end user experience. In the 2013 version, there are now mobile viewers for Word, Excel and PowerPoint. The new viewers optimize the end user experience when working with these document types, beyond what a basic web browser experience can provide. It's also important to note the architecture change for 2013 in that the Office Web Apps Server is now standalone, instead of installing on SharePoint like it does in the 2010 version.

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Push notifications and mobile alerts are also new for SharePoint 2013. Both target the mobile user with notifications of events from sites and/or items within sites; but each are targeted towards slightly different scenarios. Push notifications leverage the Microsoft Push Notification Service to send notifications to mobile device apps. This would be more like a mobile feed of ongoing information of interest for the user. Mobile alerts on the other hand, are more intended for critical (and typically infrequent) events as they are sent via Short Message Service (SMS) so will reach a mobile user anywhere they have cell coverage.

A geolocation field type has been introduced for SharePoint 2013 that stores location information (latitude/longitude) that can be used in SharePoint lists to bring a location dimension to the items within the list. The geolocation data can be used to display information on Bing maps (e.g. a push-pin on a map view). This is an extremely powerful enabling functionality, particularly for mobile related applications. For example, this functionality could be used in an asset management application within a utilities organization to help a technician find a particular device in the field (having the ability to see their current location and the device location on the same map on their mobile device).

Takeaways

~ There are some very important enhancements to significantly improve the mobile-enablement of enterprise content over the functionality provided in SharePoint 2010. An organization should seriously consider the upgrade to SharePoint 2013 if they currently support mobile users with earlier versions of SharePoint, or are planning to enable mobile access.

~ Other more advanced enhancements like push notifications, mobile alerts and geolocation will be valuable for organizations that already have a mobile enabled workforce and would like to take it to a new level. The enhancements provide important functionality to provide more comprehensive and valuable mobile applications.

ECM core functional areas

Enterprise Content Management (ECM) is concerned with general document management, digital asset management, archiving for long term storage, records management and governance, content-related processes and workflows across the enterprise.

Document management

General document management (DM) functionality (e.g. check in/out, versioning, etc.) has been available in SharePoint for several versions now. SharePoint 2010 introduced new functionality and enhanced many areas. Most notable of these are document sets, content organizer, document ids and content co-authoring. SharePoint 2013 took it a step further with further enhancements as well as some other significant changes.

Document sets
Introduced in SharePoint 2010, document sets were created to represent a cohesive "work product". A work product is a business specific collection of multiple related documents. Take the example of a marketing department organizing a company conference. Organizing conference sessions involves the collection of several artefacts around each session. In this scenario, a "conference session" would be the work product that would relate several documents (like the session summary, speaker bio, speaker picture, session slide deck, etc.). From a business perspective, it's important to manage these related documents as a unit.

Technically speaking, a document set is like a special folder. It has its own UI, related functionality, metadata, a customizable welcome page, and an object model for extensions. In our scenario a conference session document set would have associated metadata for the session ID, the speaker name (or a link to an item in another SharePoint list that would contain all speakers and their related information), the track, and perhaps an associated status or other related information. The welcome page could contain some summary (metadata) info about the session and list the current related artefacts, as shown in the screen-shot below.

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For SharePoint 2013, there are several improvements around document sets. They now support OneNote notebooks natively. Folder and versioning support along with the ability to add default documents (of different content types) enhances the overall experience with document sets in SharePoint 2013. There are notable improvements around search and document sets. The content by search (CBS) and content by query (CBQ) web parts now fully support document sets. Document set icons can be set and are shown in search results. And it's now possible to search within a document set; particularly important for situations that involve large document sets. And last but not least, there are improvements to the client and server APIs to help with development around document sets.

Takeaways

~ Document sets have not fundamentally changed from SharePoint 2010 to 2013, but several enhancements significantly improve the overall experience and level of functionality. Customers currently using Document Sets should review the changes to determine if they would realize benefits from the enhancements.

