



## What is cognitive computing?

**A computation model that simulates the cognitive process of the mind.**

**Atomian is a cognitive architecture**, a collection of data, structures and processes that imitate the understanding and reasoning faculties of the human brain, and designed with computation features.

Atomian is the product of a 15 year investigation in the fields of information theory, computer science, neurolinguistics and psychology.

**Atomian computing technology allows knowledge to be organised in a cognitive data model.** Atomian understands the world as humans do, and can answer any question about the knowledge it acquires, automate process and learn new information.

**Any of the knowledge can be accessed simply by asking a question in natural language.** Atomian will understand the meaning of the words and sentences, and will actively provide an answer.

Atomian is a cognitive and symbolic computing system based on atomistic conception and able to understand the world.

## What is the language used?

**Atomian processes data as knowledge atoms**

**The data used by Atomian consists of indivisible items called knowledge atoms.** These units are collected in different memories: declarative, episodic, semantic, logical-mathematic... with a total of eleven memory levels.

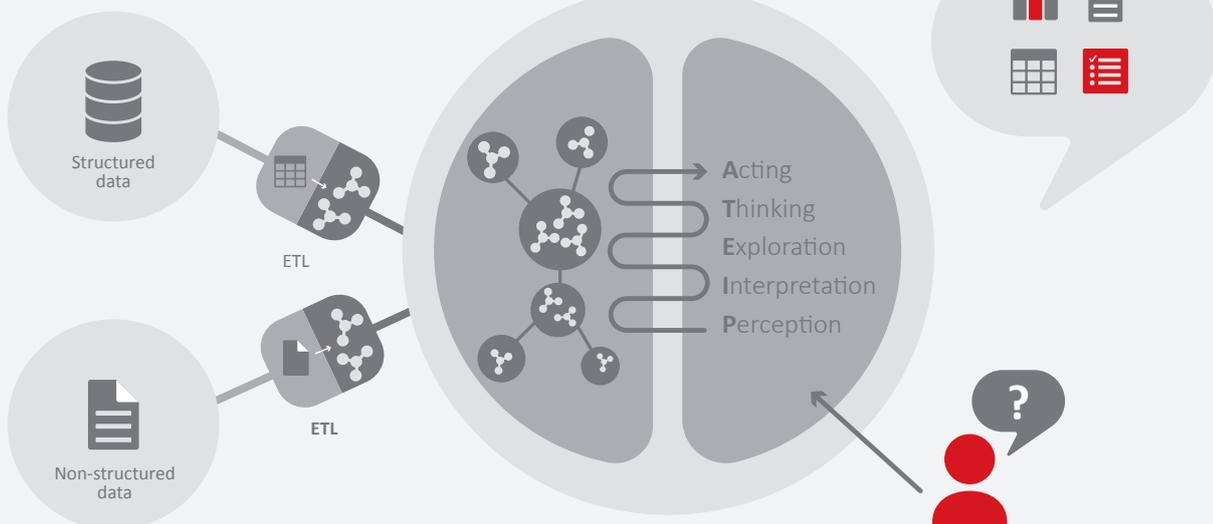
Words are not the same as their meanings in Atomian. Instead, a **Natural Language Processing (NLP)** system has been developed to reformulate sentences as collections of computable units in the Atomian database.

**Atomian can therefore store large amounts of data in a symbolic format**, think, reason, understand language, communicate in human language, remember, plan, calculate etc.

The answers provided are always deterministic and informed, as Atomian consistently uses previously acquired information for responses and operations.

## Atomian Model

Atomian Brain

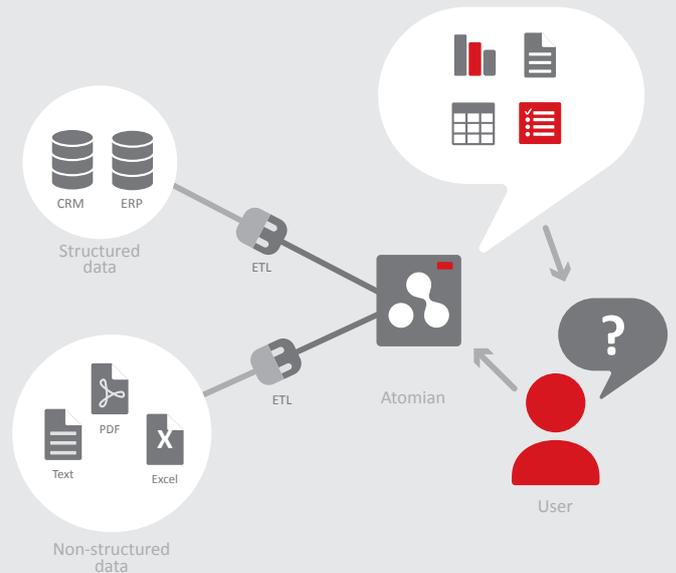


## What type of sources can be processed by Atomian?

### Atomian can process any external data source

The software has a cognitive architecture that can store large amounts of data from different origins in a single model, and an interface in natural language that provides unlimited access to this knowledge.

Atomian can process any external data source (structured or unstructured) in the architecture, and uses these sources to assemble a complete and operational artificial brain that can answer any question asked by the user in their own words.



## Where is our software most needed?

### Cognitive computing has become one of the greatest assets for businesses.

Companies and organisations with complex data have significant problems when searching for information on their own software applications. **Businesses need tools with fast responses that enable strategic or operational decisions and provide a detailed analysis of information.**

With Atomian as a cognitive computing tool, businesses do not only save on costs by reducing the time to locate information, but are also provided a comprehensive view of the concealed information in company data. **We set-up a digital brain in your company.**

Atomian does not require training. After retrieving knowledge, the programme actively responds to any question producing an immediate answer.

## Is 100% automation possible in some processes?

### Atomian learns and automates decision processes.

Organisations often encounter business operation systems with intermediate stages where information needs to be used in real time to make a decision. These are parts of the process where Atomian proposes or performs an action based on learning, recorded information and automatic processing.

### Atomian can understand and learn new information, and is a tool used for automated processes that reduce cost.

Extracting data insights and automating data processes is a growing challenge for companies. Atomian has new technological developments to confront this challenge.

## How does Atomian learn?

### Atomian uses knowledge atoms, the basic elements in every cognitive universe.

We have designed a series of tools to retrieve information units stored in databases and documents. These tools enable the construction of entire ETL (Extract, Transform, Load) systems that provide information to Atomian while removing the need to review transaction systems for each question.

