SHINING A LIGHT ON YOUR DARK DATA

Organizations across industries are struggling to make use of their rapidly growing data sets. In most cases, those tasked with trying to manage or bring value to this data are met with frustration, wasting time and resources.

Data scientists and researchers are spending too much time finding the data they need when they should be spending their time doing what they do best: the actual data science or research. This scenario has several negative impacts. While your experts are digging through data instead of fulfilling their primary job responsibilities, project timelines get delayed. There may be inaccurate outcomes due to human error. And certainly, the organization will suffer financially when highly qualified professionals are focused on tedious, less profitable work.

Could artificial intelligence (AI) be the solution? There has been plenty of AI hype in recent years. Savvy business leaders are starting to ask how AI can make a difference for their organizations.

The key is a specific type of AI called deep learning. Deep learning algorithms can peer into your data and glean previously undiscoverable insights. Now, thanks to several enabling technologies (GPUs for computational power and novel algorithms for analytics), Vyasa is using deep learning to harness and extract value from your data in an entirely new way. And the best news is this new method works even if your data is unstructured and dispersed. You don't have to clean up the data before putting it to work.

Stop trying to move your data to the algorithm. Instead, bring the algorithm to your data.

OVER 80% OF ORGANIZATIONAL DATA IS DARK[1]

1. IBM (2015, November 23). The Future of Cognitive Computing. https://www.ibm.com/blogs/cloud-archive/2015/11/future-of-cognitive-computing/

A Worthy Challenge

In recent years, it has become easier to collect all types of data. However, most of this data comes in unstructured formats (e.g., PDFs, PowerPoint presentations, images, spreadsheets) that are challenging to search, identify and pull insights from. To complicate things further, this data is streaming in from various sources, creating data silos both internally and externally along with duplicate, obsolete or trivial data sets that can be impossible to sift through.

This is dark data — data that holds great value if only you could access it. It doesn't matter if you have billions of data points if you can't access or utilize the data.

Manually cataloging or managing this data takes far too many hours to be worthwhile and introduces the risk of human error. Other options, like keyword search, still require human intervention and are too rudimentary to provide real value. Unless you make a change, the data remains dark.

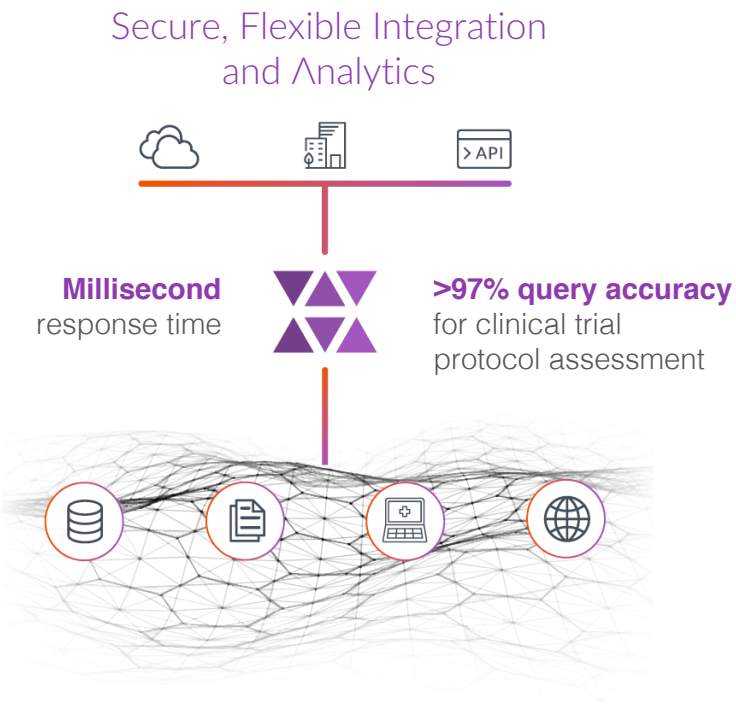
"IT DOESN'T MATTER IF YOU HAVE BILLIONS OF DATA POINTS IF YOU CAN'T ACCESS OR UTILIZE THE DATA."

- Dr. Christopher Bouton, CEO & Founder, Vyasa Analytics

The Solution

Today, advancements in deep learning and data management are making dark data an issue of the past. Deep learning neural networks mimic the human brain through a set of algorithms that train on large data sets. And now you can finally tap into your data's full potential with a data fabric. This is an architecture that connects data from disparate silos. Like layers of fabric, it blankets the data, no matter where it resides or what format it is in.

A data fabric can connect many layered systems together, and they can all work together to provide a single source of information.



Vyasa Layar Deep Learning Data Fabric

Unifying data is the first step. Layar takes it to the next level by pulling insights from the source.

Layar's set of deep learning algorithms allows you to unlock the data and be able to:

- Uncover novel relationships within your data sets.
- Answer questions about your data.
- Visualize your data, making it accessible across skill sets.

