



Case Study: BPN's AI-Evolution in Money Transfer Compliance



Arda Akay, CAMS, CGSS, CAMS Audit – Head of Compliance, Risk & Internal Control -BPN Payment & E-money Services

Tolga Kurt, PhD – Managing Partner, H3M Analytics Inc.

Introduction

In an increasingly complex financial landscape, staying ahead of potential risks is paramount for financial institutions. For BPN, a renowned player in the money transfer domain, ensuring rigorous compliance standards is more than a mandate; it's a commitment to its stakeholders. Enter H3M's advanced tools, **KROTON software modules**, and the **RUMI compliance search engine** transformed BPN's approach to uncovering and mitigating risks.



The Challenge

In the intricate web of financial transactions that BPN oversees daily, identifying suspicious activities can be akin to finding a needle in a haystack, particularly in risky geography. The challenge was two-fold:

- Detect potential high-risk customers amidst benign transactions with a low false positive ratio.
- Detect multiple related customers on a single case.
- Investigate the breadth and depth of these entities, including their associations and possible adverse media presence, before taking any regulatory action.

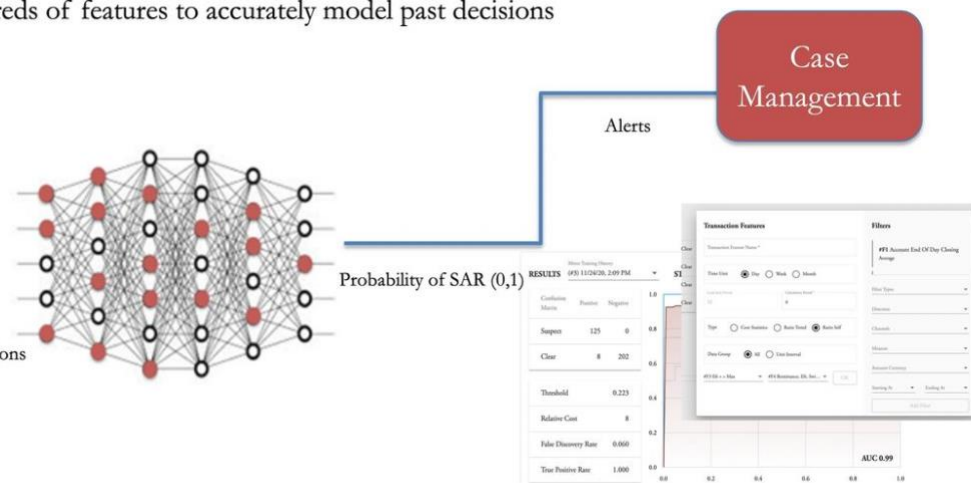
The Solution: A Multi-Pronged Approach with H3M's Innovations

Step 1: Pinpointing Suspicious Entities – Suspect Miner

The journey began with H3M's machine learning-powered **KROTON Suspect Miner** module. Instead of conventional rule-based systems that often yield numerous false positives, the module's adaptive learning algorithms scoured through BPN's vast transaction database. The result? A curated list of high-risk entities with **over 85% true positive alerts**, streamlined and prioritised. The current model utilises over 100 features spanning various location risks, CRM risks and transaction characteristics.

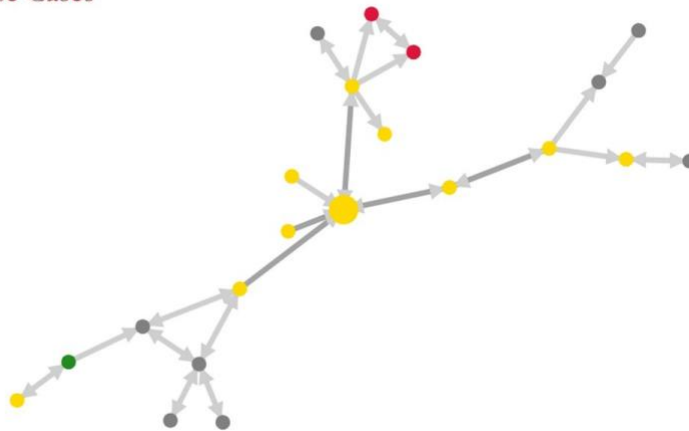
- Combining hundreds of features to accurately model past decisions

- Date of Birth
- Nationality
- Address
- Occupation
- Since first transfer
- Verification status
- Verified since
- Default currency
- Two-factor verify?
- Number of devices
- Location
- # of locations
- # of channels
- Consecutive multiple locations
- Location risk
- Source risk
- Destination risk
- ...
- Total value history
- Transaction history
- Cancellation history



Step 2: Unraveling the Network – Link Miner

Once potential suspects were identified, the next step was understanding the depth of their financial involvement. BPN deployed the KROTON Link Miner tool, revealing intricate transactional links and networks related to these entities. What could have been a months-long manual tracing process became an efficient visual map of connections, making the scale and structure of the network instantly clear.



