Five Must-Haves to Succeed at Enterprise Search

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Introduction

Enterprise Search should be at the epicenter of all organizations as the place where employees can get access to the information they need when they need it. The vision of having an "internet for the enterprise" should be top of mind for executives, and IT organizations need to champion investments for initiatives that reduce employee frustration and improve their productivity. With AI technology readily available from large organizations such as Microsoft, Google and Amazon, AI-driven enterprise search software enables your employees to obtain maximum value from the intelligence that sits within your organization - intelligence that's locked away in databases, document management systems, experts' minds, email inboxes, servers, internal sites and even your website. It doesn't matter whether the information is on-premise or somewhere in the cloud.

AIIM identifies enterprise search as "The practice of identifying and enabling specific content across the enterprise to be indexed, searched, and displayed to authorized users", which is a concise and complete way to describe an enterprise search system. To this we would add that enterprise search needs to provide results that are relevant and personalized to the needs of individual users. It should also provide flexibility for administrators to make changes rapidly while taking advantage of analytics to provide insight about searches being conducted.

Many visionary companies have implemented enterprise search that is highly successful as measured by high adoption and usage, personalization to the users' needs, and the ability for users to quickly find the information they are seeking (in a majority of the time it is in less than a minute and often within seconds). All of these implementations include a set of core components. Within these core components are five must-have items, which are reviewed in this paper.

User Experience: What is it?

The user experience governs how users interact with the system to find the content they are looking for. This is their first impression of the system and goes a long way in providing an experience that meets their ultimate needs. Through the user experience, users interact with the enterprise search system by entering queries or search terms and are often provided navigational options such as refinement, paging, and filtering, as well as information on how many items were found and how long their search query took.

While this component of the search system seems the simplest, it is in fact the most important. For any enterprise search system to be truly effective and to deliver on the promise of increasing operational efficiency, it must provide users with an experience that is easy to navigate and puts valuable tools at their fingertips.

Why must you have it? (#1)

Without a clean and easy to understand user experience, users will not use or adopt the enterprise search platform. Additionally, without applications that provide value and increase usability to users, adoption will also suffer. BA Insight provides a number of products designed to bring this type of value directly to end users. This includes SmartHub, which combines natural language query and a query engine for tuning relevancy and analytics to bring an internet search experience to the enterprise, and Smart Previews, which helps users quickly find what they seek, explore inside documents and attachments, and identify content to re-use. Any enterprise search system must have a user experience that brings real value to users.

Search Results: What is it?

When users execute a search, their "query" is processed and compared to the search index, and the system returns results (or "hits") referencing source content that is deemed most relevant to what users searched for.

Within this component is where the differences between enterprise search systems can be seen. The order in which results are returned is governed by the internal relevancy system of the search platform. Often times, these default relevancy systems fail to account for external influences on the potential results. Does it account for who issues the query, and how that person is different than the last person who entered a similar query? Does it factor in organizational taxonomy, synonyms, and terminology applicable only within the specific organization? Does it account for popular content, or allow the user to specify advanced criteria to quickly home in on the item being searched for? Does it personalize by the user's attributes such as location, department, or interest in certain subjects?

Why must you have it? (#2)

Control and access to the relevancy configuration that powers the search results is key. Administrative users need the ability to tweak and tailor the order of results to meet the needs of business users. In order for an enterprise search system to succeed, this level of control is a must-have.

BA Insight's SmartHub provides solutions to many of these issues and can even help organizations bring together multiple backend search systems in a single interface.

Content Awareness: What is it?

Content awareness (or "content collection") is the process of providing users access to all of the content (documents, emails, discussions, etc.) they need, regardless of the systems in which the content is stored. Enterprise search takes this aggregation of content and provides the user methods for accessing and retrieving the specific and relevant information they are looking for. Sometimes content is pushed to users based on their profiles or preferences, while other times it is delivered to them through a search and refinement process similar to how users interact with popular sites like Amazon, Expedia, etc. From a technical perspective:

- In the push model, a source system is integrated with the search engine in such a way that it connects to it and pushes new content directly to the engine. This model is used when real-time indexing is important.

- In the pull model, the software gathers content from sources using a connector such as a web crawler or a database connector. The connector typically polls the source at specified intervals to look for new, updated, or deleted content.

Why must you have it? (#3)

The reason is that without this your enterprise search will be a failure. It would be like having the internet provide results from only one site! The key point here is to provide access to ALL authoritative sources of content that have the relevant information that users need. If a user experiences getting the wrong information, or the user has to leave the enterprise search platform to access another system to find content, their productivity will be impacted, and the true value of enterprise search will never be realized. Regardless of the enterprise search platform being used, making the right data accessible in a unified user interface is key. BA Insight's collection of more than 70 off the shelf connectors delivers this must-have.

Content Processing and Analysis: What is it?

Content from different sources will have different meta tags or may have no meta tags at all. Remember, meta tags are key to finding relevant information. If meta tags are not consistent, then the search results will not meet users' expectations and will often provide too much information or information that is not relevant. Furthermore, the ability to provide refiners (or facets) to let users refine the results so they can get to the right information quickly will be negatively impacted. The content processing phase's job is to process documents into a format the search engine understands and to normalize that content in various ways to improve recall or precision. These may include stemming, lemmatization, synonym expansion, entity extraction, part of speech tagging, etc.

Why must you have it? (#4)

For an enterprise search system to be effective, it must have the ability to account for the organization specific data needs and structure. A great way to do this is through a centralized taxonomy that utilizes automated content analysis to identify and associate keywords, Meta tags, and concepts with content. BA Insight's AutoClassifier, which is an AI and rules-based tagging and text analytics solution, is built to do just that. It is integrated with AI platforms from Microsoft, Google and Amazon, providing a best in class and flexible approach to address content processing issues.

A Flexible Index: What is it?

After connecting the line of business and numerous content systems within an organization, the textual content of a document is stored in an index, often referred to as the enterprise search engine. This index is optimized for quick lookups without storing the full text of the document. The index may contain the dictionary of all unique words found across all content as well as information about ranking and term frequency. The question to ask here is whether the chosen enterprise search engine has the flexibility required to meet the changing needs of your organization. Many organizations find that over time the various search engine options innovate at different rates, and new capabilities from other engines may be necessary to meet new requirements.

Why must you have it? (#5)

The key point here is flexibility. There are multiple enterprise search engines to choose from, and organizations often find themselves tied to their choice for years to come. The cost to migrate or switch is high as new capabilities or innovations become available in alternate options. BA Insight can enable your organization to completely index all necessary data into multiple enterprise indexes like Azure Search,

Elasticsearch or Microsoft Search, delivering the utmost flexibility. In today's enterprise, the traditional enterprise search approach of a single, integrated index based on an array of enterprise systems is not enough. For example, it is not feasible to crawl and index 100m+ documents from a DMS such as NetDocuments with a 10% rate of change into a new index and keep it fresh. The same types of problems exist with applications developed in-house with Elastic, Solr, or Azure Search, where the index can be in the 100s of millions of items. Combining a single index approach with federated search is key in environments like this where you can leverage the existing index and include its results in your search experience.

Summary

Research from McKinsey and IDC suggests that employees spend approximately two hours per day looking for information in 4-11 systems to get their work done. Is this the kind of experience you want your employees to have? The right implementation of enterprise search will turn frustrated employees into productive teams who can tap the knowledge of your organization – just by asking.

Imagine a world without the internet! Enterprise search makes it possible to essentially have an internet for the enterprise - making your organizational knowledge askable.

We urge you to book a search strategy session with us to discuss the possibilities for your organization.