



Microsoft SharePoint and Knowledge Management Systems



Knowledge Management Software

What is SharePoint and where does it fit?

Microsoft's SharePoint collaboration and content management platform has generated a new IT market segment in the last decade, with hundreds of millions of end users and a large "ecosystem" of vendor partners marketing plug-in components to enhance and extend it.

Natively, SharePoint simply provides a medium for intranet sites. SharePoint acquires its real value through the ways innovative users adapt and build useful things with it - from simple content repositories for teams, to large-scale systems that track sophisticated business processes.

Because SharePoint's core capabilities are in content management and collaboration, organizations committed to SharePoint have been considering the platform for their Knowledge Management requirements as well. Knowledge Management, after all, frequently involves the capture and retrieval of explicit content, and is intended to support and enhance collaborative work.



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Is SharePoint an effective platform for Knowledge Management?

The answer depends on how an organization defines Knowledge Management.

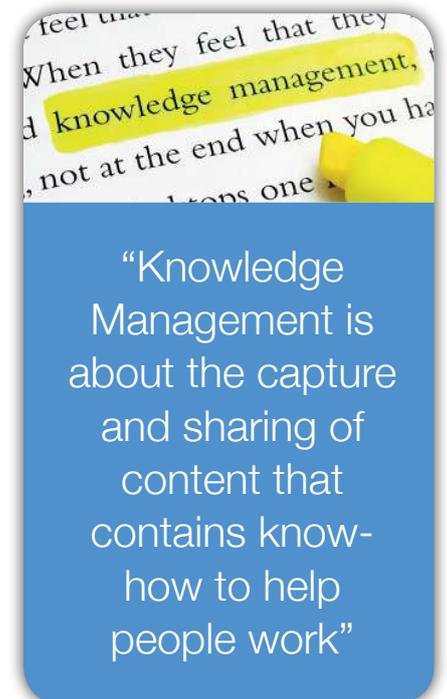
Some companies have chartered their Knowledge Management initiatives in ways that leverage SharePoint strengths. For most, however, SharePoint natively has critical shortcomings that limit its ability to support the kinds of problem resolution processes that typically justify an investment in Knowledge Management in the first place. For those organizations, SharePoint can support Knowledge Management, but not without help.

What Fuels the Growth of SharePoint?

SharePoint's ascendance is only partly attributable to what the software does.

Other important factors include:

- **Ubiquity:** Hundreds of thousands of organisations have implemented SharePoint.
- **Flexibility:** Because it is essentially a blank slate, any function or team within an organization can adapt SharePoint to its own processes.
- **Reduced burden on IT:** The CIO accepts the responsibility for maintaining an always-on SharePoint infrastructure; because SharePoint is flexible and easy to use "out of the box," end users can develop and maintain simple applications for themselves.
- **Increasingly interesting social functionality:** Microsoft has invested heavily in the blogging, wiki, tagging, rating, profiling and other social features of SharePoint. These are genuinely competitive social media tools with the advent of SharePoint 2013.
- **Cloud deployment:** Office 365 brought SharePoint into the software as a service (SaaS) arena.



Capturing and Sharing Content

Knowledge Management is about the capture and sharing of content that contains know-how to help people work. Content management is a fundamental SharePoint strength. SharePoint allows teams to:

- Store documents, images, audio or video files and other types of content in shared libraries;
- Annotate that content with “metadata” - keywords, tags, hyperlinks and descriptive data;





- Manage the life cycle of content - e.g., scheduling review, revision and retirement dates; and assigning revisions to individuals through workflow;
- Manage version control, tracking changes to documents and their metadata, and storing previous versions along with the most current version; and
- Manage access by assigning permissions to create, read, update or delete content.

Collaboration

Support for collaboration also aligns with Knowledge Management. SharePoint provides sites where team members can share projects, hold discussions in forums, collaboratively author documents, and document their performance of assigned tasks. Recurring tasks can be represented as entries in a SharePoint “list” - a flat file database in which each task is a “list item.”



