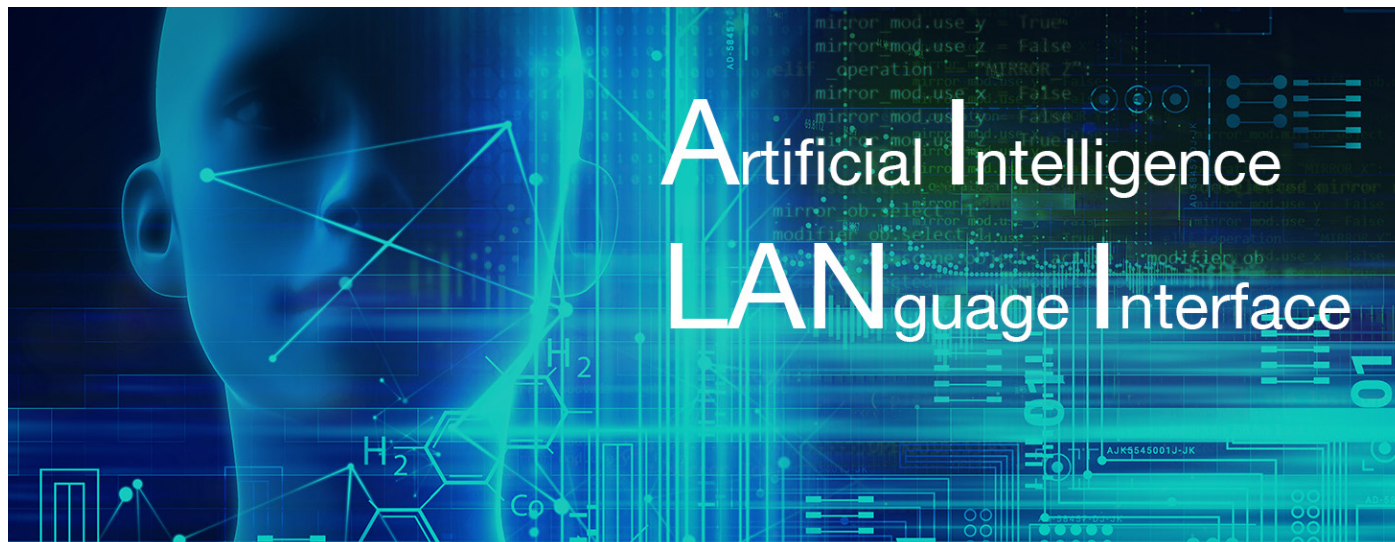


## AILANI - Your gateway to deeper knowledge



## Intelligent Semantic Search with AILANI

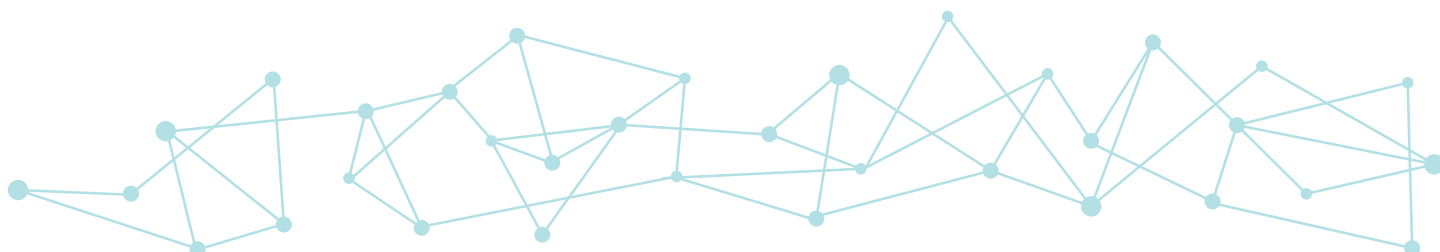
### Get a deeper insight in your knowledge

AILANI is a novel and unique semantic search enterprise solution for fast, easy and comprehensive knowledge discovery. It combines semantic modeling, ontologies, linguistics and artificial intelligence (AI) algorithms in a self-refining system that delivers results based on inter-related meaning of facts.

AILANI delivers the most relevant results and puts them in a wider context for deeper analysis. Queries can be expressed in natural language. Regardless of the quality of your search term AILANI will be able to provide you with relevant answers.

AILANI stands for Artificial Intelligence LANguage Interface and enables you to

- > Accelerate your innovation cycle
- > Raise the productivity of your scientists
- > Gain an edge over your competitors
- > Make better decisions by integrating public and proprietary knowledge
- > Transfer knowledge efficiently within your organization
- > Keep the know-how in your company, even if a knowledge carrier leaves your company
- > Provide powerful information resources to your employees anywhere and at every time



## How does AILANI work?

Based on the semantic core technology of Biomax, AILANI provides an extensible search framework that automatically maintains a growing and evolving semantic network. This “meta-ontology” supplements and extends more than 60 life science ontologies that are automatically updated and can be extended with any additional public or proprietary ontology with just a few mouse clicks.

