SURVEIL-X™

Behavior

Predictive, Proactive, Proven
Surveillance for Rogue Trading

Protect Your Bottom Line and Reputation, Deter Rogue Traders Before They Act

A recurring phenomenon, rogue trading continues to wreak havoc on financial institutions around the world. Reckless trading behavior can dig deep holes in balance sheets, create incomprehensible losses, and topple otherwise healthy firms.

For example, nearly two decades ago, rogue trading contributed to the demise of one of the world's largest and most stable banks, Barings Bank, which had thrived for two centuries before its downfall. And more recent rogue trading scandals at other leading institutions have cost firms billions of dollars in trading losses and litigation costs, in addition to inflicting reputational damage. Companies can also face regulatory repercussions if there is any falsification of a firm's books and records, failures in supervisory control systems, or if the rogue behavior is tantamount to market manipulation or fraud. Notably, with more regulated employees working remotely, the potential for rogue trading is now amplified.

But even with so much at stake, catching rogue traders has proven elusive. In most cases, rogue trading schemes elude detection and don't come to light until many months or years after-the-fact, and by then it's too late – the damage is already done.

In their report, ***Behavioural Patterns in Rogue Trading: Analysing the Cases of Nick Leeson, Jerome Kerviel, and Kweku Adoboli in Light of the Control Balance Theory***, authors Hagen Rafeld, Sebastian Fritz-Morgenthal and Peter N. Posch affirm the importance of a timely detection of rogue trading by identifying key behavioral risk factors as early warning indicators.

Catching Rogue Traders: A Multi-Dimensional Problem

The fact is – while most firms have policies and procedures in place to prevent unauthorized trading, timely detection of rogue trading is difficult using today's legacy surveillance systems. Here's why:

1 Rogue trading is very broad

Unlike market manipulation which is governed by specific regulations and where the typologies are clearly defined, Rogue Trading is a very broad area, dictated by internal policies. Also, rogue traders engage in their misdeeds using various modus operandi. This makes detection more complex because many factors/parameters may need to be monitored. Moreover, rogue traders are quite good at devising creative ways to cover their tracks and elude detection.

2 Focus on things that have already happened

The key to mitigating losses and reputational damage from rogue trading lies in deterrence, not detection. But by definition, most surveillance systems are designed to detect rogue trading after it has already happened.

3 Too many alerts, too much noise

There tends to be a general lack of supervision regarding rogue trading but when surveillance is done, systems can generate too many alerts. There's simply not enough time to investigate every flagged trade so alerts may be ignored or dismissed. For example, in the case of notorious rogue trader Jerome Kerveil, Société Générale analysts missed 75 alerts between June 2006 and January 2007 and Mr. Kerveil was able to carry on his scheme for over 2 years.

4 Surveillance in silos

Surveillance and decision-making is all too often done in silos. Ultimately, this fragmentation of controls means there's no overall big picture view of regulated employee actions which would enable firms to accurately identify potential rogue traders. For example, different systems may set off alarm bells when a trader breaches his volume limits, has unusual patterns of cancellations or corrections or other deviations from normal trading patterns, or makes unauthorized P&L adjustments. Still other departments might track vacation time (another key indicator) but no one system ties all of these things together.

5 Excludes behavioral factors

Finally, today's surveillance systems largely focus on metrics related to the trade execution and other quantitative aberrations, to the exclusion of behavioral factors which are known to be associated with rogue trading. For example, in all three rogue trading cases (Nick Leeson-Barings Bank, Jerome Kerveil- Société Générale, and Kweku Adoboli-UBS), it was found that each trader had familiarity with back office processes), which should have flagged them for additional monitoring. In case of Kerveil, other behavioral factors emerged. He had not taken vacation in over 2 years, maintained erratic working hours and accessed systems during non-working hours. All of these tell-tale factors were overlooked.

