

Monitoring Transactions Cannot Scale to Tomorrow's Volumes Payments Risk Management Needs a New Approach

Introducing Quantifind Payments Risk Intelligence

"In today's fast-moving payment landscape, traditional surveillance methods are insufficient to protect against financial crime. Scalable AI solutions are needed to navigate the massive reach of modern commerce and identify potential risks. Partnering with Quantifind offers cuttingedge AI technology to enhance payments surveillance capabilities with reduced false positive rates, even when the counterparties are not well known."

- Scott Nathan, Managing Director at Citi

Payments Screening and Monitoring Solutions Fall Short

Traditional payment risk management systems rely on rigid rules and outdated money laundering scenarios that fail to detect true financial crimes. These scenarios often overlap with legitimate customer behavior, causing false positives and missed threats. This drains resources, creates operational inefficiencies, and allows sophisticated financial crimes to go undetected. The lack of contextual analysis in counterparty relationships means transactions are assessed in isolation, missing key risk patterns. This results in a frustrating trade-off: the resources dedicated to manually processing numerous false positives offset the benefits of catching true financial crime. It's a zero-sum game.

Moreover, traditional transaction monitoring systems cannot scale to increasing transaction volumes. Typically built for on-premise deployment, they rely on fixed hardware that can't accommodate rapid growth, leading to performance bottlenecks and delays. These systems often use traditional relational databases, which must be optimized for modern data complexities. Maintenance costs soar as they stretch to their limits, diverting resources from critical areas. This inflexibility makes them unsuitable for today's dynamic, high-volume payment environments.



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Obsolete approaches suffer from the following:

High False Positives

Traditional systems generate many false alerts, each requiring time and effort from analysts.

This high volume of false positives consumes resources without providing corresponding benefits, leading to a net-zero outcome.

Missed Hidden Risks

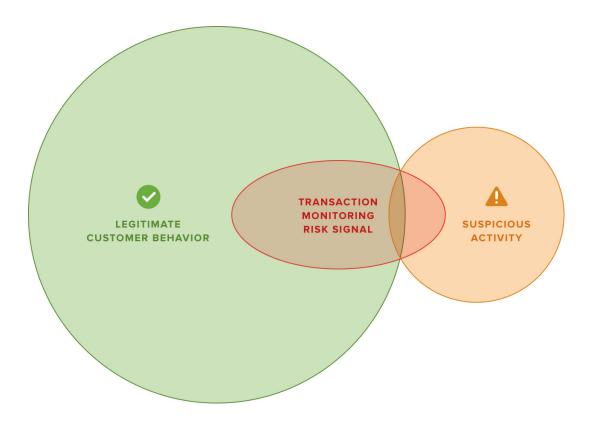
By focusing solely on transaction anomalies, traditional methods often overlook the broader context of customer behaviors and relationships, missing deeper, more insidious risks.

Manual Processing

The reliance on manual review processes slows down response times and introduces human error and fatigue, further diminishing the effectiveness of risk management efforts.

The Transaction Monitoring Conundrum

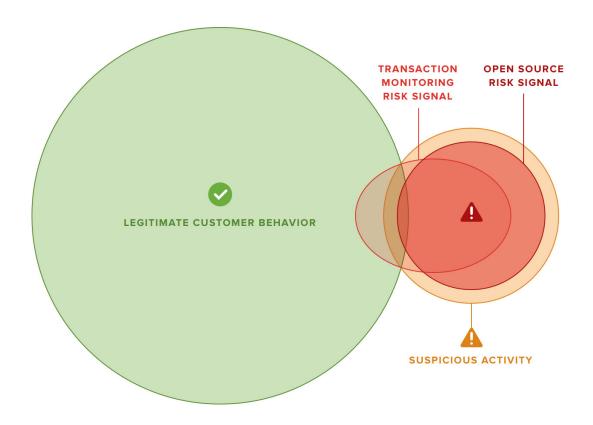
A legacy transaction monitoring approach misses hidden patterns and instead triggers illegitimate risk on legitimate customer behavior, causing many false positives and inefficiency.





The Real Risk Signal Approach

This approach leverages Quantifind's risk intelligence to discover risk in relationships and monitor and investigate who you're doing business with.



From Insufficient Monitoring to Effective Payments Risk Intelligence: Introducing Quantifind Payments Risk Intelligence

Quantifind Payments Surveillance is an advanced method that leverages purpose-built artificial intelligence (AI) and machine learning (ML) to provide a comprehensive and holistic risk analysis approach that spans pre-, during, and post-alert generation. Unlike traditional transaction monitoring, which primarily focuses on flagging transactions based on static rules, Quantifind Payments Surveillance analyzes customer and counterparty behavior and relationships at the pre-alert generation phase at scale and with unprecedented speed and accuracy.

