



Solving the problem of complex document processing for insurance companies

FINANCE

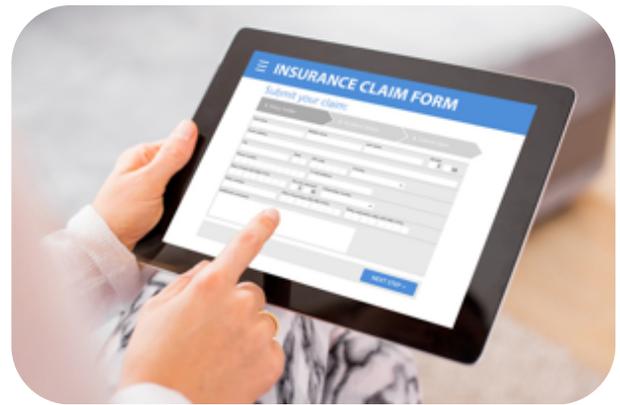
SPONSORED BY CORTICAL.IO

Data and documents are the lifeblood of every insurance company. Yet they also represent one of the biggest challenges insurers face



Insurers handle, on average, more than 100,000 documents every year,

Related Articles



The top automation trends in the insurance industry for 2022



Inflation: Real challenges, real opportunities for insurers

which take a huge amount of time and effort to process manually, and are open to human error. Most of them contain unstructured data (which accounts for 80 per cent of data produced globally), meaning the documents don't follow a predefined or known structure: for example, insurance contracts and policies.

Most document-processing software, even when leveraging AI, cannot process all the possible variations of the content. In addition, natural language approaches based on statistical models will also fail to accurately analyse unstructured documents because the amount of similar content is not high enough to enable generalisation.

One promising approach you may have heard of is intelligent document processing (IDP), which is used to automate data extraction and processing by combining artificial intelligence (AI) and natural language understanding (NLU) with tools such as optical character recognition, thus improving

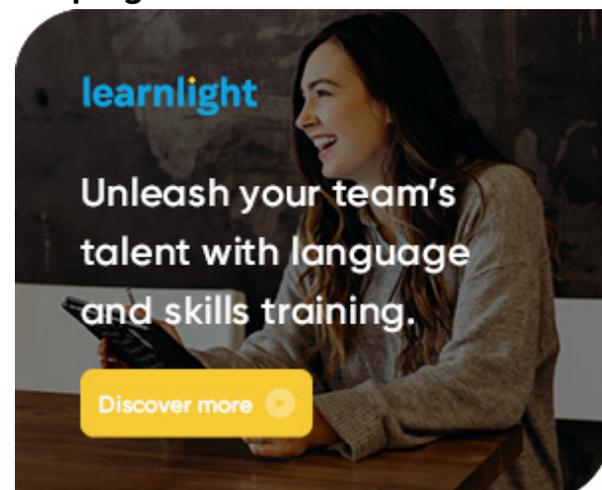


How to unlock data to improve outcomes along the insurance policy life cycle

How to unlock data and value along the insurance policy life cycle



Shaping the future of insurance



efficiency and margins and reducing cost.

Unstructured data challenges

However, most IDP providers are solely focused on structured and semi-structured data solutions. And the out-of-the-box solutions they do provide for unstructured data are also incapable of processing documents that don't match a template in their repository, and therefore don't deliver accurate results.

The two biggest problems for these vendors are the variability and ambiguity of natural language used in the documents. The range of terms used within an organisation and by its customers and vendors is too broad to be completely captured and will be constantly evolving. Even the most advanced term-based natural language processing (NLP) tools are unable to process terms they haven't seen during training.

Then there is the ambiguity of language used, meaning the same

SupplyChainTalk

**Supporting suppliers
on net zero and sustainability**



GUESTS INCLUDE

**Alexandra Hammond,
Head of Sustainable
Procurement & Supply Chain,
NHS England and
NHS Improvement**

MARCH 30, 2022 | 16:00 GMT

SIGN UP

concepts can be expressed in different ways. Even advanced NLP algorithms can't associate phrases with similar meanings but different wordings, because they are based on word statistics, not high-level conceptual ideas.