Introducing SURVEIL-X Behavior

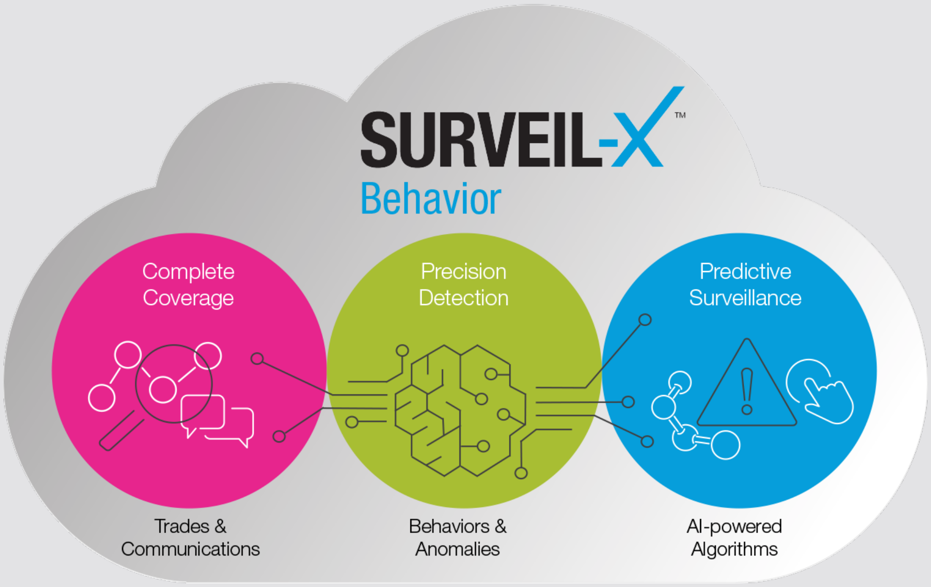
Predictive, Proactive, Proven Surveillance for Rogue Trading

To protect your firm from financial and reputational damage, you need a new predictive, proactive, proven approach to surveillance that focuses on deterrence, instead of simply relying on detection.

SURVEIL-X helps you identify and deter rogue traders before they act, thereby preventing financial and reputational damage to your firm. With SURVEIL-X's predictive surveillance, you can get out in front of rogue traders before they wreak havoc on your firm.

SURVEIL-X eliminates siloed decision-making by leveraging AI-powered predictive algorithms to analyze data across a wide range of behavioral, trading and communication risk factors to identify unusual behavior. By analyzing all of these factors together and using supervised and unsupervised machine learning to co-relate these early warning signals to past known rogue trading cases, SURVEIL-X is able to accurately assess each regulated employee's risk and assign an associated risk score.

Now, instead of detecting rogue trading months or years after it happens, you can deter it in advance, by proactively identifying traders who may have a propensity to act recklessly.



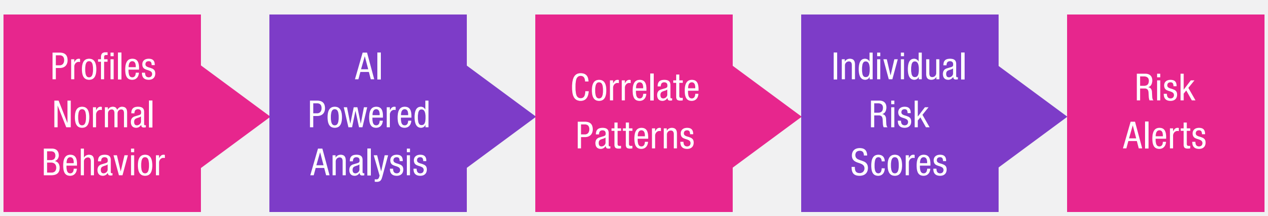
SURVEIL-X™ Behavior

Here's how it works:

1. Using multi-dimensional analysis SURVEIL-X Behavior first establishes profiles of normal behavior (for specific regulated users or groups of monitored employees), related to behavioral indicators, communications and transactions.

2. Using unsupervised machine learning SURVEIL-X Behavior flags trader patterns (anomalies) that fall outside of these normal profiles. The solution's powerful AI engine conducts multi-dimensional analysis, monitoring for key risk indicators across trade data, communications, and other employee behavioral data, including:

    - Not taking vacation
    - Back office background experience
    - Unusual access to office systems
    - Atypical working hours
    - Trading limit breaches
    - Unusual patterns of cancellations and corrections
    - Trading in products that are outside of a trader's known expertise
    - P&L that exceeds a certain de minimis or unusually large one-day P&L reports
    - + much more

