ELASTICDOCS™

Knowledge
Management
System

- ▸ Cloud
- ▸ On-Premise
- ▸ Managed Services

Your company's data is

exploding

Did you know that every day, your company generates valuable data that could transform the future of energy? For over a century, the energy industry has been gathering vast amounts of subsurface data—yet a staggering 80% of it remains unstructured, unprocessed, and untapped.

This untapped data holds the key to groundbreaking discoveries and new use cases. Imagine pinpointing discovered resource opportunities, and uncovering new exploration plays. Think identifying new energy sources, such natural hydrogen and geothermal locations. Re-imagine waste management, and map underground carbon storage potentials.

What if your geoscientists, engineers, and data managers could access and analyze this data instantly—saving over 50% of their time and eliminating the need for costly data acquisition?

Empower your team to make smarter, faster decisions and drive innovation in energy exploration.

ELASTICDOCS™

The best solution to this energy data problem is ElasticDocs™, our Knowledge Management System for earth and energy data.
It can quickly and easily transform unstructured data to reader-friendly structured data. What's more, it's instantly available for search, retrieval, and information extraction, faster than any technology in the industry today. Through its innovative **artificial intelligence** platform and search-and-cluster technology, it enables professionals to browse through thousands of your proprietary corporate reports and publications in minutes.

Here are just a few of its state-of-the-art features:

Equipped with GIS layers to geolocate information and provide understanding on the availability of information within a particular area.

Built with an interactive, user-friendly interface that brings the value of vision modes/LLM to the energy industry as a functional and web-based software.

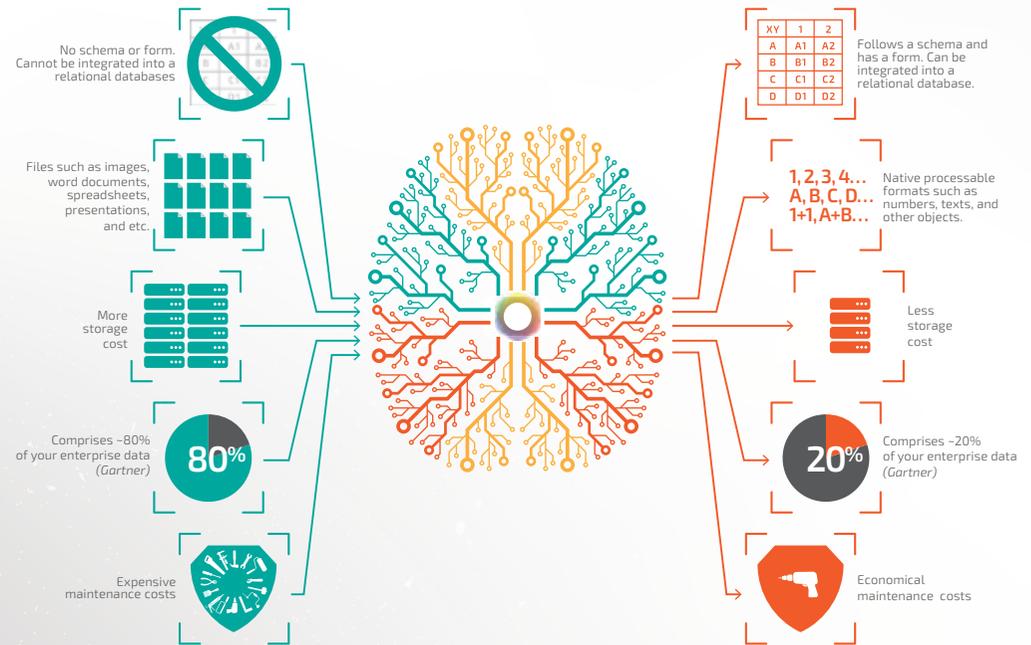Elasticdocs can be accessed by multiple users, anytime and anywhere.

Proven track record for earth, energy and engineering data and **pre-trained on industry-specific, open -source data repositories worldwide.**

Your data and our technology are constantly updated and kept evergreen.