- "There's a need within financial services for technology that prevents AML/KYC expenses from growing out of control because of exploding transaction volumes. If you try to use out-of-the-box generative AI, it will take you five years to run a single day's worth of data. If you try to do it manually, you'll be hiring 5,000 people."
- Ari Tuchman, CEO of Quantifind



The Benefits of Precise Language Models

Traditional transaction monitoring systems rely on static, predefined rules to flag suspicious transactions. These rules are rigid and need to adapt to changing financial crime patterns. As a result, they often fail to detect new and evolving threats, leading to higher false positive and false negative rates. The inflexibility of static rules makes it difficult to keep up with the dynamic nature of financial crimes. This is similar to a keyword-based approach to adverse media screening, where reliance on a static list of keywords (e.g. "fraud," "arrest") can lead to missed critical context if terms like "misappropriation" are not included.

In contrast, precise language models powered by artificial intelligence offer a more sophisticated approach. These models can analyze large datasets, understand complex patterns, and adapt to new data inputs. They provide higher accuracy in detecting true financial crimes while reducing false positives. Al-driven systems are dynamic and can continuously learn and improve, making them more effective at handling the complexities of modern financial crimes. Additionally, they operate much faster and can scale efficiently to handle large volumes of transactions.

Due to the exploding scale of payments, precise language model solutions must offer scalability and accuracy. A foundation language model with over 100 billion features would be orders of magnitude too slow to process high-volume payments. Therefore, a separation between model build and model runtime is required, where predictive features are learned on a massive language model but then implemented in a much more compact model for large-scale enterprise throughput. These reduced-dimensional models are also more transparent and explainable to regulators.

Quantifind uses this advanced approach to assess payment counterparty risk, utilizing transaction information and vast open-source information from news articles, regulatory enforcement actions, and company intelligence data. This method reverses the traditional problem-solving approach by focusing on external risks as triggers, allowing investigators to align these with transaction patterns and take appropriate actions. With configuration knobs to tune the model according to the risk tolerance of the financial institution, the alerts produced are designed to be both precise and relevant, significantly reducing irrelevant findings and enhancing the prevalence of material discoveries.

Key Benefits

Find hidden risks quickly and accurately—

precise language models combined with proprietary name science and best-inclass entity resolution ensure accurate, actionable risks are identified.

Scale your analytics to a limitless number of entities and their counterparties—

flexible architecture and highly performant implementation scales with the business, ensuring you never fall behind.

Get a holistic view of entity risk-

enrich all payment parties and counterparties with a holistic risk assessment based on information inside and outside the financial institution.

Customize the solution to

align your risk appetite with the implementation and only review the most relevant alerts.



The Quantifind Payments Risk Intelligence Approach

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1. Intelligence-driven Counterparty Risk Analysis

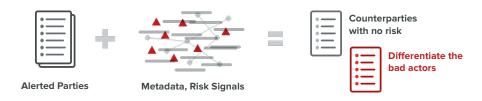
Pre-Alert Generation

Alert Generation

Post-Alert Generation

Risk intelligence on transaction counterparties:

- Upfront screening and identification of counterparties based on underlying characteristics (DOB, address, registration, etc.)
- · Extraction of risk signals on underlying counterparties differentiating good vs. bad actors



Benefits:

- Faster counterparty research/ investigation
- Risk-based investigation due to upfront knowledge about underlying counterparty risks
- Identification of potential false positives based on counterparty risk

Effort considerations / preconditions / challenges:

- Access to transaction and counterparty data
- · Availability of analytics infrastructure
- Counterparty risk is not representative of the entire alert risk

2. Automated Risk-based Prioritization and Workflow Optimization

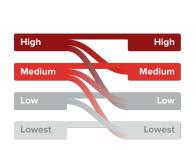
Pre-Alert Generation

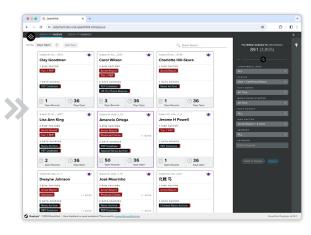
Alert Generation

Post-Alert Generation

Alert risk scoring and prioritization:

- Augment Quantifind's risk signals with transaction analysis and apply Al-based scoring model to classify and score alerts based on risk profile of underlying transaction activity
- Prioritize alerts based on risk score and segment into high, medium, low, lower (potential false positive)
- Automatically route alerts based on risk-based workflows and team specializations (e.g., Prior SAR highest alerts to a specific team)





Benefits:

- · Accelerated review of riskier alerts
- Potential auto-closures based on risk classification and automated research

Effort considerations / preconditions / challenges:

- Testing/Training data availability for accurate alert classification
- Alignment with procedures to define automated actions, especially concerning lowest risk potential false positives
- Iterative collaboration with client SME to refine parameters and review outcomes



3. Streamlined Alert Insights

Pre-Alert Generation

Alert Generation

Post-Alert Generation

Automated alert risk factor summarization:

