



### Business challenge

Insurance companies waste millions of dollars and thousands of hours each year dealing with fraud. Thélem assurances sought to tackle this problem using AI technologies, but it needed help.

### Transformation

Thélem assurances wanted to launch an AI initiative to help detect fraudulent insurance claims, but it needed help to develop the necessary expertise. An IBM® Services™ team helped the company create and deploy a fraud-detection algorithm on IBM Cloud™ that can detect five times the number of potentially fraudulent claims than the company could previously.

## Results

### Detects 5x more fraud

using AI to identify potentially fraudulent claims

### Reduced costs

expected over the next several years

### Provides exceptional flexibility

with the storage capacity and processing power of IBM Cloud

# Thélem assurances AI on IBM Cloud helps detect five times more potential fraud

The [Thélem assurances](#) mutualist group provides personal, property and liability insurance for individuals and professionals. The company, which has 266 agencies throughout 49 departments and 385 insurance brokers, achieved a turnover of EUR 358.9 million in 2018, via more than 1 million contracts and 477,590 members. Its headquarters are in Chécy, France in the Loiret, with sites in Chateauroux, Nantes and Paris. Founded in 1820 under the name Orléanaise, Thélem assurances was created in 2004 from the merger of MRA and AMI. It has 477 salaried employees.

*“The value proposition that IBM proposed to us corresponded exactly to our needs.”*

—Séverine Prin, Director of Risk,  
Thélem assurances

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## An insurance fraud initiative

Insurance companies waste millions of dollars and thousands of hours each year dealing with insurance fraud. Thélem assurances sought to tackle this problem in part by using AI technologies. “Fraud is a problem that lends itself well to online machine modeling,” says Séverine Prin, Director of Risk, Thélem assurances. “We wanted to launch an AI program and make rapid gains in speed and performance for the company.”

After proceeding with several preliminary tests and experiments using AI, Thélem assurances realized it needed help with the initiative. “We encountered problems with the tools and with the environment, and we decided that we had to find a solution that would free us from machine storage and performance constraints,” says Prin. “To increase our expertise, we decided we also needed to work with experts in the field.”

## AI in the cloud

After meeting with IBM, Thélem assurances decided to engage the company to help it deploy an AI solution. “The value proposition that IBM proposed to us corresponded exactly to our needs,” says Prin.

IBM provided a cloud-based AI environment and also a team from IBM Services - Insurance and Advanced Analytics. The IBM group helped Thélem assurances construct the technical solution and offered training to help the company build its knowledge of AI. The group also helped Thélem assurances create processes that conform to the EU’s General Data Protection Regulation (GDPR), including minimizing the amount of personal data collected and taking appropriate measures to secure personal data.

Thélem assurances is using the IBM Cloud Object Storage solution to host its data on IBM Cloud, where the data can be integrated with the IBM Watson Studio and IBM Watson Machine Learning services. The company uses IBM Secure Gateway Service to transfer data to IBM Cloud in a secure manner. With the Watson™ Studio service, Thélem assurances can create analytical models and use cases to help detect fraudulent activities. The models are then deployed on the Watson Machine Learning service.

## Improved fraud detection

After launching the solution, Thélem assurances began detecting five times the number of potentially fraudulent claims than it had in the past. And the company expects that the solution will only become more effective. “We now have greater knowledge in AI modeling, which makes it possible for us to enrich our models over time,” says Prin. “So we’ll be able to increase our detection rate, which we hope will allow us to reduce costs even more over the next few years.”

By running its solution on IBM Cloud, the company has a high degree of flexibility. “We don’t have to concern ourselves with storage capacity or machine performance,” says Prin. “So we have a very flexible solution that allows us to test different solutions as initiatives come up.” The cloud environment also facilitates collaboration among different groups. Data scientists can work together on new initiatives and new algorithms. And the lines of business can easily access and review the work.

## Solution components

- IBM® Cloud™ Object Storage
- IBM Secure Gateway Service
- IBM Services™
- IBM Watson® Machine Learning
- IBM Watson Studio

### Take the next step

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