



 **ALGOL ELINAR**

**AUTOMATING THE
DOCUMENT-
HANDLING PROCESS
WITH THE HELP OF
DEEP LEARNING AI,
FROM RECEIVING TO
DELIVERY.**



BACKGROUND

Algol Chemicals offers a wide range of industrial and special chemicals and polymers for industrial production processes.

Algol Chemicals connects manufacturers and customers of industrial raw materials and offers customized delivery solutions, services, and expertise. Products are produced worldwide, and customers are served locally. Reach-registered products from global partners are delivered to our customers from local warehouses.

Algol Chemicals has approximately 40 000 product deliveries annually and services are offered to more than 3000 industrial companies in Finland, Scandinavia, the Baltics, Belarus, Ukraine, and India.

Algol Chemicals belongs to the Finnish Algol Group. Algol's operations were started in Helsinki in 1894. Today, the international multinational company Algol is still a Finnish family company.



BUSINESS NEED

Algol Chemicals' business need was to automate the routine document processing from beginning to end, thus reducing the amount of manual work, and freeing up time for more valuable customer work.

Certain products and their manufacturing batches are accompanied by a technical batch analysis certificate, which the supplier sends by email to Algol Chemicals' customer service upon purchase.

When Algol Chemicals sells this product and batch, the same document will be re-sent to the customer.

Receiving, archiving, and sending documents has been done manually, so this routine work has required a lot of customer service time. There have been tens of thousands of manual actions related to documents every year and several hundreds of different types of documents.





SOLUTION

The purpose of the solution was to automate the document-handling process described above with the help of Deep Learning AI, from receiving to delivery.

The core of the system is ElinarAI, which recognizes the necessary information from documents, i.e. purchase order number, product, product code, batch number, and best before the day.

This information enables the automatic processing of the document in Algol Chemicals' background systems, the document management system, and ERP.

The solution utilizes both IBM Datacap and ElinarAI to produce the best possible end result in identifying the above-mentioned information.

IBM Datacap is a versatile capture platform that takes care of the incoming analysis certificate's passage through the process all the way to the customer's system.

ElinarAI is artificial intelligence solution and it's developed in Finland based on deep transfer learning. ElinarAI can create a human-like understanding of unstructured data, such as in this case analysis certificates.

The solution used Algol's existing analysis certificate data to train the model. A cognitive understanding of the document enables accurate information to be produced automatically.





BENEFITS

Automating the processing of analysis certificates improves the delivery reliability and speed of the organization and customer service. In addition to this, the number of human errors decreases as numerous manual work steps are eliminated.

The cloud-based document service implemented in the same context enables these documents to be utilized and shared outside the organization and in other online services intended for Algol Chemicals' customers and partners.



ElinarAI enable the automation of the document processing presented here. The solution also provides a platform for automating Algol Group's other similar manually performed identification tasks.

THANK YOU

Want to hear more?
Contact us and let's chat more.



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We provide unstructured data understanding using the Deep Transfer Learning methods of AI.