“SharePoint provides Search - another essential Knowledge Management capability”

Search Using SharePoint

SharePoint provides Search - another essential Knowledge Management capability. Widely perceived as a weakness in early versions of SharePoint, the platform’s base search tool has improved with each new release, although the tool is limited to simple keyword searching.

SharePoint’s native search engine provides a simple keyword search of the titles and metadata for documents in libraries and items in lists, as well as the actual content of documents stored in libraries. Results are returned in a Google-like result page, in order of calculated relevancy to the search terms. The search engine allows the site’s owner to define specific “search scopes,” narrowing the search to a specific area of the site or a specific type of content.

While the quality of search results has improved with each new release, native SharePoint search is widely regarded as unsophisticated. More importantly, search is limited to the immediate area of the SharePoint infrastructure where the user is working.



To explain, SharePoint is hierarchical. In a given server farm, administrators set up “Site Collections,” each with its own permissions structure. Each site collection contains sites and sub-sites. Using native SharePoint search, the user can only search within his or her team’s site collection, not across site collections or importantly in non-SharePoint repositories.

Thus, basic SharePoint cannot support “enterprise searches”. To do so, the organization would have to implement Microsoft’s enterprise search platform (FAST Search) – with all of its associated license, maintenance and support costs. Or the organization can adopt a third party Knowledge Management / search tool.

SharePoint and Knowledge Base Initiatives

With help, SharePoint can support a Knowledge Management initiative. Historically, however, most successful Knowledge Management initiatives have had much more modest origins. Typically Knowledge Management has begun with a single business process with clear and measurable success criteria, such as enhancing problem management in a Contact Centre, IT / HR Service Desk etc. The costs associated with problem resolution are very well understood, and the case for a Knowledge Base to help service desk agents diagnose and solve problems faster and with fewer occasions for escalating problems to higher level subject matter experts has been documented and measured reliably since the 1990s.

Many business processes are similarly transactional in nature - individuals draw on institutional knowledge to execute recurring tasks with defined outcomes. Customer service agents, human resource specialists, engineers and even lawyers perform tasks that have this transactional character.





Transactional business processes are at the core of the Knowledge Management adoption, and it is in Transactional Knowledge Management that SharePoint is weakest.

At a service desk or call centre, the knowledge content used to facilitate problem-solving is typically stored as “Solutions” - questions/problems paired with their associated answers/resolutions. Solutions have value to the extent that they are relevant - i.e., to the degree that an agent can quickly retrieve the right solution in a given situation to solve the problem.

Software tools developed specifically for Knowledge Management are effective not only at enabling agents to find relevant solutions, but also allowing the agents or knowledge base to automatically link the solution easily to the incident or question for which it was effective. That linking statistically reinforces the relevancy of that solution when a similar incident occurs, making it easier to find in the next search.

Storing Solutions versus Tracking Relevance

SharePoint can store solutions, but in capturing and capitalizing on their relevancy, SharePoint fails.

Remember that SharePoint stores content in lists and libraries. Imagine a system in which Solutions are stored as items in a SharePoint list (a database with rows and columns). Now imagine that the transactions - the service desk “tickets” or customer questions - are stored in a second list. In order to represent the relevance of a Solution in a particular incident, the user would link the Solution to that ticket or question.



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The link is the measure of value. Those linking's can be counted - the system should be able to report how many times a Solution is used (its ID is linked to something else). That number should be an attribute of the Solution.

The problem is that SharePoint doesn't let the user be in two places at once. One can be looking at a ticket, and meanwhile open a new browser window to execute a search against the Solutions list. One could then copy a relevant Solution's ID and paste it into a field in the ticket - an awkward, manual process. Ideally, one would click once and have the Solution pass its ID number over to the ticket automatically. Knowledge Management tools make this effortless. SharePoint cannot do this, because if the user is looking at a Solution, SharePoint is not aware that there also is a ticket open.

Thus, SharePoint is fundamentally not engineered to support Transactional Knowledge Management.