That's where Cortical.io comes in. With 11 years' experience of researching and developing NLU solutions, we specialise in processing unstructured and complex documents with a high level of accuracy. Our novel approach to NLU, Semantic Folding, means we're better at extracting the meaning of sentences and paragraphs in documents, even if the wording is different.

The Cortical.io solution

We provide two core intelligent document processing solutions: Contract Intelligence and Message Intelligence. Using NLU, Contract Intelligence enables insurers to quickly review policies and other key documents by accurately identifying, extracting and classifying important

information.

Message Intelligence automates the intake/submission process by classifying and extracting key information from email messages and attachments. Both solutions deliver accuracy and efficiency, reduce manual labour time and are easy to implement without the need for data scientists or AI experts.

A major issue for insurers is accurately and efficiently reviewing and extracting key information from prior insurer plans and submissions and entering it on their own system. They have to review tens of thousands of policies every year using a process that's tedious, error-prone and expensive.

The process is further complicated by plans with complex tables, multiple employee classes of coverage, each insurer using its own jargon and format, provisions needing to be interpreted, and multiple products intermixed in one plan. Manual checking can also overlook key provisions, resulting in

inaccurate quotes and profit losses.

Automating the workflow

To tackle the problem for one client, a Fortune 500 insurer, Contract Intelligence was trained on five different products: long-term disability, short-term disability, vision, dental and life insurance. The solution enabled the insurer to find all the necessary provisions and thus produce more accurate quotes.

By automating its quoting workflow, the insurer was able to extract key information from the different insurance products from other insurers, interpret that information into its own language, detect employee classes and associate extractions with class descriptions, classify clauses and export document extractions as an Excel document.

Contract Intelligence also delivered a 30 per cent reduction in labour, translating into 7,500 man hours saved every year. Read the case study [here](#).

Another problem for global organisations is making sure their local policies in different regions are correct and consistent. One of our clients, a commercial property insurer, has offices worldwide and 2,000 customers with as many as 30 policies each.

Because the insurer doesn't use industry-standard forms, the binding copies of its locally issued documents may differ from the originals. Added to that, the process of reviewing these policies is extremely time- and labour-intensive, with the team spending one third of their time looking for differences in provisions between the original policy and final version. Seventy per cent of the documents also contained errors even after review.

Natural language understanding

To solve the problem, Contract Intelligence was trained with documents from different regions based on annotations from the insurer's subject-matter experts. It

then compared policies on a word-by-word and clause-by-clause basis to understand the different variations of the same concept – for example, recognising a Force Majeure provision where the word “war” has been mistakenly replaced with “conflict”.

Contract Intelligence quickly and accurately reported the differences in terms and conditions between the original and locally issued policies, enabling the insurer to make any timely corrections, thus keeping the risk of policy differences to a minimum. Read the case study [here](#).

The key indirect benefit of automating policy reviews is a reduced risk of missing key clauses or misinterpreting provisions. It also enables policies to be reviewed and compared quicker and, thus, quotes to be issued faster and more deals closed. Furthermore, it allows for a better pricing strategy because the quotes are more accurate.

Essentially, Cortical.io’s solutions enable insurers to improve their

business processes by speeding up the time they take to handle incoming submissions and extract key information from documents required for quotes or claims, thus improving their turnaround time, and by extension, customer satisfaction and the chances of winning new business. They also improve efficiency and reduce errors, thereby also lowering insurers' exposure to risk.

To learn more about Cortical.io's Intelligent Document Processing solutions, call (+1) 888 933 6658, email info@cortical.io or visit www.cortical.io

SPONSORED BY CORTICAL.IO

Insurance



23-29
Hendon
Lane,
London, N3
1RT

[GDPR Requests](#)
[Cookie Policy](#)
[Terms of Business](#)

[Privacy Policy](#)
[Terms and
Conditions](#)