BLECKWEN

Consumer credit:
Carrefour Banque
reduces its residual risk
by 50% with Bleckwen
Credit Fraud Services

Interview with

Karim TINOUILINE,
Head of fraud prevention
at Carrefour Banque

banque
et assurance
vous, tout simplement

Credit fraud is growing by 25% per year and is set to reach $45 billion in annual losses by 2023 according to WPI Economics: As our lives move increasingly online, the nature of threats is evolving, as goes to show the growing prevalence of identity theft and synthetic ID fraud.

Fraud has consequences beyond financial losses (such as the financing of terrorism, for example). However, despite banking institutions having already implemented a certain number of tools in the fight against this scourge, 10% of fraud goes undetected.

Carrefour Banque was no exception to these statistics: Out of €1000 of consumer credit granted, between 3.10 and 4.54 euros were detected as fraudulent by Bleckwen's technology.

Context: Reducing residual fraud

In 2017, Carrefour Banque started looking for a solution to its problem of residual fraud. When the retail giant started out in consumer credit in the 80s, it handled actual documents that were presented physically over the counter in-store. Today, this is not always possible. Dematerialised documents have heightened the risk of fraud.

The banking establishment, which only pays funds in France, wanted to fight both misrepresentation (customers making false declarations but with the intention of repaying all the same) and identity theft, which is extremely costly as it leads to an outright loss.

How to deal with this residual fraud?

Carrefour Banque met with a number of suppliers to solve this problem.

> «We didn't set out with a specific type of solution in mind. We were open to different approaches and machine learning was not high on our list of priorities at the time.»
> says Karim Tinouiline, Head of fraud prevention at Carrefour Banque.

Indeed, Carrefour Banque was more interested in OCR solutions to scan documents without necessarily being convinced by their ability to detect fraud. In effect, with a huge variety of non-standard documents, it was technically difficult to detect identity theft, for example.

When Bleckwen met Carrefour Banque, it put forward a detection model based on machine learning, which was a completely new proposition for Carrefour.

The choice of Bleckwen

Beyond the ability for the machine learning models to improve over time, it was Bleckwen's business approach that attracted Carrefour Banque in particular.

> *«We were won over by Bleckwen's approach and the simplicity with which we were able to collaboratively build a bespoke solution during pilot projects»*
> says Karim Tinouiline.

Bleckwen and Carrefour Banque started work on building the future Bleckwen Credit Fraud Services solution. Carrefour provided the data to feed Bleckwen's algorithms.

From POC to roll-out

Before setting up a proof of concept, Bleckwen created a specific analysis and scoring model and trained it on Carrefour's data. Bleckwen was thus able to train a machine learning model and also gain a clearer view of Carrefour Banque's customer profiles.

The resulting model was specifically dedicated to fraud detection and not just document recognition and analysis. Thanks to historical data, the solution was trained to spot anomalies in certain credit applications.

> *«We worked together with our clients to provide models that are most suited to their use cases,»*
> says François de Pimodan, Head of business development at Bleckwen

Blackwen soon delivered a model set up to work asynchronously: Every morning, the module sent data from the fraud cases. After four months, the first results were visible and spoke for themselves.

Following this successful POC, Carrefour and Bleckwen agreed to continue working together on a bespoke model.

The first results show
millions saved

The recent health restrictions have changed credit application patterns: Although their overall volume has decreased, fraud has not. The machine learning model was therefore reinitiated.

Carrefour contributed to scaling the solution, even if for a number of internal reasons Carrefour chose it to work in asynchronous mode.

> «In the space of 6 months alone, Bleckwen's API enabled us to avoid €1.8 million in fraud. The ROI is plain to see, especially since fraud is revealed much earlier in our processes and we can make additional checks much faster,»
> says Karim Tinouiline.

Some figures on the period from July
2020–January 2021

	COST OF FRAUD	FRAUD AVOIDED BY BLECKWEN
Consumer credit (53% of applications in terms of value)	€28.37 per €1,000, fraud rate: 2.8%	€23.18 € per €1,000, or 80% of residual fraud.
Credit renewals (47% by amount)	€12.49 per €1,000, fraud rate: 1.3%	€7.41 per €1,000, or 58% of residual fraud.

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Explainability of scores:
Limited impact on payroll expenses

Detecting new potentially fraudulent flows can however quickly turn into a logistical nightmare since the applications must then be reviewed manually for legal reasons.

For the 20 cases reported every day by Bleckwen, the model is also able to provide insight and explanations: depending on the reasons and the corresponding instructions given, the time taken to review them varies from 5 minutes to 30 minutes at very most.

Thanks to accurate scoring combined with clear explanations, Carrefour Banque was able to limit the investigatory effort to 1.5 full-time equivalents.

Future plans:
A real-time, continuously improving process

It is still possible for Carrefour to evolve the solution using addition sources of data. These will make the machine learning models more intelligent and more powerful still.

The medium-term objective is also to switch from asynchronous mode to real time, or at least to move closer to it, given the complexity of Carrefour Banque's information systems.

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About Bleckwen

Since 2019, Bleckwen is committed to helping banks protect themselves and their clients against financial crime. Working closely with our customers and partners occupies a central role in our product development: we built our solutions in close cooperation with two major players in the financial sector: BNP Paribas and Carrefour Banque.

Our team of experts are passionate about innovation and helping you reach your goals for growth.

We are optimists by heart and we believe that artificial intelligence is an opportunity to improve our daily lives (and yours) while remaining in control.

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