Shredded storage

Shredded storage is a big technical improvement for SharePoint 2013 that has big potential IT benefits in terms of storage and performance. We say *potential* because the amount of benefit really depends on the situation. As a first step, let's explain the technical improvement. Shredded storage means that a document is now stored as "shreds" (i.e. chunks) in the database. The benefit comes when updates to that document happen (e.g. a new version or metadata change). Only the change will be stored; not another entire copy of the document. This is similar to the benefit that other de-duplication technologies strive for in that they try to prevent large chunks of exactly the same data and content from being stored over and over again.

This "shredding" also applies to interaction with the client Office application where only changes are sent from the client to the server. [Side note: This functionality existed in SharePoint 2010 where only changes in Office XML documents were sent back to the server, but they were aggregated together on the server and a completely new version of the document would be stored.]

So if there are several small revisions of a document, the potential savings in storage is significant. And this mechanism was designed to work very well with XML based Office documents (it's primary focus) as XML documents naturally break up very well into bite-sized chunks. That said, if there is only one version of a document, or if the documents are not Office XML documents, there is questionable benefit, if any at all. So in a scenario where Office XML documents are the majority of content, and there are typically several versions, the potential benefits are significant in both storage and client performance.

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Takeaways

~ Shredded Storage has potential benefits for customers using Office XML formats (e.g. .docx, .pptx), versioning and also expect to encounter several versions of content.

Enterprise metadata management

SharePoint 2010 provided significant functionality around metadata management. The core metadata capabilities have not fundamentally changed for SharePoint 2013. But the big news is the fact that metadata management has evolved into being an enabler for several other features and functionality. Metadata and taxonomy are leveraged in several different areas within SharePoint 2013.

Perhaps the most notable is managed navigation. It's usually advertised as a web content management (WCM) improvement, but it applies to, and is potentially valuable to common ECM and Intranet scenarios. A term set can now be used to drive the navigation of a website. For example, a product hierarchy (e.g. Business Unit ->Product Category -> Product) could be defined to drive an intranet site structure and navigation for a Product Management organization within a company. When using a publishing site collection, a term set can be used to drive navigation in a non-hierarchical way. For example, within government, each major department could have their own intranet site based on a common structure (Home, Who we are, Careers, etc.). Category pages work in conjunction with managed navigation in that category pages can be defined for specific terms within a term set used for managed navigation. For example, each product in our earlier example could have a category page.

Related to this are refiners and faceted navigation. Again, these are often tagged as WCM features, but can apply very well to ECM and intranet scenarios. In our Product Management scenario, the product term set could be used to filter and/or navigate search results. For example, browse all of the product roadmaps, and then filter the results by selected product category. The screenshots below show a simple browse and filter navigation example.

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All of the product roadmaps

Filtered list by selected product category (BBQs)

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Term Store defintion to support this navigation

Takeaways

∼ The increased leveraging of Managed Metadata in SharePoint 2013 is valuable for large organizations that will typically have several term sets that could be leveraged for navigation and improved search experience

∼ Organizations that already use managed metadata within an earlier version of SharePoint will realize benefits quickly from the enhancements in SharePoint 2013

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Records management and eDiscovery

Records management

Records Management has not fundamentally changed from SharePoint 2010 to 2013, but it has expanded in scope. The biggest benefit is that compliance features now apply to sites. It is now possible to assign site policies to control the complete lifecycle of a site. This includes:

~ The retention policy for the whole site and the associated Exchange 2013 team mailbox (it there is one)
~ Project (site) closure
~ Project (site) expiry

This is most useful in a project or case management scenario. When a project or case site is created, the owner assigns an appropriate policy template, which in turn applies the correct retention policies to all the content that is added to the site. When the project or case is complete, it is closed. After a time (as specified by the associated policy) the site will expire and it (along with the artefacts associated with it) are deleted.