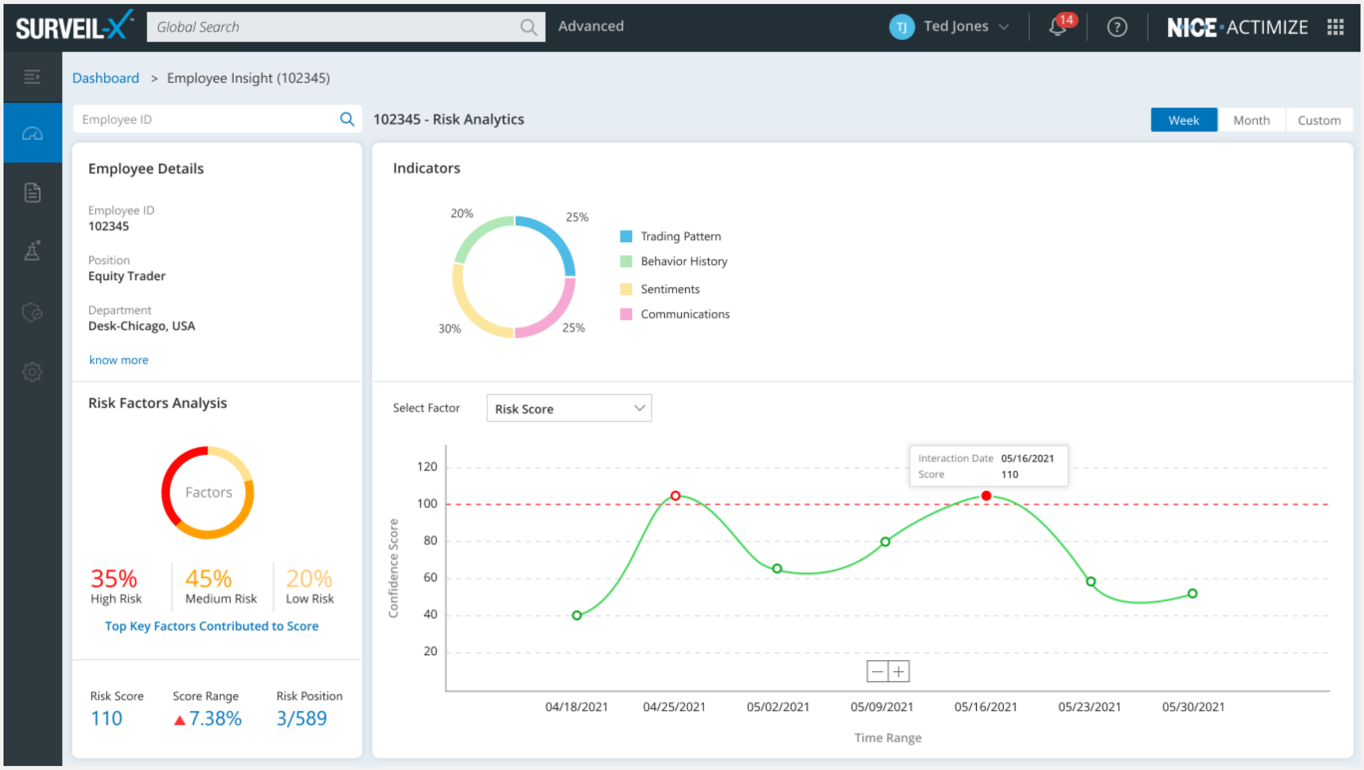


3. Additionally, leveraging NICE Actimize's 20+ years of subject matter expertise in financial compliance and partnership with several top tier financial institutions, SURVEIL-X Behavior also utilizes a comprehensive misconduct database to correlate patterns of employee behavior with historical confirmed cases of misconduct.

4. SURVEIL-X Behavior then uses all of the above analysis results to aggregate individual risk scores for traders. Through this extensive analysis, SURVEIL-X Behavior is able to interpret each trader's activity and behavior and objectively assign a risk score that is not possible using manual analysis.

5. These risk assessments are presented to supervisors via alerts and trader risk dashboards that allow supervisors to drill down into data to better understand why specific regulated employees have been flagged as risky.

6. SURVEIL-X Behavior makes it possible to easily identify traders at high risk of misconduct and put them under heightened supervision.



SURVEIL-X Screen Shot: Employee Insight

SURVEIL-X Benefits

- Deters rogue traders before they can act
- Insulates your firm from reputational damage and fines
- Reduces noise and false alerts that can cause rogue trading to be overlooked
- Leverages AI and multi-dimensional analysis of a wide range of data and behavioral risk factors
- Behavioral detection identifies otherwise undetectable hidden risks for higher level of protection
- Improves efficiency of compliance analysts through automation
- Insulates firm against reputational damage and fines due to behavioral risks
- Easy-to-use analytics self-development closes surveillance gaps

About SURVEIL-X

NICE Actimize's SURVEIL-X Holistic Conduct Surveillance offers unparalleled risk coverage for online brokers, buy-side and sell-side firms, insurance companies, crypto exchanges, regulators and more by enabling accurate detection and rapid, thorough investigation of market abuse, inappropriate sales practices, conduct risk and otherwise undetectable compliance risks to insulate firms from fines and reputational damage.

About NICE Actimize

NICE Actimize is the largest and broadest provider of financial crime, risk and compliance solutions for regional and global financial institutions, as well as government regulators. Consistently ranked as number one in the space, NICE Actimize experts apply innovative technology to protect institutions and safeguard consumers and investors assets by identifying financial crime, preventing fraud and providing regulatory compliance. The company provides real-time, cross-channel fraud prevention, anti-money laundering detection, and trading surveillance solutions that address such concerns as payment fraud, cybercrime, sanctions monitoring, market abuse, customer due diligence and insider trading.

Learn More

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