Reporting Tools

Reporting is another basic SharePoint weakness. Many of the vendors in the SharePoint "ecosystem" provide tools for reporting and dashboard-presentation of data, because natively, SharePoint provides minimal reporting functionality. Reporting always has been a weakness of Microsoft's offering, and unlike search, it has not improved significantly as SharePoint has matured. For Knowledge Management purposes, this is a critical gap, because reporting is essential to the evaluation of the organization's store of knowledge, the growth of that knowledge, its quality as an enterprise resource, and the effectiveness of the team responsible for it.



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SharePoint as a Knowledge Repository

As we have seen, the more rigorous the definition of Knowledge Management, the more gaps there are in SharePoint's capacity to fulfil the mission.

An organization can obtain truly effective Knowledge Management functionality while continuing to leverage its investment in SharePoint, by adopting a purpose-built Knowledge Management tool - and maintaining a shared knowledge repository in SharePoint.

The Knowledge Management software would index the content in site collections designated as repositories for knowledge content for the supported business processes, treating those site collections just as it would any other repository in the enterprise. This topology will enable the organization to continue benefiting from what is likely to have been a substantial enterprise investment in SharePoint - the platform, its integration with the organization's backbone systems, the training and adoption effort, and SharePoint's social media functionality.

Combining Knowledge Management And SharePoint

Knowledge Management software often combines natural language search, knowledge capture, knowledge sharing, taxonomy, administration and reporting technologies. Such tools are particularly effective in the transactional Knowledge Management for which SharePoint has inherent limitations:

- **More effective search.** A Knowledge Management solution goes beyond the limitations of keyword searching, providing natural language search that allows users to express their search criteria in terms that make sense to them - in their own language. Once the organization's content is indexed, search will improve continuously over time, as the search engine enhances the indexing as the content evolves and documents become associated with actual questions. A tool with "self-learning" characteristics actually eliminates the need to Meta tag documents, generating tags automatically as the system is used.

- **Extending the range of search across all platforms and information sources.** Users can search content across and beyond the enterprise - not just within a given site collection on a specific server farm, as would be the case with SharePoint.
- **More granular search results.** Unlike Microsoft's own enterprise search engine, search using a true Knowledge Management tool can isolate a relevant passage within a large document; the Solution therefore is not the entire document, but the specific, relevant passage which aids knowledge sharing / collaboration as relevant specific content rather than large documents can be shared.
- **Providing “push” features for knowledge content.** “Hot Topics” and “Frequently Offered Solutions” are standard features of a Knowledge Management system, enabling knowledge managers to push critical, “required reading” or frequently useful knowledge to users. This type of knowledge sharing can be hand-crafted in SharePoint through “web parts,” but is inherent in the user experience with a Knowledge Management tool.
- **A full suite of Knowledge Management metrics and reports.** Knowledge Management reporting goes far beyond page views and audit logs. Reports designed specifically for Knowledge Management allow tracking of the content most widely-used to resolve queries, allowing team leadership to reward contributors of the most valued content and incentivize regular contribution. Other reports track individuals' search histories and rates of content usage, allowing reinforcement of effective search and knowledge consumption. Reporting enables the manager to analyse unresolved cases, or incidents closed without the use of knowledge content, allowing the team to discover knowledge gaps or flag content that is losing relevancy.



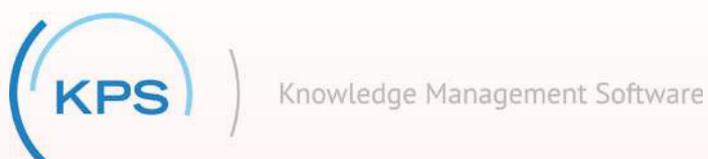
“Search using a true Knowledge Management tool can isolate a relevant passage within a large document”



Summary

SharePoint is emerging as a dominant platform for content management and collaboration, in organizations committed to Microsoft's network architecture.

A solution embracing both SharePoint and Knowledge Management platforms can provide a complete range of Knowledge Management functionality, from traditional, top-down knowledge base construction to bottom-up, social knowledge creation, including transactional forms of Knowledge Management that are impractical with a SharePoint-only solution.



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