RIS RESEARCH SOLUTIONS

Nebula
The Key to Unlocking Institutional Knowledge

The Problem

The Hidden, But Ongoing Cost

With the vast amount of data generated daily by enterprises, finding relevant information quickly can be challenging. Data silos, staff resignations, and inadequate technology impede knowledge discovery, collaboration, and talent onboarding or reskilling. According to Gartner, the departure of even a single technical talent, whose expertise is not captured and made accessible, can significantly delay flagship products.

The Opportunity

It's There, But How Do We Find It?

Companies already do a good job of documenting and retaining organizational knowledge, but they can do a better job of making that knowledge searchable and discoverable with digital and analytics tools. McKinsey reports that "leading players [in pharma] are incorporating digital and analytics into early-stage drug discovery and clinical development to shrink timelines and improve the probability of success".

The Solution

We've built technology to maximize the value of all your scientific institutional knowledge with a powerful, machine learning, and AI-driven enterprise search platform. Archival research, experiments, lab notes, market intelligence, technical documentation, and more can now be discovered with a few clicks.

Short Case Study

Aditxt Therapeutics, Inc., a California-based life sciences company founded in 2017, faced a critical challenge in replicating transplantation experiments from acquired assets. Dr. Dolly Tyan, Senior Vice President, struggled with 19,000 poorly labeled documents, hindering her ability to understand and replicate past experiments. With no feasible method to sift through this "dark data," Dr. Tyan's efforts to manually organize the documents proved overwhelming, jeopardizing crucial research progress.

Nebula, our enterprise search tool now part of the Research Solutions' family, provided the solution by indexing, enriching, and tagging Aditxt's internal documents stored on SharePoint drives. This enabled Dr. Tyan and her team to efficiently search and connect relevant information using advanced search capabilities. Within five days, Nebula helped her find all the information she needed, a task estimated to have taken six to 12 months without it. Dr. Tyan praises Nebula for its strategic connection to internal documents, revolutionizing research efficiency and uncovering vast amounts of previously inaccessible data, empowering Aditxt to accelerate its scientific endeavors.

[1] Gartner (2022): How to Safeguard Institutional Knowledge in the Face of the Great Resignation
[2] McKinsey (2023) Rewired pharma companies will win in the digital age.

Top Challenges of Traditional Content Searching

Challenge #1
Locating relevant documents is challenging due to siloed platforms across a company.

Challenge #2
It's difficult to find data if you don't know what to look for or if it exists.

Challenge #3
File organizational structure is ever-changing and reliant on human knowledge.

Challenge #4
Most search options on internal data are limited to file names and typed text.

Challenge #5
Most searches limit themselves to basic keyword searches or do not have semantic search options.

Challenge #6
Inefficient searches can lead to duplicate work as finding evidence of previously completed tasks becomes difficult.

How Nebula's Technology Addresses These Challenges

Technology	What it does	Delivered Value
Natural Language Processing	Generates structured metadata from unstructured text through semantic expansion and document similarity.	Discover previously unseen connections and broaden your research findings.
Faceted Search	Filters results utilizing both NLP-generated metadata and data directly from the source database.	Target specific data/documents even in the absence of proper file names and tags.
Multiple Ontologies & Taxonomies	Incorporates industry-agnostic ontologies, such as PubChem, MeSH, ICD-10, and more	Refine search with precision.
Optical Character Recognition	Indexes handwritten and scanned text regardless of orientation in documents, images, and videos	Search notes, charts, and graph labels.
Document Cracking	Searches within embedded documents	Search content previously hidden to traditional search methods.
Image Recognition	Identifies images, graphs, charts, and logos in documents and video files	Narrow down on specific content types more quickly.
Audio Transcription	Transcribes and indexes talk tracks from webinars, videos, and other presentations	Maximize the value of all spoken word materials.
Format Agnostic	Handles and indexes a variety of formats, such as Microsoft Office documents, PDFs, .msg files, as well as audio and video content	Leave no stone unturned!