

Coalition Greenwich

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Q2 2023

The Future of Trade Surveillance

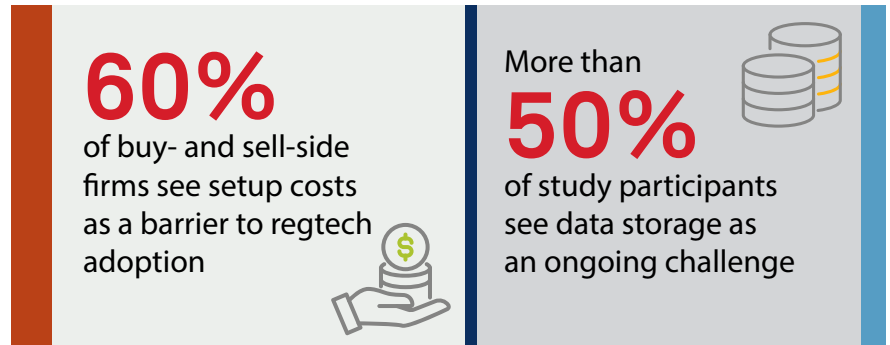


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Executive Summary

This Greenwich Report explores several drivers of investment in surveillance technology. These range from the system upgrades via new technology, better data, more analysis tools and methods, and connecting disparate systems and information. More specifically:

- Surveillance capabilities have grown substantially over the past three years, driven in part by the global pandemic and the subsequent emergence of new communication channels and the explosion of data. Research respondents commented that the volume of data fed into surveillance tools has increased anywhere from 12% to 15% in just the last year.
- Consequentially, investments in regtech have increased steadily (by 20% each year since 2020), culminating in an estimated \$1.8 billion on technology spending globally in 2022. Steady increases were observed across both buy- and sell-side firms. Drivers include post-pandemic and macro effects, such as the introduction of more communications channels resulting from work-from-home and hybrid work environments coupled with unpredictable and volatile markets.
- Surveillance gaps have arisen out of a confluence of factors: increased volatility in the market, growing trading volumes, new communication modalities used by regulated employees, operational uncertainty, and regulatory and reputational concerns. As a result, 72% of study respondents believe technology spending will continue to accelerate in 2023 and beyond.
- Regtech barriers still exist. Although firms have many regtech aspirations and wants, approximately 60% of buy- and sell-side firms in this study feel that set up costs—including technology infrastructure, internal support staff and even time needed to learn and adapt to new systems—are a non-trivial barrier to implementing modern regtech.¹ Some of the more forward-looking professionals we spoke with believe these costs are well worth it in the longer term and will save resources and time, ultimately reducing total cost of ownership (TCO).

¹ See Coalition Greenwich: [Capital Markets Firms Ramp Up Surveillance Technology Investments](#); November 29, 2022

- Overall, the future is bright for regtech improvements and investment despite cost challenges. Study participants feel optimistic about modern tech adoption, such as AI/ML and cloud, and better integration of systems. When asked whether the industry is at a turning point that demands more modern compliance systems and technology, over 50% agree the space is ripe for a tech upgrade.²

METHODOLOGY

In Q3 2022, Coalition Greenwich interviewed several dozen compliance, front-office and risk professionals of Tier 1 and regional sell-side banks and brokers, buy-side investment firms, numerous data providers, as well as major service providers in the United States to better understand trends in surveillance spending and challenges presented by evolving communications channels and growing data sets. The heads of business and executives participating in this research represent a meaningful portion of the capital markets surveillance technology ecosystem. Coalition Greenwich estimates and analyses are based on these conversations and proprietary data.

Introduction

A growing regulatory burden coupled with a challenging market environment has driven institutional markets firms to increase their investment in surveillance technology. The buy side and sell side alike are interested in improving their trade-related surveillance capabilities, as well as their ability to surveil newer and increasingly sophisticated areas like electronic communications (eComms), video communications (vComms) and audio communications (aComms).

To better understand these trends and where regtech is headed, Coalition Greenwich spoke with market participants and service providers to better understand trends in four key elements of surveillance technology (below). The findings act as a benchmark for financial services firms working to maintain and enhance their surveillance technology going forward.