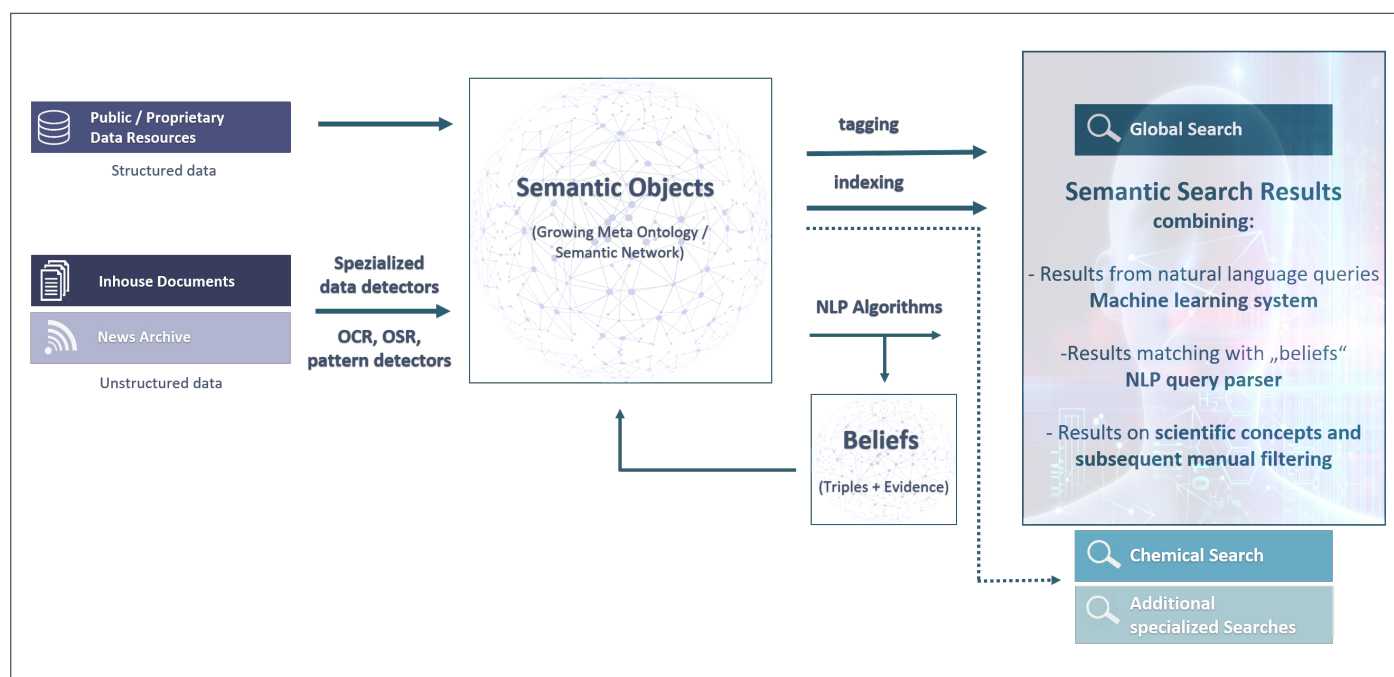
There are many different ways to connect structured and non-structured data resources to the system. The system can interface with existing document management systems. Relational databases can be connected directly. Web services can be accessed and crawlers can sift through shared data repositories.

Repositories of scanned documents are analyzed using optical character recognition (OCR) and documents that were previously subjected to OCR can be re-analyzed using current advanced neural network-based algorithms to improve results.

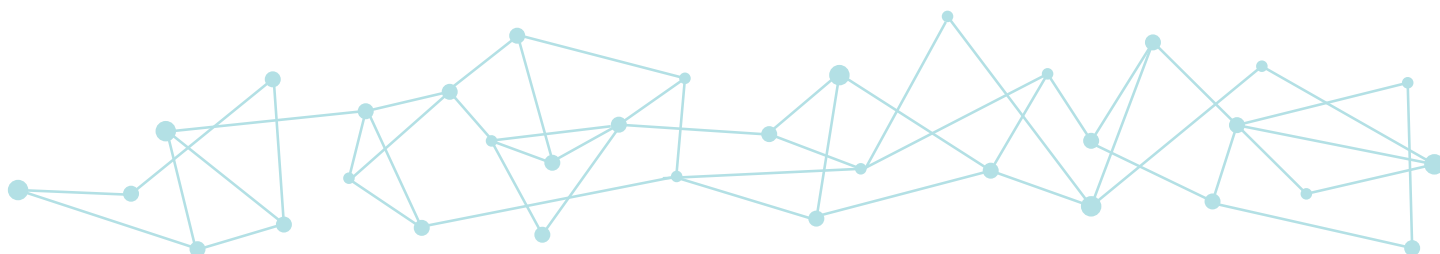
Specialized “data detectors” detect and extract data types and patterns specific to any business area. For example, in chemistry and pharmacology, two-dimensional chemical structures embedded in scanned reports are detected using optical structure recognition (OSR), extracted and translated into searchable chemical notations. Corporate identifiers can be detected with specialized pattern detectors and represented as “semantic objects”; in this way, any one of these objects can become a focal point related to all associated real-world data.

