

'A NEW KIND OF INDUSTRIAL REVOLUTION': AI, HUMAN JUDGMENT, AND THE FUTURE COMPLIANCE TEAM

Financial Crime Studio - Zurich, 24 September 2026. In conversation with Ingo Zentgraf, Chief Compliance Officer, NORD/LB Luxembourg S.A. Covered Bond Bank. Written by Oonagh van den Berg, CEO, Virtual Risk Solutions.

Ingo Zentgraf did not come to the Financial Crime Studio with a hype speech. The Luxembourg-based Chief Compliance Officer came with a map: where AI actually is inside financial institutions today, where it may go next, and the uncomfortable truth about the threats the industry is sleeping on.



Detection today, investigation next, decisions last

Asked where AI delivers the greatest value - detection, investigation, or decision-making - Ingo framed it as an evolution: *"I think it's more or less an evolution. Today we are more on the detection mode, where we start to learn AI, we start to implement agents. The next step is the investigation. And then the last part, the more complicated step, is decision-making - because by law, the decision has to be taken by the compliance officer."*

"Maybe in future, in three or five years, AI will be able to make well-founded recommendations, while humans remain responsible for review, oversight and final accountability. We have to understand how the agents are working. We need to trust in the decision of AI - and we need to review it."

For Ingo, the transition toward greater AI-supported decision-making therefore depends on understanding how the technology works, building trust in its outputs and maintaining appropriate human review. Human accountability remains essential, particularly in regulated environments where final responsibility cannot be delegated.

The underestimated threat: state-sponsored attacks on critical infrastructure

Asked what threat financial institutions still underestimate, his answer was the first of its kind all day:

"For me it's more or less a state-sponsored attack on critical infrastructure. That's the main topic at the moment - and the topic where the financial institutions are a little bit sleeping at the moment. It's more or less cybersecurity, but also the critical infrastructure: power stations, and the buildings of the bank."

The vector has changed, the conversation noted: attacks no longer need to be orchestrated in person, digital tools are cheap, and everything is for sale - fraud-as-a-service included.

The three-year model: connected data, AI agents and human judgment

His world-class operating model for three years out is built in layers:

"The basis is a group-wide integrated data environment. If you're an institution group, it's necessary that you merge your systems. Then you need AI agents which are screening the whole data - the transactional data, but also the static data, because you need to know your customer, your business partner. Then automatically processing agents checking everything and giving alerts. And then you need experts again - people with experience and professional judgment."

For Ingo, the value lies in combining the scale and analytical capabilities of technology with the experience and judgment of human experts. That division of labour - not replacement - is the point, and it set up the line of the day.

Bring data and business expertise together

Asked how institutions can make better use of the intelligence they already have, Ingo's answer was straightforward:

"It's simple. You just have to bring together data analysts and experts, business experts. That's the solution."

For him, that combination of technology, data and human expertise is part of a much broader transformation:

"I think it's more or less a new kind of industrial revolution."

Pair experience with digital natives

His closing advice to every financial crime professional watching: *"Don't trust just on your experience. The world is changing rapidly - really changing rapidly. You need to be open-minded, and you need to involve your younger colleagues as soon as possible, because they are the digital natives. You are the business expert. So I think this is the perfect match: old experienced people and young digital natives, for what is coming."*

He hires the same way: *"When I'm looking for new staff, I'm not looking for the compliance officer. I am looking for skills which are missing in the team - IT experts, or people who have business experience - and then I bring them together. The rest is learning."*

