

Holistic  
Behavioral  
Analytics

# Behavioral Analytics: The Next Frontier of Surveillance

Holistic Behavioral Analytics uncovers hidden threats traditional analytics can't detect, reducing your regulatory risk and mitigating financial losses. It enables you to easily identify high risk individuals, spot changes in normal behavior and instantly open an investigation.

## Hidden Threats and the Risks They Pose

Traditional analytics utilize algorithms to detect known forms of market abuse that follow a predictable pattern, like front running. Threats that don't follow a predictable pattern such as conflicts of interest or abnormal trading fall outside of the traditional analytics net and remain hidden to the organization. Holistic Behavioral Analytics uncovers these hidden threats.

Regulations from FINRA, FCA, SFO and others require firms to detect improper conduct and effectively manage the firm. Firms lacking the systems and controls to detect hidden threats are vulnerable to these regulatory violations and substantial financial losses.

## Holistic Behavioral Analytics

Holistic Behavioral Analytics enables firms to answer the question: "How is this individual's actions or behavior putting the firm at risk?" This is different than traditional model-based analytics which provide yes/no answers to specific questions. In addition to uncovering hidden threats, using Holistic Behavioral Analytics together with our traditional model-based analytics helps firms more accurately assess alerts for known forms of market abuse such as insider trading, spoofing and marking the close.

Actimize's surveillance solutions enable firms to address both sides of the compliance coin – known and hidden risks. They also save analysts time, and reduce costs by correlating behavioral data with traditional alerts and displaying them together in our case manager, RCM. With this data at their fingertips, instead of spread across different systems, analysts make better decisions and execute investigations quicker.

Compliance, the front office control group, the COO and the risk team rely on behavioral analytics to mitigate financial losses, protect the firm's reputation and meet regulatory obligations. Our solution is equally at home with sell side firms, retail organizations and the buy side.

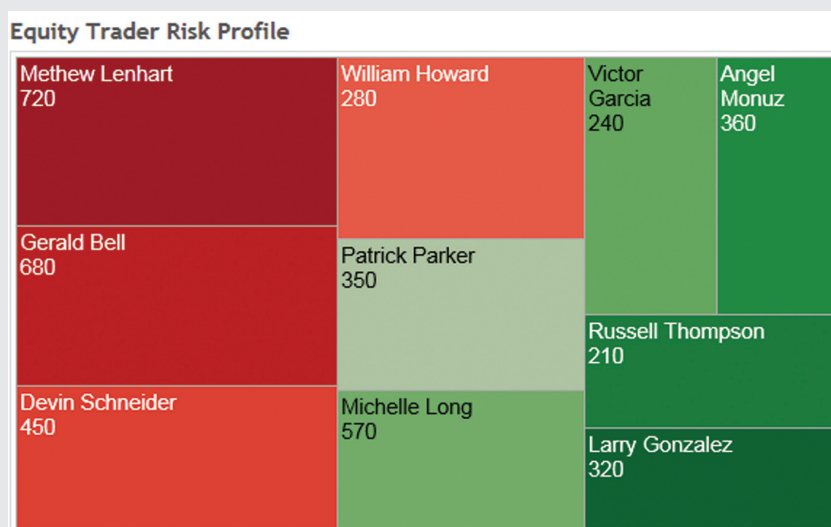


FIGURE 1:  
RISK DASHBOARD

# Holistic Behavioral Analytics in Action

Holistic Behavioral Analytics enables analysts to easily identify high risk entities, spot changes in their normal behavior and instantly open an investigation.

The risk dashboard (Figure 1) visualizes high risk entities and their risk score, enabling analysts to easily identify the biggest risks to the firm. An entity is usually an individual, account, broker, desk or counterparty. An entity's risk score is based on deviations from their normal behavior across multiple behavioral factors. Analysts can gain additional insight into how an entity's behavior is putting the firm at risk by examining their risk score for individual behavioral factors (Figure 2), their history for a specific behavioral factor and the products they're trading. If at any point in the process the analyst concludes the entity's behavior is putting the firm at risk, they can open an investigation or create an alert – mitigating the risk of a financial loss or regulatory violation.

Additionally, with a click of the mouse, firms using both Actimize's on-premises markets surveillance and Behavioral Analytics can view alerts generated by traditional analytics and the behavioral data associated with them together in RCM – our award winning case manager.



FIGURE 2:  
SAMPLE BEHAVIORAL FACTORS

## How It Works

A wide range of data including trade, P&L, communications and HR information can be incorporated into the Actimize Behavioral Analytics platform. This enables firms to measure a diverse set of behavioral factors such as trading outside of normal hours, daily P&L, method of communication and call duration. Holistic Behavioral Analytics then establishes a profile of normal behavior across each factor for an entity. An entity's normal behavior is based on their history or the history of their peers. Deviations from normal behavior for each factor are calculated and a risk score is assigned. The total risk score for an entity is the sum of the risk scores for each behavioral factor, which, is visually displayed in the interactive risk dashboard.

Firms can create their own behavioral factors and profiles in addition to using those that come out-of-the box from Actimize. The thresholds and risk values for behavioral factors, both custom and out-of-the box, can be set by the firm.

## Summary

Holistic Behavioral Analytics is the next frontier of surveillance. It enables firms to reduce their regulatory risk and mitigate financial losses by uncovering hidden threats traditional model-based analytics can't detect, such as conflicts of interest. Used in conjunction with our traditional analytics it provides additional insights to help analysts more accurately assess alerts for known forms of market abuse such as insider trading.

Holistic Behavioral Analytics utilizes a wide range of data – trade, P&L, communications, HR and more – along with cutting edge technology to easily identify high risk entities and spot deviations in normal behavior.

Compliance, the front office control group, the COO and the risk team at sell side firms, retail organizations and the buy side all rely on behavioral analytics.

Actimize's experience and position as a market leader in traditional analytics, advanced analytics – including Behavioral Analytics – and communications surveillance is unrivalled. It enables us to provide firms with market proven, 360° protection -- a must-have in today's environment.

## 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 investor's 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.

© Copyright 2017 Actimize Inc. All rights reserved.