Concepts represented by ontologies and other “semantic objects” in the knowledge network are tagged and indexed for fast search access. Text analysis with natural language processing algorithms extract enriched triples, so-called “beliefs” of typed associations between the managed semantic objects.

The extracted beliefs describe the semantics of an association between “real-world” objects typically found



*AILANI Artificial Intelligence LAnguage Interface*



in specific domains (like the life sciences, materials sciences or chemistry). These associations are enriched with sentences that support the assertion and additional meta-data, for example a ranking score. Beliefs augment the managed body of knowledge and over time build up to establish a priceless corporate-wide repository of knowledge.

AILANI is a zero-footprint solution, delivered as managed service (SaaS) and intended as enterprise-level product to operate on terabytes of data.

Originally designed as software for the life science industry, AILANI can also be used in all other sectors, easily being adapted to the various requirements.

## How to benefit from AILANI?

With AILANI you can develop new insights on what you already can and access internal and external know-how from every instance. You will accelerate your innovation cycle enormously.

Due to efficient data search and knowledge management you will be able to raise the productivity of your scientists at any step of your product development process.



*Comfortable user experience with AILANI*



*Powerful information resources at your fingertips*

You will profit from the large number of open access semantic resources as well as your own internal knowledge base, gaining easily an edge over your competitors.

Having access to all information - public and proprietary - at a glance, decisions can be made even faster and better.

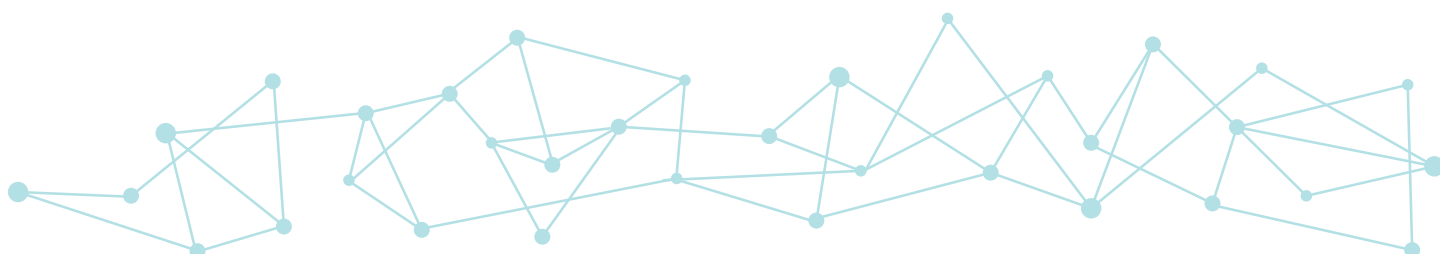
Efficient knowledge transfer within your organization becomes easy by facilitating access to key information for everyone and at any place. If a knowledge carrier leaves your company all knowledge will remain in your company, stored in AILANI.

All in all AILANI will just allow your scientists to concentrate fully on their research projects again.

## Convincing User Experience with AILANI

AILANI is available on any browser or mobile device. An easy-to-use, modern graphical front end provides hassle-free searching and graphical exploration of the complete knowledge network.

Showing the most relevant keyword results first, the user has the possibility to efficiently drill down and learn more.



Suggestions based on Artificial Intelligence Algorithms complete the list of results and deliver concrete answers, even if the original search term is of less quality.

Smart Breadcrumbs allow you follow your search journey. Search can be saved at any time and recalled later.

Users of AILANI can easily set favorites and alerts, thus adapting the system to their individual search behaviours.

## Optimal Search Results with AILANI

Regardless of the quality of the question and completely free from search ads, AILANI delivers optimal results at every time:

- > Artificial Intelligence suggestions
- > Keyword results
- > Concrete instructions
- > Detailed background knowledge
- > Reports and statistics
- > Structures and molecules

## Why choose Biomax?

Biomax Informatics AG was founded in 1997 with a mission to develop software solutions based on the real needs of life science organizations. As a competent partner for the implementation of an enterprise semantic search solution, Biomax offers you numerous advantages:

- > Biomax Informatics has more than 20 years of experience
- > Biomax Informatics provides a validated technology through multi-year contracts with reference customers
- > Biomax Informatics understands your business and has the life science and software experts
- > Biomax Informatics is flexible enough and able to adapt its semantic technology to your individual needs fast and effectively
- > Biomax Informatics is certified according to ISO 9001 and ISO 27001

With AILANI from Biomax you can save time and money and you will gain a long-lasting edge over your competitors.

Get in touch with our experts for a live demo and your individual offer.



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