

WHITEPAPER

Managing Risk Exposure in an Increasingly Complex Landscape

Combine a Consolidated Data Foundation, Entity Resolution and Network Risk Analysis to Enable Effective Compliance Transformation

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“Now, more than ever, organizations are facing an increasing risk surface that cannot be addressed by adding more headcount. To keep up with evolving threats, organizations must equip risk managers with technology that enables teams to improve processes and stay ahead of risk.”

—Stuart Jones, Jr. CEO Sigma

More Complex Risks Require New Management Strategies

Financial institutions and global enterprises face an increasingly complex risk environment with frequently expanded sanctions and updated regulations. Meanwhile, many criminals and sanctioned entities have the resources to invest in powerful technology and expertise to evade standard detection practices. Organized cybercrime is so wealthy that if it were a country, it would be the world's third-largest economy,¹ and Russian oligarchs' wealth continues to grow despite increasing international sanctions since the start of the war in Ukraine.²

Bank and business stakeholders also have rising expectations for meeting environmental, social and governance (ESG) standards. ESG is important for building long-term value through what McKinsey describes as social license — “the perception by stakeholders that a business or industry is acting in a way that is fair, appropriate and deserving of trust.”³

Many organizations have considerable resources to perform customer due diligence (CDD) and meet minimum KYC requirements, but those resources are no match for the pace and scale of change. The “rate of regulatory change” is now an internal challenge for 44% of global corporate banks, and risk management practices generate friction between operations and compliance teams at 46%.⁴ In the first

In this white paper, we'll explore:

- *why the status quo is untenable*
- *what the ideal risk management state looks like*
- *what institutions require to achieve the ideal state*

We'll also provide a checklist for organizations to assess their current state and plan their transformation strategy.

year following Russia's invasion of Ukraine, the Office of Foreign Assets Control rolled out sanctions on over 2,500 entities.⁵

Fragmented data streams, legacy technology platforms, manual searches and calendar-based customer information updates are already forcing many institutions to tread water in terms of compliance. As a new wave of regulations and expectations rolls in, these organizations need to navigate a more challenging environment more effectively.

A Transformative Approach to Data-Driven Risk Management

A strategy that includes consolidated data foundation, effective entity resolution and network risk analysis can help organizations manage their risk more efficiently and with greater efficacy.

Organized cybercrime is so wealthy that if it were a country, it would be the world's third-largest economy...

1. Cybercrime Magazine, [Cybercrime To Cost The World 8 Trillion Annually In 2023](#), October 17, 2022.

2. Forbes, [Why Western Sanctions Failed to Truly Impact the Wealth of Russia's Billionaire Oligarchs](#), April 13, 2023.

3. McKinsey Sustainability, [Does ESG really matter—and why?](#), August 10, 2022.

4. Fenergo, [KYC in 2022](#), 2022.

5. U.S. Department of the Treasury, [FACT SHEET: Disrupting and Degrading – One Year of U.S. Sanctions on Russia and Its Enablers](#), February 24, 2023.

The Status Quo Is No Longer an Option

The current risk landscape is so complex and vast that even large enterprises with extensive compliance resources are often penalized for violating sanctions. In the first half of 2023, Office of Foreign Assets Control (OFAC) fines against six organizations totaled more than \$549 million⁶—more than 10 times the total of OFAC fines in all of 2022.⁷

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KYC

Know Your Customer

Well-known and well-regulated processes of verifying customers to prevent fraud. Falls under the umbrella of Anti-Money Laundering requirements.

KYCC

Know Your Customer's Customer

Additional measures to understand who your clients do business with, ensuring transparency and risk mitigation throughout the entire business relationship chain.

As regulations increase in number and scope, KYC alone is no longer adequate for businesses to manage their risk properly. KYCC provides more visibility into the supply chain to help organizations maintain compliance with several recent regulations, including:

The Uyghur Forced Labor Act strengthens the ban on imports of raw materials and products made with slave labor in the Xinjiang Uyghur Autonomous Region, as well as goods that are “likely to contain inputs from that region.” To avoid seizure of goods and other penalties, DHS says companies “should exercise due diligence and closely examine your entire supply chain.”⁸

The German Supply Chain Due Diligence Act sets requirements for human rights, environmental practices, and the due-diligence practices to meet them. These practices include using a risk management system, evaluating KYCC risk, and responding immediately when a violation occurs.⁹