Takeaways

~ Site-level retention policies are a major benefit to any organization, particularly those currently using SharePoint 2010 sites as projects or cases within their business. This enables an increased level of governance and helps significantly with overall maintenance of the SharePoint deployment. Actively managing site, project or case closure and expiry will help keep the content and information within the system more relevant and up to date, and will also help in related areas like search relevancy, performance and navigation.

eDiscovery

eDiscovery has experienced major enhancements in SharePoint 2013, including:

~ A dedicated eDicsovery site collection for managing queries and discovered items across SharePoint farms and Exchange servers
~ The ability to search and export discovered content from Exchange Server 2013, SharePoint Server 2013 and file shares. In addition when dealing with Exchange mailboxes and SharePoint sites, more flexible options exist as content can be preserved "in-place"

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With SharePoint 2013 there is a new eDiscovery Center site template. This is effectively a command center for accessing and managing discovery cases. In practice there would typically be a site for each eDiscovery case that also includes a document library for storing associated content. Within a site, it's possible to conduct eDiscovery searches as well as hold and export content. An eDiscovery case is composed of:

~ Sources – including Exchange mailboxes, SharePoint sites or file shares. NOTE: It's important to remember that Exchange is also the compliance store for Microsoft Lync content.
~ eDiscovery sets – used to identify and preserve the necessary content
~ Queries – used to identify content to export
~ Exports – which is a list of all the case-related exports

The lifecycle of an eDiscovery case is typically as follows. When a need arises (e.g. litigation case or audit scenario) a site is created (based on the eDiscovery Center site template). Sources are identified and eDiscovery sets are created to identify and preserve the necessary content. It is typically an iterative process as queries can be revised to further refine what content is preserved. Upon closure of the case, all associated holds are released. An example eDiscovery case is shown below:

Within a case, content can be searched for and exported from multiple SharePoint farms, Exchange Servers and file shares. Specifically for SharePoint, content can include documents, lists (exported as .CSV), and pages (including wikis and blogs exported as MIME HTML). For Exchange Server 2013 mailbox, content includes email messages, attachments, tasks, calendar entries and contacts, all exported as a .PST file. In addition, an Electronic Discovery Reference Model (EDRM) compliant XML manifest is produced to summarize the exported content. This industry standard XML manifest is very important for data exchange between parties and/or other systems related to eDiscovery.

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A very important enhancement is the ability to preserve content in-place for SharePoint Server 2013 and Exchange Server 2013. Any content that can be placed on hold (e.g. SharePoint sites, documents, lists, pages, and Exchange mailboxes), can be preserved in-place. The in-place preservation can happen at a very granular level as specific items within sites and mailboxes can be preserved. But if an entire site or mailbox is preserved, then everything in it is also preserved. This is a huge benefit as it prevents the need to copy potentially enormous amounts of content into an eDiscovery case. Even when content is preserved in-place, users will still be able to work with the content (i.e. access, edit, add/delete versions, etc.), but the preserved content will still be maintained.

Considering all of the existing and new functionality, SharePoint 2013 has taken a very large step forward in terms of enterprise-level eDiscovery.

Takeaways

~ SharePoint 2013 has really come of age in terms of records management. If an organization wants to improve its governance around SharePoint sites and content, it should seriously consider the upgrade to SharePoint 2013 to achieve this.

~ For eDiscovery the improvements are even more valuable. SharePoint 2013 can provide technology-assisted eDiscovery over SharePoint and Exchange content (and by extension Lync content), which is a critical component in an overall, defensible eDiscovery strategy within an organization.

~ Even if an organization has eDiscovery tools for SharePoint and Exchange (and by extension Lync), they should closely evaluate the new SharePoint 2013 capabilities against their existing tools. It may be an opportunity to simplify and reduce costs by using the functionality built into SharePoint 2013.