Produces outputs of structured data such as .csv tables, heat maps, and knowledge graphs that provide valuable knowledge and quantitative insights that meet your business needs.

Processing time is up to 4 times faster than any manual workflow reducing project turnaround by up to 75%. **This means a month's worth of work is reduced to just a week.**

Unstructured Data ▶ ▶ ▶ ▶ ▶ ▶ ▶ ▶ ▶ ▶ Structured Data

No schema or form. Cannot be integrated into a relational databases

Files such as images, word documents, spreadsheets, presentations, and etc.

More storage cost

Comprises ~80% of your enterprise data *(Gartner)*

80%

Expensive maintenance costs

Follows a schema and has a form. Can be integrated into a relational database.

1, 2, 3, 4...
A, B, C, D...
1+1, A+B...

Native processable formats such as numbers, texts, and other objects.

Less storage cost

20%

Comprises ~20% of your enterprise data *(Gartner)*

Economical maintenance costs

With ElasticDocs™, you can read the earth's data 4 times faster, accelerating your company's decision-making process. Timely decisions save your company thousands of hours a year, and millions of dollars in opportunity cost.
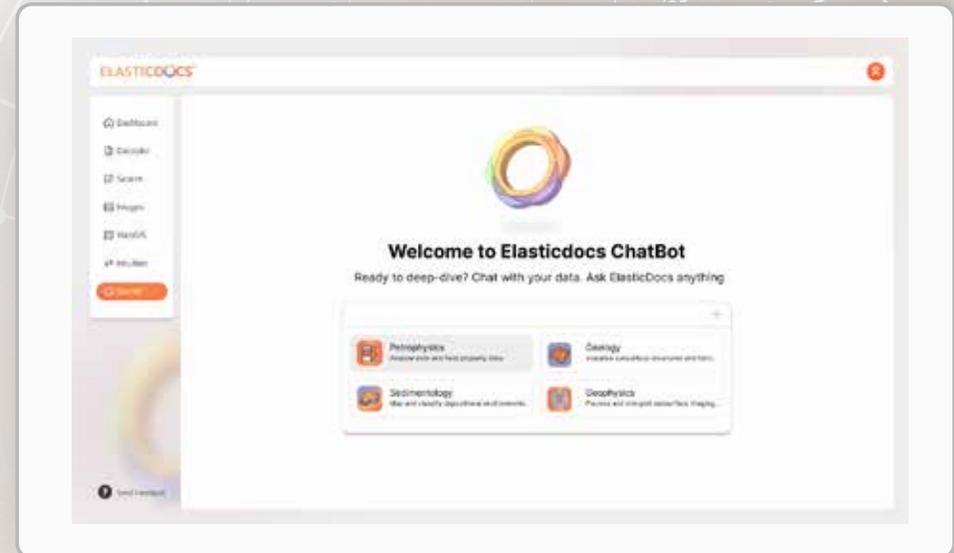
What is the **value** from processing **unstructured data**?

The **ElasticDocs™ Cloud and On-Premise web solution** makes unstructured data instantly accessible:

Data Management

Remove data silos
Infinitely scalable data lake solution

Search and Retrieval

Instant cognitive search with ranked results, traceability to original documents with geolocation, and exportable metadata in .csv format.

Auto classification, pattern recognition, clustering and search of text within images

Knowledge Graph

Correlates related well events from one document to the other, establish an information highway within the document corpus.

Heat Maps

Quantify extracted information in map view according to data density and generate instantaneous map.

Iraya creates **specialized agents** for customers

Advanced dashboard analytics are now available through our **specialized agents,** which are tailored to address specific domain needs.

ElasticDocs™ also offers seamless interoperability with our partners by providing API connectors. This feature allows our customers to access multiple innovative solutions from leading industry partners—all within a single ecosystem.