The research found that now more than ever, both buy-side and sell-side firms are focusing on:

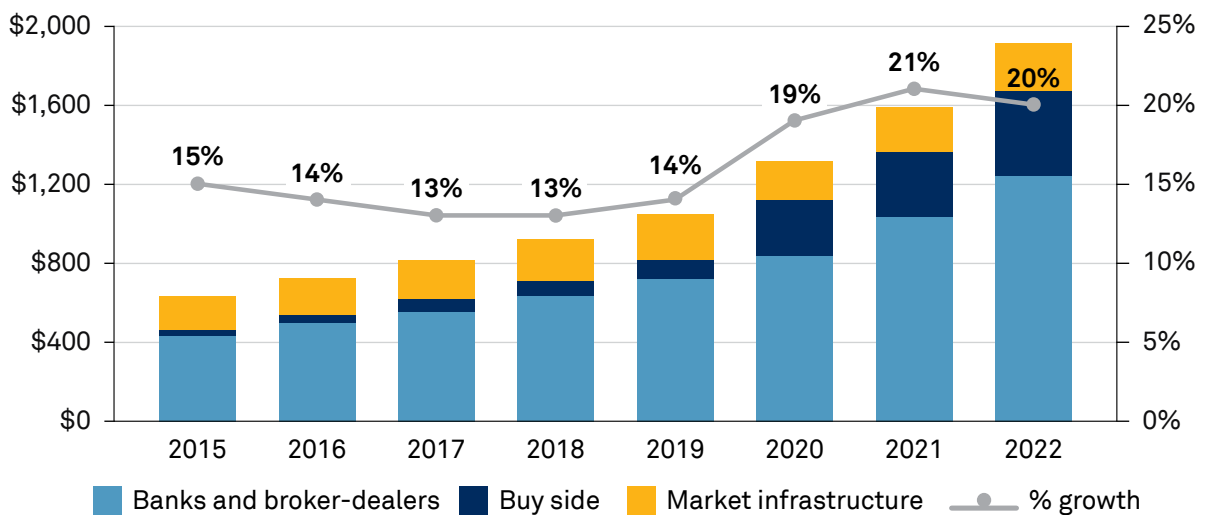
- **Efficiency:** Achieving greater efficiency through a more holistic approach is a key goal of compliance professionals.
- **Integration:** Specifically, solutions that enable communications surveillance across all channels, as well as integrations to more complex data sets and sources, are of great interest.
- **Operating model:** Optimizing and scaling data management practices to provide consistent data from multiple sources, allowing for efficient apples-to-apples comparisons.
- **Artificial intelligence (AI) and machine learning (ML):** Whether used to augment in-house capabilities or embedded in externally developed solutions, AI/ML advanced technologies are set to play a major role in the future of surveillance.

² See Coalition Greenwich: [Capital Markets Firms Ramp Up Surveillance Technology Investments](#); November 29, 2022

Driving Factors Behind Regtech Spending Growth

A number of forces are driving firms to increase their spending on surveillance solutions. Our recently published research³ found that surveillance technology spending grew to \$1.8 billion in 2022, a year-over-year increase of 20% for broker-dealers and 30% for buy-side firms.

Surveillance Technology Spending Market Growth 2015 to 2022



Source: Coalition Greenwich estimates based on data collected from and conversations with platform providers and market participants between 2020 and 2023.

Starting in early 2020, the global pandemic created shocks to the market and challenges for compliance teams. Firms needed to urgently grapple with challenges around surveilling large numbers of regulated employees who had shifted to working from home in a matter of weeks. Although many firms and front-line staff are now back to full-time work in the office, others are using hybrid models—and the goal posts keep shifting. The goal posts for surveillance are shifting too, with growing data feeds and communication challenges. This requires new surveillance technology and approaches.

Among our interviews, several traders mentioned that market activity has also resulted in more investment in surveillance technology. Volatility created by macro events (including rapidly rising interest rates and efforts of global central banks to combat very high and persistent inflation) has led to increased market churn. Over the course of 2022, volatility remained relatively high compared to pre-pandemic levels, while greater amounts of electronic and systematic trading increased flows in several asset classes. 2023 has also had a volatile start and may present more challenges as teams contemplate the possibility of economic recession. Taken in tandem, firms will need to arm themselves to deal with swaths of data resulting from increased trading and communications activity and continue to grow their investments in regtech.