Search

In SharePoint 2013, Search has undergone many, many improvements overall. We will not attempt to cover everything here, but there are a number of enhancements that have a very positive benefit for ECM overall.

In terms of the initial query experience, query suggestions have been improved. The user's personal activity now factors into suggestions *while* the user is entering query search terms. Suggestions will be made based on items the user has clicked on before in conjunction with items other users are typing for their queries.

Improvements have also been made to suggestions when getting results. The user will now also get a list of links the user has clicked through at least twice before and match search criteria. The end result is that the user search experience is more efficient and effective because the user is guided to, and presented with more relevant queries and results.

Search results refinement has also been improved. SharePoint 2013 supports the same filtering and faceted navigation refinement that SharePoint 2010 offers, but it takes it a step further by providing the ability to assign display templates to different refiners. In SharePoint 2010 this has to be accomplished with custom development.

Other significant end-user benefits come from the improvements in thumbnail previews. It's now possible for an end user to preview the *entire* document. It's important to note that SharePoint relies on Office Web Apps for thumbnail previews. This means that thumbnails are only provided for the document formats that Office Web Apps supports (or has been extended to support). In terms of administration, it's also important to note that thumbnail previews only works with claims authentication (not Windows classic authentication). Screenshot below (courtesy of Microsoft):

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SharePoint 2013 also introduces the concept of 'Query Rules' and 'Result Types'. Using these together allows an administrator to customize the user's search result experience based on what the user is searching for. Consider an intranet example for a product development company. If a user searches for a product name, the search result experience could be configured to show the associated Product Manager profile, the current product roadmap, links to educational resources for that product, as well as the general content search results for that product name. To accomplish this, an administrator would create 'Conditions' to identify when a product name is being searched for, define 'Actions' to take, and create a Result type with an associated 'Result template' to render the desired visual experience. All of this allows the administrator to create an extremely rich and valuable search experience.

"Continuous crawling" is a new feature in SharePoint 2013 that will crawl SharePoint sources every 15 minutes (by default, but it is configurable). Additional improvements in the index creation and storage means content can appear in the index within seconds. It is not necessary to have the entire crawl and index process complete before content is accessible to user searches.

There are many more administrative and configuration enhancements that will improve the overall search experience. Improvements have been made to content connectors, document parsers and search schema management. The result is that it is easier for administrators to provide more content and more valuable content to end users.

One notable architectural enhancement is the ability for SharePoint 2013 to a 'Remote SharePoint Index' as a Results Source (formerly known as Search Scope). This allows one SharePoint farm to leverage the index from another farm without needing to crawl all of that farm's content. This has potentially huge benefits for larger organizations that have multiple geographically dispersed farms. It has the potential to dramatically reduce the bandwidth requirements between farms as well as minimizing the overhead required to maintain crawling large volumes of content between farms.

Takeaways

~ There are many search improvements in SharePoint 2013 that have the potential to dramatically improve end user search in terms of efficiency (productivity) and overall experience.

~ There are even more improvements on the technical and administrative side that make it easier and more practical for an organization to provide a rich and valuable search experience to their user base.

~ It is important to note that more organized and mature organizations (in terms of ECM, metadata management, taxonomy, etc.) are in a much better position to take advantage of these search improvements.

Recommendations

Overall, SharePoint 2013 has a tremendous amount of Enterprise functionality to offer, above and beyond what SharePoint 2010 provides. An upgrade to SharePoint 2013 will be particularly valuable for an organization which is:

~ Looking to social-enable their enterprise content and improve the social interaction among users and groups

~ Looking to offer or significantly improve the mobile experience for their user base

~ Already using the core ECM functionality effectively (i.e. using metadata, versioning) in an earlier version of SharePoint and is ready to take it to a higher level to realize additional gains in functionality, governance and end-user productivity

~ Have already started using (or is seriously planning to use) records management and/or eDiscovery functionality

~ Looking to offer or significantly improve their organization's search experience for end-users

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