Our network of AI partners is expanding.
Examples of specialized agents that can be custom-built, include:

- **Post-Mortem Analysis Agent**

- **Petrophysics Agent**

- **Geologist Agent**

- **Rock Physics Agent**

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Welcome to Elasticdocs ChatBot

Ready to deep-dive? Chat with your data. Ask ElasticDocs anything

Petrophysics

Geology

Sedimentology

Geophysics

Unleashing the **Power of GenAI Sandbox**

We understand the challenges of working with unstructured and complex data. That's why we developed the GenAI Sandbox—a powerful, flexible platform where innovation meets intelligence.

What is *GenAI Sandbox*?

GenAI Sandbox is a state-of-the-art AI-powered environment designed to help you experiment with and unlock the full potential of your data. Whether you need to analyze, organize, or extract insights, GenAI Sandbox simplifies the process, empowering you to focus on results.

Key *Features*

- **Interactive Data Exploration:** Dive deep into your datasets with intuitive AI tools that reveal actionable insights.

- **Customization at Its Core:** Tailor workflows and models to meet the unique needs of your business.

- **Streamlined Automation:** Automate repetitive tasks, saving valuable time while ensuring accuracy.

- **Secure Experimentation:** Test new ideas and approaches within a secure, sandboxed environment, free from operational risk.

- **Scalable Solutions:** Whether you're managing small datasets or large-scale operations, GenAI Sandbox adapts to your needs effortlessly.

ElasticDocs™ Solution:
A Cost-Effective Approach to *Data Management*

Our sales team can help design the optimum deployment package for your organization based on your business needs, from Starter Pack to Enterprise Deployment.

Why ElasticDocs™ Is a Cost-Effective *Solution*

Flexible Payment Options:
- Choose between a one-time payment with maintenance or a subscription model—only pay for what you need.

Host Your Own Data: Enjoy flexible data hosting options
- Cloud
- On-premise
- Hosted by us

Advanced Analytic Services: Access expertise from AI and LLM specialists to maximize the value of your data.

How You Can Get ElasticDocs™

ElasticDocs™ offers a cost-effective, flexible solution tailored to your organization's needs. The Total Cost of Ownership (TCO) includes:

- Subscription-based Plans ; One-Time Payment with Maintenance Services

Industries Where We Work:

Oil & Gas	Geothermal	Carbon Sequestration and Storage	Geotechnical	Facilities & Engineering

ElasticDocs™ is designed to be scalable, adaptable, and capital efficient, ensuring you get the most out of your investment.

Technical Specifications

Input Data Format	Unstructured data including but not limited to Word, PDF, PPT, Excel, JPEG, etc.
Input Data Quality	Variable input data quality may range from: vintage, typewritten, OCR-ready | Handwritten (optional).
Technology	AI-enabled, end-to-end pipeline composed of optical character recognition (OCR), natural language processing (NLP), named entity recognition (NER), image recognition, geolocation, elasticsearch, vision models, large language models.
Advanced Search	Deep search within the full corpus.
Advance Filters	Geospatial filter, metadata filter, document type filter.
User Interface	Intuitive, user-friendly web browser.
Language	Ability to translate over 70 languages.
Infrastructure	On-Premise and/or native cloud infrastructure powered by Azure, AWS, and Google.
Processing Speed	1/100s to 10s, per process, dependent on algorithm and compute power.
Tagging	Auto-image recognition using convolutional neural network and vision models.
Metadata	Automated metadata extraction through natural language processing. Customer-provided ontologies can be incorporated and developed for easy search and information retrieval.
GIS Layers	Enabled | Customer-specific cultural data can be integrated upon request.
Outputs	Structured data including but not limited to: search results in CSV format, classification-ready images, instantaneous heatmaps, knowledge graph. Table extractions in .csv format.
Deployment and Support	Fully virtual from initialization to deployment | On-site support (optional).
Quality Control Principle	Human-in-the-Loop.

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CONTACT US FOR MORE INFORMATION

It's time to read the earth better with us at **Iraya Energies.**
Find out how we can **transform** your unstructured data into **knowledge and insights.**

To learn more about **ElasticDocs™** and **what we do,**
contact us at **info@irayaenergies.com**

iraya
read the earth better