The model enabled not only finding suspicious networks but also eliminated the subjectivity and relativity by different experts investigating bits and pieces of the same network. In addition, the redundancy removal algorithm removed non-suspicious links and nodes so that the final network is easy to analyse.

Step 3: Comprehensive Background Checks – RUMI Search Engine

RUMI (Research – Unveil – Monitor - Investigate): A free compliance-focused search engine. With a clear picture of the suspicious networks, BPN's next challenge was to delve deeper into these entities' backgrounds. Utilising H3M's RUMI, a search engine tailor-made for compliance, the team could access an array of data sources with unparalleled depth. From global sanctions lists, regulatory databases, and bitcoin wallets to infamous data leaks like the Panama Papers and company beneficial ownership databases, RUMI offered comprehensive insights at the click of a button.



RUMI Search Engine

X
Q

About 783,000 results (0.30 seconds) Sort by: **Relevance** ▾

'Bitcoin Bonnie and Clyde' plead guilty in Bitfinex hacking case - The ...
Washington Post › 2023/08/04 › bitfinex-hack-guilty-plea
 Aug 4, 2023 ... He and his wife, Heather Morgan, a marketing expert who moonlights as a rapper, were arrested last year on money laundering charges. Dubbed " ...

Meet the **crypto 'Bonnie and Clyde'**: A TikTok rapper who calls ...
Markets Insider › News
 Feb 12, 2022 ... A couple in their 30s, referred to as the **crypto "Bonnie and Clyde,"** have quickly come under the spotlight after being accused of conspiring to ...

Cryptocurrency - The Washington Post
www.washingtonpost.com › business › cryptocurrency
 FTX founder Sam Bankman-Fried has bail revoked, ordered into custody - PayPal launches digital token in push to capture **crypto** payments - **'Bitcoin Bonnie** and ...

Paralelism: The Untold Story Of How A YouTube Blogger Becomes



The result? Several flagged entities were linked to shell companies and had adverse media associations, offering concrete evidence of their suspicious nature.

Step 4: Synthesizing Information & Taking Action

With a treasure trove of data at their disposal, BPN synthesised the insights derived from Suspect Miner, Link Miner, and RUMI. The culmination was in multi-dimensions, including suspicious activity reports to FIU, black-listing and high-risk customer identification.

The Outcome

Thanks to H3M's suite of tools, BPN didn't just identify and report a potential financial threat. They showcased a proactive, comprehensive, and tech-driven approach to compliance, setting a benchmark for other institutions.

Highlighting the Effectiveness

- **Efficiency:** What would traditionally be a long-winded, resource-intensive process was streamlined into a systematic, phased approach. Each H3M module was pivotal, ensuring no stone was left unturned.
- **Accuracy:** By leveraging machine learning and AI, the risk of human error was minimised. The Suspect Miner's adaptability meant the system constantly evolved, improving its detection capabilities with each transaction.
- **Depth of Information:** RUMI's extensive database provided a depth of insights that conventional search engines could never match. From unearthing shell companies to detecting adverse media links, RUMI's capabilities were instrumental in painting a comprehensive picture of the entities in question.

Conclusion

In the high-stakes world of financial compliance, more than traditional methodologies is needed. As BPN's experience illustrates, H3M's innovative solutions – from the KROTON software modules to the RUMI search engine – are not just enhancements but necessities. By successfully unravelling a complex web of suspicious activities, BPN has fortified its compliance stature and set a precedent for other financial institutions to emulate.

About BPN: BPN Payment & E-Money Services, the first and only institution in Turkey to cooperate with Western Union in the retail sector for international money transfers, enables you to make your money transfers and bill payments within minutes with a network of more than 2.000 representatives providing domestic and international money transfer and bill payment services located all over Turkey.