³ See Coalition Greenwich: [Capital Markets Firms Ramp Up Surveillance Technology Investments](#); November 29, 2022

Given today's market forces, regulatory compliance is an area to keep a sharp watch on, according to regtech analysts. Given the volumes of data, regulatory compliance can't live in silos or hinge upon old and outdated systems. Study participants collectively believe when firms don't have their ducks in a row, it affects their front office, and order flow may be pulled back. The Consolidated Audit Trail (CAT) in the U.S. is an important case study, since it involves a stringent core window to report an event to FINRA. Many believe surveillance could come under similar scrutiny from regulators, requiring faster turnaround times to report suspicious issues.

“Given today's volume of data, regulatory compliance can't live in silos or hinge upon old and outdated systems.”

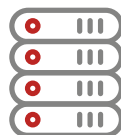
Among firms in our study, communications data increased between 12% and 15% from 2020–2022. This dynamic has created havoc for firms in their quest to aggregate, store and surveil communications. In many ways, this dynamic has resulted in compliance haves and have nots. For example, the pandemic and subsequent shifts in work preferences created setbacks for firms that were less tech-savvy and weren't capable of keeping up with employees working from home or hybrid work. At the same time, the pandemic motivated investment in much more reliable platforms and workflows and better integration of systems.



Volume of communications data has **grown 12% to 15%** in 2 years' time



Over 60% of buy- and sell-side firms agree investment in the integration of trading, aComms, eComms and vComms is driving regtech spend compared to less than half 3 years earlier



More than 50% of firms believe the storage of vast amounts of data will challenge firms well into the future

The integration of different types of surveillance information is becoming critical. In a study conducted in 2020, we found that fewer than half of firms participating had merged their trade and communications surveillance. Today, over 60% of firms⁴ have integrated these different data types and are setting themselves up for a holistic surveillance approach and a more complete compliance framework. The shift away from disparate systems is expected to continue. Study participants emphasized the growing need for the consolidation of resources and systems to streamline processes and bring down costs.

Banks received hefty fines from regulators, and more are coming. The global pandemic and work-from-home phenomenon opened up use of new communication channels for regulated employees (like Microsoft Teams and mobile messaging apps). The problem is surveillance of these new modalities did not keep up, and firms were fined billions for these monitoring lapses. As the communication technology used by regulated employees continues to evolve, firms will need to step up their game in order to ward off nefarious conduct, monitor these new channels and avoid regulatory breaches and fines.

“The storing of data and analytics is a huge issue with much room for improvement.”


Compliance Professionals Have Many Needs

We have seen the secular drivers of increased regtech spending and investment, but there are also technological factors at play, in both the compliance space and the business areas that compliance oversees.

Advanced surveillance system capabilities are also creating demand for more investment. Among these capabilities are advanced technology applications, including AI/ML, more interoperation capabilities, like data platforms and aggregation tools, and the ability to scale systems in a flexible manner as needed. AI/ML are being adopted at a faster pace to deal with inefficiencies in pattern recognition that lead to an excessive amount of false positives—the bane of every compliance team. According to study participants, advanced technology will also make interoperability of up- and down-stream processes, internal and external data and analytical tools a greater reality.

⁴ See Coalition Greenwich: [Capital Markets Firms Ramp Up Surveillance Technology Investments](#); November 29, 2022

Today's Technology Must-Haves and Future Desires

Today		Future
System openness/ability to speak to other upstream and downstream systems	<p style="text-align: center;">Most important</p> 	More unstructured and other data inputs and aggregation built on top of advanced technology platforms
Initial adoption of AI/ML and cloud-based infrastructure		Accurate natural language processing (NLP) capabilities
Expanded multi-channel surveillance offerings		Ability to quickly deal with unexpected market and regulatory changes
Growth in strategic partnering, consulting and data resources		Software-as-a-service (SaaS) offerings/ more overall knowledge of the surveillance space
Improved overall value proposition/focus on system look and feel		Greatly improved user interface/user experience (UI/UX) with much more visualization
System simplicity		Vastly improved integration capabilities with additional internal and external systems
More metrics to highlight best anomalies/ reduce false positives		<p style="text-align: center;">Least important</p>

Source: Coalition Greenwich 2022 Trade Surveillance Study

When asked where they'd like to see surveillance capabilities heading in the next few years, surveillance participants pointed out the following:

