Case Study: Large Pharma Improves R&D Efficiency by Providing ‘Quick’ Access to Needed Content

The Challenge

Employees at a large pharmaceutical were unable to locate the unstructured content they were searching for as it is stored across dozens of disparate repositories. Their existing intranet had weak navigation capabilities, while the search functionality was merely average. It could take hours to locate the appropriate content, with many complaining that it often took days. Although this impacted all employees, the efficiency of the R&D teams suffered quite a bit as they have a dire need to quickly find the right information from anywhere in the enterprise.

The Solution

The pharmaceutical implemented a Search Platform on SharePoint 2013 with the latest Microsoft operating systems and SQL Database Server technologies. Additionally, they use several components of the BA Insight software portfolio. Multiple connectors are used to integrate all of the external line of business systems into SharePoint including custom databases, fileshares, Documentum, Box, and more. It also performs searches on external leased-based content solutions and databases such as SCOPUS and PharmCircle.

BA Insight’s AutoClassifier is used to replace manual tagging by users which, even when they took the time to tag content, was error prone and inconsistent. Now information within SharePoint and all the systems connected to SharePoint is automatically and consistently tagged to improve findability.

Finally, several applications have been deployed including Visual Refiners to enable further refinement of search results; and Smart Previews, which enables users to explore inside documents and attachments. These applications provide a more modern and efficient graphical user interface.
User Interaction

Employees interact with the search solution similar to how they interact with applications such as Google, Amazon, and Kayak. They have a single simple search box on the landing page. Their search results are enhanced with filtering capability powered by harmonized metadata, a process which ensures the refiners are driven by the most pertinent information. As users refine their results to a manageable set they are able to electronically flip through each document via a previewer, which places them on the most relevant pages of each document. Since the previews are pulling information from the indexes, the performance is far superior to opening large documents one at a time and then performing a text find from within. Also, because the information is tagged via consistent rules, the search results are much more relevant and consistent.

Results

The solution has been a phenomenal success. They are giving users the ability to search on millions of documents, across hundreds of repositories, across dozens of technologies, while presenting results in under 4.5 seconds. Company team members use it not only for knowledge management in the R&D process, but it is also used to: locate documents during FDA inspections; discover documents for legal proceedings; identify documents for product divestiture; and integrate new companies/products as part of acquisitions. It has eliminated the need to spend hundreds of thousands of dollars to migrate data from legacy repositories.

One of the coolest components of the project came from the R&D Leadership team. They wanted to go over-and-above to provide new categories and metadata for all information systems. The team wanted higher-level business categories that were not part of or unknown to the existing information systems. One example is Therapeutic Area - a category that was not tagged in any information system. A master list database was put together with a cross referencing of products, projects, locations and other interpretable data. That master list could be used to derive this new category and additional new metadata. The solution uses BA Insight’s AutoClassifier to enrich and augment information items. The key is that every piece of information that is indexed into the Search System passes through the AutoClassifier, which automatically meta tags the information, saving a great deal of time. New information categories and data are created - without changing a single thing in the source information systems.