- · Summarizes risk signals and underlying alert characteristics and explains the risk score
- Enables quick understanding of the risk score rationale and additional critical details about the alert at a glance



Alert Metadata Transaction Activity

Quantifind Risk Signals

Alert Risk Factor Summarization



Benefits:

- Reduces time spent analyzing risk factors
- Easily ingestible alert characteristics and risk score explanation
- Readily available summarized counterparty research

Effort considerations / preconditions / challenges:

- Customization to include or emphasize certain data points
- Iterative collaboration with client SME to define feature review summaries
- Access to underlying transactional data and infrastructure for LLM models to generate summaries

4. Narrative Generation

Pre-Alert Generation

Alert Generation

Post-Alert Generation

Automated alert/SAR narrative generation:

- Summarizes alert metadata, transaction activity, counterparty risk, investigator inputs, and related alert dispositions
- Drafts a comprehensive narrative using LLMs for alert closure and SAR escalation



Benefits:

- Faster alert closure with automated narratives
- · Expedites and simplifies QC
- Reduces human error





How to Assess Your Choices

New Criteria	Traditional Transaction Monitoring Solutions	Quantifind Payments Risk Intelligence
Uncovering Hidden Risks in Customer Relationships	Does not analyze the customer network of connections at scale and with speed and accuracy.	It goes beyond mere transaction monitoring by examining the relationships and behaviors of customers through network discovery.
Scaling Risk Analysis to Billions of Customers and Their Connections	Scale is constrained by manual processes the inability to handle high data volumes, and increased processing power.	Unlimited ability to scale to your needs.
Accuracy of Risk Detection, thereby Reducing false positives	Limited data coverage, antiquated Al models, and manual processes produce a high volume of false positives and false negatives.	Proven, purpose-built AI models detect true risks with high accuracy.
Speed of Quality Risk Discovery	Provides speed but at the expense of low-quality results.	Offers rapid and high-quality risk discovery through advanced Al and ML techniques.
Report True Financial Crime vs. Meet a SAR Quota	A defensive approach to compliance is needed due to accuracy, speed, and scale issues.	Enables proactive reporting of true financial crime by ensuring precise, timely, and scalable risk detection.
A Comprehensive view of customer behavior	Customer intelligence is limited to their transaction behavior. The aggregation of customer intelligence is often manual.	Quantifind integrates data from multiple sources, offering a holistic view of potential risks. This integration enables more consistent and thorough risk assessments, enhancing the organization's protective measures.



Public and Private Partnerships to Define Risk Cards

Public and private partnerships are crucial in the fight against financial crimes, particularly in supporting conservationist movements and ensuring the safety of our planet. These collaborations leverage the strengths and resources of both sectors to address complex challenges that neither could tackle alone. Public entities provide regulatory frameworks, enforcement capabilities, and access to critical intelligence, while private organizations contribute innovative technologies, data analytics, and financial resources.

At Quantifind, bridging sectors is part of our company strategy. Our contribution facilitates collective discussion through a Convergence program and walks the talk through a one-of-a-kind Risk Card initiative. Risk Cards are a vehicle to facilitate collaboration between domain experts, data scientists, and information consumers to create models that comprehensively identify signals and assess the relevance of those risks. These cards help "scale expertise" by operationally defining each risk and setting machine learning models up for measurable success and validation. Furthermore, the approach goes a long way toward establishing a transparent, responsible approach to AI by clearly documenting the model's risk-targeted definitions. Taking the taxonomy and documentation another step further, integrating this risk schema with a comprehensive knowledge graph that fuses information from many open source intelligence (OSINT) data sets, Quantifind hopes to help partners map and disrupt wildlife trafficking networks across the globe.

Together, public and private partnerships help to enhance the detection and prevention of financial crimes that threaten conservation efforts, such as illegal wildlife trafficking, human trafficking, and environmental exploitation. By working in tandem, public and private sectors can create more robust, comprehensive strategies that protect biodiversity, preserve natural habitats, and promote sustainable development, ensuring a safer, healthier planet for future generations.

Conclusion

A holistic Al approach to payments risk management addresses the challenge of massive payment scale by assessing the lifecycle from the first client touchpoint through the transaction. This changes the philosophy from reactive anomaly alerting to a proactive understanding of the risk of counterparties, automated network analysis, and a technology commitment to workflow optimization and installing automated steps efficiently and thoughtfully. In an era where financial crimes are becoming increasingly sophisticated and pervasive, it is clear that traditional payment risk management methods are no longer sufficient. The flaws of high false positives, missing genuine threats, and process inefficiencies hinder the ability of financial institutions to combat financial crimes effectively. The need for a paradigm shift to advanced payments risk intelligence is not just a strategic advantage but a critical necessity to discover the hidden criminal threats to a payment system—while simultaneously providing operational cost savings.





