

CASE STUDY

R&D collaboration platform speeds time-to-market



abbvie

AbbVie is a global biopharmaceutical company with more than 30k employees in 70 countries

Industry

Life Sciences

Solution

Research collaboration platform

Key benefits

- Increased productivity
- Sped time-to-market
- Boosted security
- Reduced IT project capital costs

Opportunity

Research-intensive activities have a shared core challenge: how do you accelerate knowledge discovery, and make information accessible to others?

From research and lab trials to submission and compliance, clinical trial, manufacturing, product introduction, and distribution, there is a corpus of data and active knowledge about a new therapy and its entire context through practical experience and processes used.

A key strategic insight is recognizing the need to formalize how knowledge is acquired, vetted, and used. This insight is the first step; aligning a broad, dynamic organization around a shared platform that manages data and everything we know about it is the challenge.

Results

AbbVie initially adopted the MarkLogic data platform as part of a new approach toward content management and search, combined with Semaphore semantic AI for ontology management, document classification, and fact extraction.

The initial project's success sparked new initiatives to expand the approach across all R&D activities – supported by a Center of Excellence (CoE) to establish and share best practices. The CoE helps speed development efforts, reducing costs and accelerating R&D.

AbbVie's "next gen" research collaboration platform supports knowledge workers throughout the company. The platform simplifies the ingestion, harmonization, enrichment, and delivery of complex data – internal and external – using centralized knowledge models to manage the data across business functions.

“We couldn’t do this with other technologies. We’re delivering these capabilities to our customers in ways that are wickedly performant.”

Director of Innovation & Emerging Technology, AbbVie

This robust and extensible system enables scientists, researchers, communicators, manufacturing specialists, and regulatory experts to easily consume and act on information according to the needs of their function.

- Researchers have radically improved the speed to insight timeline – integrated data is queried in a single sub-second search, versus navigating multiple internal and external data sources. This “Google for AbbVie,” said an AbbVie Vice President, gives them “the information they need, when they need it, in order to make a decision.”
- Scientists and researchers can examine data in new ways and ask questions that they never could before. AI and machine learning capabilities can leverage integrated and harmonized data to deliver both informed search and grounded analytics.
- Compliance and regulatory workflow is improved. Extraction capabilities in the platform identify essential information to support the compliance and regulatory submissions, which are an essential part of the drug development process.
- Team members can communicate more easily and get highly targeted information delivery. A collaborative platform incorporates newsfeeds and chat functions and provides support for process-driven mature business practices – all user-defined by topic and role.
- Knowledge workers across the company can easily comply with organization and legal requirements. AbbVie employees can rapidly identify the appropriate standards, procedures, and responsibilities associated with their role, versus the previous “stare and compare” method of locating and reviewing documents.

AbbVie’s unique approach is grounded in data agility – the ability to make simple and powerful changes regarding how information is interpreted and acted upon. Data agility allows them to tackle bigger challenges that demand new ways of working with information. The ability to eliminate fragmentation and combine enterprise data, and everything they know about it, into a single platform allows AbbVie to accelerate the move from data to knowledge and insight to action.