Layar removes the requirement of setting up a framework, thus lowering the barrier to accessing your data. Simply ask a question, and Layar will give you the answer without you needing to tell the machine where to look or how to find the answer. It is like an "easy button" that lets you derive insights from your data.

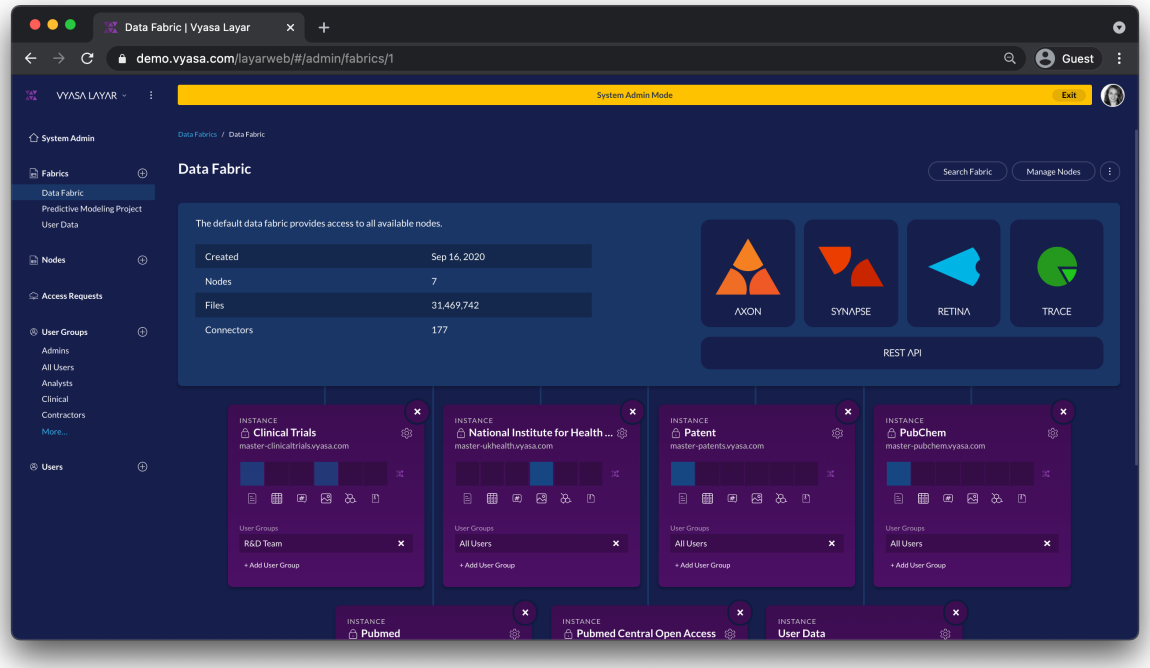
How it Works

First, we gather the information. Data connectors link all the data from many different sources within your organization and from external sources and then consolidate the view.

Then, Layar pulls information from your unstructured files and creates an index of the metadata without creating copies, moving the data from its source or requiring a data lake. Next, we provide the context. Through that index and automated metadata, our advanced analytics tools (i.e., deep neural networks) create the context needed to answer your questions.

Already, our data fabric and deep learning are better at answering your query than human performance.

But we go even deeper. Finally, we fine tune the Layar system on your content, making it even more powerful and intuitive for your users. As a result, you can manage, search and analyze data from a wide range of sources.



Next-Level Insights

Once Layar is deployed, you are empowered to add on additional capabilities and take advantage of Vyasa's other deep learning applications:

AXON — A visual approach to data exploration using natural language queries to find answers from structured and unstructured data sources integrated within the Layar data fabric.

SYNAPSE — "Smart Table Technology" that leverages natural language queries to populate spreadsheets with answers from structured and unstructured data sources.

RETINA — A scalable image analytics and model management platform that offers a wide range of deep learning tasks to streamline your imaging workflow.

TRACE — Visual data patterns with geospatial analysis to add deeper context to data with the addition of timing and location information.

Our tools allow you to access the best possible data so you can do your best work. Your team can ask questions in the natural language of the data instead of having to code to extract information. The sleek, user-friendly interface democratizes the most advanced tools and makes valuable insights available across the organization.

Shine a light on your dark data and uncover new intelligence for your organization with Vyasa.

ADVANCED CAPABILITIES WITH VYASA

- Connect disparate on-premise and cloud-based data sources within a single platform without requiring a data lake.
- Quickly analyze unstructured content such as PDFs, PowerPoint presentations or images via powerful deep learning applications.
- Visualize your data through knowledge graphs and smart spreadsheets.
- Accelerate research time and extract insights directly from documents.
- Automatic data cataloging directly within the Layar data fabric.

Vyasa Analytics is advancing deep learning A.I. into approaches that enable humans to elevate the nature of their work beyond rote activities inherent in processing digital content. Using highly scalable deep learning software and analytics, we enable organizations to ask complex questions across large scale integrated data sets to gain critical insights for better decisions.

» **Contact us** at **hello@vyasa.com** to learn more