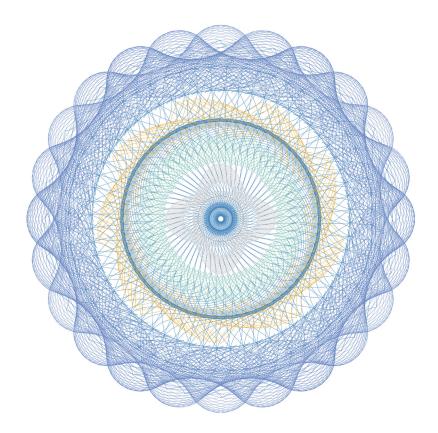# Deloitte.

Regulatory analytics: Keeping pace with the SEC

5 insights into compliance

As 2016 drew to a close, the U.S. Securities and Exchange Commission (SEC) touted its "vastly increased use of data and data analytics to detect and investigate misconduct."[1] The increasing scope and sophistication of analytics employed by regulators compel financial services firms to examine how they can use analytics, both in a retrospective "look-back" manner and proactively, to address growing scrutiny and enforcement. Here are five insights that can be helpful in formulating a regulatory analytics strategy.

Regulators may be more steps ahead of you than you think

Spawned in the aftermath of the financial crisis, the SEC's analytics capabilities are the result of long-term investment in tools, people, and capabilities. The Commission has built an advanced system that continues to evolve today.

While in the past, regulators relied on simple spreadsheets provided by a company to investigate its activities, they now want raw data, which they can analyze in deep detail using leading-edge tools developed by, and with, industry partners. In the past two years, the SEC Enforcement Division's Center for Risk and Quantitative Analytics "has provided data analytic expertise for over 100 cases against more than 200 entities and individuals involving various matters. The division's Analysis Detection Center is using "billions of lines of bluesheet trading data…to build insider and abusive trading cases."[2] There is no sign that regulators will ease up on their scrutiny.

Analytics can uncover diverse mistakes and wrongdoing

From trading and portfolio management to advisory services and solicitation, investment firms operate in a minefield of regulatory requirements and potential conflicts of interest. For example, a portfolio manager gets nonpublic information related to a potential merger and trades ahead of the announcement. Another manager executes a cross-trade to a client's detriment. Or, an adviser pushes favorable trades to performance-based clients ahead of fee-based clients. Analytics conducted as part of a regulatory investigation or review can uncover such occurrences, whether willful or mistaken. Alternatively, a investment firm can proactively use regulatory analytics to identify and address the problem before it comes into regulators' view (see "Analytics-vulnerable conflicts of interest").

Risk topics ripe for analytics

Investment firms can encounter many different conflicts of interest. Analytics, whether conducted by regulators or investment firms themselves, are likely to uncover conflicts in several categories, including:

Client Trading

Ethics

Portfolio management

Solicitation

Investment advisor fees/expenses

Small doesn't mean invisible

Large firms with global operations, thousands of employees, and massive assets under management might intuitively be considered the primary targets for regulators to pursue using analytics. However, these metrics aren't the only criteria of concern; data volume may tell the real story. A hedge fund with a much smaller workforce and footprint engaged in high-frequency trading could generate as much data as a larger firm that is pursuing a comparatively mainstream investment strategy.

Firms can level the playing field with analytics

New ways of analyzing big data, small data, and unstructured, fragmented "dark data", as well as concurrent advances in analytics software and platforms, provide organizations with an opportunity to stay a step ahead of potential violations. Regulatory analytics, a growing category of information analysis, involves gathering and storing relevant data and mining it for patterns, discrepancies, and anomalies. Using regulatory analytics with a forensic lens, firms can detect and head-off potentially improper transactions or wrongful actions before they create peril for the firm. Regulatory analytics is an element

of enterprise fraud and misuse management (EFM), the capability to screen transactional activity for evidence of fraud in real-time, as well as diagnose external fraud rings that may threaten the organization.[3]

EFM employs a number of advanced analytics techniques, including:

- Rules-based monitoring to identify known fraud and compliance risks

- Anomaly detection to recognize potential risks

- Network analysis to identify potentially worrisome collusive activity across entities

- Text analytics to mine and sense written documents for insights

- Visual analytics/dashboards to summarize actionable results for stakeholders

Using these techniques, firms can process enormous volumes of structured numerical data captured and stored in their systems related to organizational processes and transactions. They can also integrate structured data with other sources of information, including unstructured data that is typically difficult to analyze in bulk.

Advanced EFM systems and techniques for compliance and risk monitoring help facilitate early identification of noncompliance and fraud. They improve on previous generations of analytics tools in four ways:

- **Broader.** Using scalable technology to analyze structured and unstructured enterprise data.

- **Smarter.** Enabling discovery of known and previously unknown issues using powerful, self-learning analytics and specialized tools and technologies.

- **Faster.** Providing organizations with risk-based alerts, improved insight, and more actionable information.

- **Clearer**. Uncovering more suspicious activity while producing fewer false positives.

Implementing regulatory analytics requires a vision, a road map, and achievable milestones. A good way to start is by developing prototype solutions that demonstrate return on investment.

Analytics provide benefits beyond compliance

The need to meet regulatory requirements is the obvious primary driver of regulatory analytics. However, the benefits of analytics investment can go well beyond anticipating and avoiding trouble. Analytics can provide root-cause insights into the effectiveness of investment activity or the costs associated with employee turnover, as well as how efficiently board reports and regulatory filings are being prepared. Analytics can also assist in complying with new rules adopted by the SEC in late 2016 aimed at enhancing the quality of information provided to investors and enabling the commission to more effectively collect and use data.[4] Finally, insights gleaned through analytics can help identify efficiencies that can streamline operations, lower costs, and enhance service quality.

Our take: Analytics can drive both compliance and business performance

Regulators have embraced analytics as a powerful tool to find answers, gain insights, and identify red flags in investment firm data and filings. So much so, that some investment managers that think they have adequate compliance capabilities in place are actually caught flat-footed when asked by a regulator for compliance data, incapable of providing requested data in the time frame demanded. In response, forward-looking firms are beginning to recognize that a new approach to regulatory analytics can be invaluable in identifying and proactively addressing issues before they come into the view of regulators. Not only can those capabilities help in producing information faster in response to regulatory inquiries, but they can also be focused inwardly to spotlight opportunities for operational and competitive improvements.

Contacts

Maria Gattuso
Principal | Deloitte Advisory
Deloitte & Touche LLP
mgattuso@deloitte.com

Michael Chung
Managing Director | Deloitte Advisory
Deloitte & Touche LLP
michung@deloitte.com

Bruce Treff
Managing Director | Deloitte Advisory
Deloitte & Touche LLP
btreff@deloitte.com

Robert Zakem
Managing Director | Deloitte Advisory
Deloitte & Touche LLP
rzakem@deloitte.com

Satish Lalchand
Principal | Deloitte Advisory
Deloitte Transactions & Business
Analytics LLP
slalchand@deloitte.com

Jamie Holden
Senior Manager | Deloitte Advisory
Deloitte & Touche LLP
jaholden@deloitte.com

Carol Tannous
Senior Manager | Deloitte Advisory
Deloitte Transactions & Business
Analytics LLP
ctannous@deloitte.com

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