- **A holistic approach** to trade surveillance is a much sought-after goal. The combination of trade monitoring, eComms and voice surveillance to create a full picture of the trading process is becoming a reality as more visualization tools, customized alerts and other functionality are being developed and funded to “connect the dots.” At some point, a unified surveillance process will be a necessity for firms that wish to remain compliant. Interviewees expressed the importance of system openness as well, since data and other tools need to work together to achieve this goal.
- **Advanced technology**, such as the use of AI/ML, is playing a major role in creating new opportunities for end users by augmenting in-house capabilities and workflows. For instance, redundant and error-prone tasks may be automated away to allow compliance staff to focus on more important tasks. As the industry searches for ways to better navigate complex data through ever-expanding channels, the use of AI/ML is set to become a differentiator.
- **The cloud** will be needed to support the creation and consumption of expanding data sets, a key challenge for compliance professionals in coming years. Several study participants noted the benefit of cloud-computing capabilities to aid in this process as their teams move away from on-premises applications. The benefit of the cloud’s elasticity and flexibility will allow firms to use more data to more accurately surveil activities and aggregate more meaningful information.
- **A laundry list of desired improved compliance capabilities** includes the desire for more outsourcing. Software-as-a-service (SaaS) capabilities to help reduce cost and improve specific areas of the workflow—especially where there may have been a lot of worker turnover and/or redundant tasks—should be automated or outsourced. The intent on focusing more attention and skill on higher-value tasks is a top priority.
- **Improved visualization** is also much in demand by compliance professionals as the industry shifts away from a tabular world to a more dynamic and interactive one. New and improved charting capabilities can go a long way toward helping compliance personnel quickly consume and manipulate data. Ideally, the goal of improved visualization should be to help the compliance officer easily understand and interpret data without requiring manual number crunching and data normalization.

Looking Toward the Future

Market mishaps, the evolving regulatory landscape, advanced technology, and user demands for new and improved functionality will drive regtech system development in the coming years.

Overall, the future looks very bright for regtech improvements. In spite of the regtech adoption speedbumps, investment in surveillance technology modernization needs to comply with ever-changing regulations, and bolstering efficiency remains a top objective for compliance professionals. Study participants feel optimistic about the pace and direction of modern tech adoption. Before the pandemic, spend barely surpassed the billion dollar mark in 2019. Since then, the push for surveillance to accommodate more data and communication channels has motivated nearly twice the amount of spend—a vast improvement.

Investment in surveillance systems is expected to continue to build on strong growth trends. Firms on both the buy side and the sell side expect to continue to improve their surveillance capabilities and workflows throughout 2023 and beyond. The global pandemic, which resulted in new work-from-home communication modalities and an explosion of communications and market data, required financial services firms to adapt, and ongoing macro events and regulations will keep compliance professionals on their toes as well. As surveillance needs continue to evolve, technology will need to keep up.

There are many current and future wants tied to surveillance functionality. Over 50% of professionals we interviewed feel that the industry is ripe for a surveillance tech upgrade. However, challenges, including the startup costs connected to surveillance investments, are sobering. While spend may represent shorter term pain for some compliance teams, the longer term objectives to be gained are likely worth it. For instance, the shift toward more integrated and complete systems, which provide open architectures capable of linking other systems and data, will ultimately improve efficiencies, keep staff focused on higher value tasks and lower TCO—all of which improve the overall compliance process.

Lastly, investments in surveillance technology will continue to grow—because they have to. Markets are only getting more complex, regulations more onerous, and the reputational risk that comes with a surveillance misstep is gigantic. Thankfully, technology is keeping up with business requirements, and regtech providers are pushing forward to implement the latest technology, ensuring markets and their participants remain safe and compliant.

About NICE Actimize

NICE Actimize is a leading financial compliance solution provider, serving more than 90 percent of the largest investment banks globally. NICE Actimize's compliance solutions assist customers in the capture of trade conversations and trades, analyzing them for potential risk, and correlating trade conversations with trades for trade reconstruction. The company's compliance solutions make automated and intelligent holistic trade compliance programs possible and enable FSOs to more efficiently comply with regulatory requirements, including MiFID II, MAR, FX Code of Conduct, Dodd-Frank and future directives.

Learn more by visiting www.niceactimize.com/compliance

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