

# CASE STUDY

Fortune 500  
Pharmaceutical



## Customer

One of the world's largest pharmaceutical companies focused on innovative medicines and consistently ranked on the Fortune 500 list of the largest US corporations.

## Challenge

For this customer, easy access to information is key to their ability to execute on their mission. This critical data exists in many disparate systems, and they decided that a key success factor of their strategy requires them to provide the ability for all employees to access all information necessary to do their jobs. This is a requirement regardless of where the information resides, where the employees are, which devices they use to access the information, or which format(s) the information is stored in.

Their vision was a single search box, just like users have on the internet, that provides a connected experience to all employees. Given the number of acquisitions they had completed over the years, the issue became even more critical. A recent acquisition brought massive amounts of historical data into the fold, all of which had also been generated by billions of investments. For them to excel in their strategic objectives and goals, unlocking this data for modeling, analysis, interpretation, review, and any other number of potential use cases needed to be done.

## Solution

They executed upon their vision of a single search box, which enables users to search and find information from a variety of on-premises and cloud business systems. This includes O365/SharePoint Online, IT service systems, social systems, cloud storage, database content, and website content, combining query time and index time merge to provide a web-like search experience to the user. The project occurred in multiple phases, allowing them to reflect on each phase and adjust

follow-on phases accordingly based on previous learnings and the idea that success breeds success.

**The initial phase focused on the overall search experience and the combination of three search indices:**

- SharePoint Online
- Amazon Elasticsearch/OpenSearch
- A third-party closed system index

**The second phase added:**

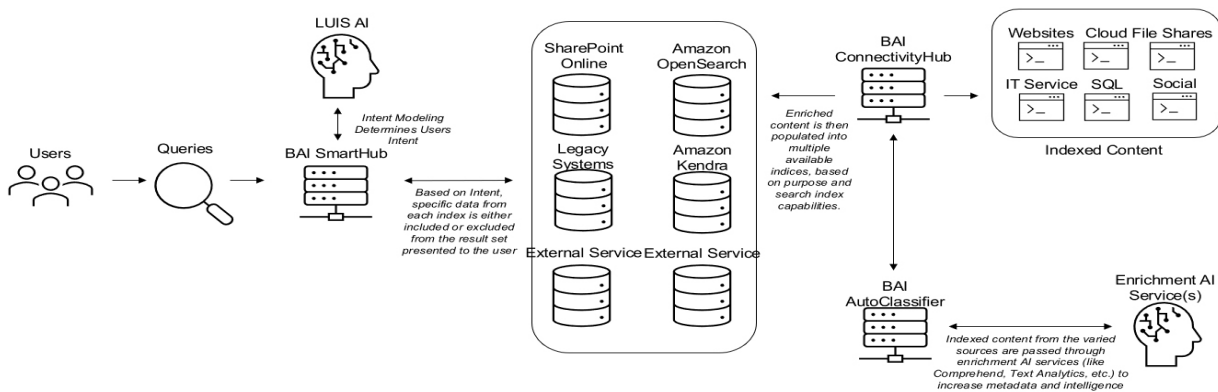
- Database content
- Website content
- Veeva Vault content
- Query time merge indices for subscription cloud systems

**The third phase introduced:**

- Amazon Kendra
- IT Service Content
- File Share Content
- Additional data from connectors in phase 1 and 2, indexed into both OpenSearch and Kendra

One of the key capabilities needed to make this work for end users was an AI-based natural language query model which would determine the user’s intent in real-time, focusing the user results on specific sets of data. Since they maintained a deep set of content within their varied systems, the ability to selectively include this data tuned to specifically what each user needed was a major win.

The below diagram illustrates the overall solution:



By utilizing Amazon Elasticsearch, now known as Amazon OpenSearch, along with BA Insight's SmartHub, they had the technology needed to power their core needs. With Amazon OpenSearch, they know they have a scalable, enterprise-level search index, and with an assist from BA Insight's connectors and AutoClassifier, they have the power and flexibility to adapt to and integrate advances in ML modeling, AI analysis, etc.

BA Insight's SmartHub provides them with a scalable, flexible, feature-rich UI and orchestration layer that allows them to integrate their varied search indices and data sources to deliver this information in a personalized and targeted manner.

## Outcome

This pharmaceutical company now finds themselves with a well-oiled data machine, with employees able to more easily find and access critical data from all areas of their business, providing detailed analysis and learning from this data. They no longer have to be concerned with where the data exists, wasting time hopping around from system to system. This increase in productivity has enabled them to make advancements towards their mission of changing patients' lives, integrating the latest technological advances, all with a focus on deep data insights, correlations, and intelligence.