War-related sanctions against Russia and other countries. As long as Russia continues its war in Ukraine, it's likely that the U.S. and EU continue to add sanctions, not only against Russia and its ally Belarus but also potentially against third countries that violate trade restrictions.¹⁰

6. OFAC, [Civil Penalties and Enforcement Information](#), accessed May 10, 2023.

7. OFAC, [2022 Enforcement Information](#), accessed May 10, 2022.

8. U.S. Department of Homeland Security, [UFLPA Frequently Asked Questions](#), accessed May 10, 2023.

9. Supply Chain Brain, [Why U.S. Companies Can't Ignore the German Supply Chain Act](#), May 5, 2023.

10. Reuters, [No quick deal in sight as EU countries start talks on new Russia sanctions](#), May 10, 2023.

Sanctions and compliance violations aren't the only risks, of course. There are other legal risks, as well. For example, a recent class action by Jeffrey Epstein's sex trafficking victims against Deutsche Bank resulted in a \$75 million settlement. The suit charged the bank with "missing warning signs in Mr. Epstein's accounts that he was engaged in wrongdoing" during the bank's five-year relationship with Epstein.¹¹

Identifying risks that are constantly changing is also clear in regulatory guidance, as several jurisdictions encourage the use of media monitoring in their diligence programs. The Financial Action Task Force (FATF) recommends that institutions gather enough public-facing information to perform adequate customer due diligence (CDD) and enhanced due diligence (EDD).

Maintaining the KYC status quo isn't enough to help organizations comply with requirements like those on the previous page.

Not doing enough can also impact:

Trust and Relationships

Violating sanctions and ESG guidelines, even unintentionally, can create customer and employee retention problems. In 2022, 66% of business and consumer customers said they'd stopped doing business with a company whose values didn't match theirs.¹² In 2023, 60% of millennial and Gen Z professionals said "values could be a dealbreaker" in deciding where to work.

Risk Posture

Shareholders and board members increasingly expect more from organizations in terms of managing their KYC and KYCC risk as well. A proactive approach can prevent unpleasant surprises, minimize tail risk, and avoid eroding ROI on the organization's investment in KYC and ESG programs.¹³

Futureproofing

A strategy that leverages data to graph complex relationships is the most practical way for companies to keep pace with an explosion of data and regulations to minimize risk, and to prepare for the possibility of mandates for this approach, like those spelled out in the German Supply Chain Due Diligence Act.

KPMG forecasts that AI and ML will increasingly handle complex analysis and decision making in financial crime detection systems, with a growing focus on "effectiveness rather than tick box compliance" and a shift toward "perpetual KYC and data-driven real time monitoring."¹⁴

KPMG forecasts that AI and ML will increasingly handle complex analysis and decision making in financial crime detection systems...

11. New York Times, [Deutsche Bank Will Pay \\$75 Million to Victims of Jeffrey Epstein](#), May 17, 2023.

12. Salesforce, [State of the Connected Customer](#), 5th Ed., 2022.

13. World Economic Forum, [Why strong company values are essential for attracting the next generation of professionals](#), April 19, 2023.

14. KPMG, [Financial Crime: A Paradigm Shift](#), November 2022.

What Does Modern Risk Management Look Like?

Every organization will have specific risk management needs based on its industry, size, customer base, markets of operation and other factors. Budget is also a major factor; a recent survey of more than 1,000 C-level risk, compliance, and operations officers at global corporate banks found that financial crime risk investment is a “top three investment priority for 45%,” second only to cybersecurity investment. One-third of the executives included ESG in their top three investment priorities. Among these organizations, KYC represented 10% to 50% of compliance spend.¹⁵

Ensuring the best possible ROI on risk and KYC investment requires understanding the scope of risk and the capabilities of modern risk management solutions. For example, comprehensive KYC now requires banks to understand and assess their clients’ and

suppliers’ ESG practices.¹⁶ A Chartis Research report written in partnership with Sigma Ratings identifies several general areas of global risk exposure that companies should consider now to guard against KYCC risk, including:

- Exposure vectors such as transaction counterparties, account holders, correspondent banks and insiders.
- Exposure types such as supply chain obfuscation, fraudulent identities and/or rationales and sub-account relationships.

Recommended detection strategies include identity and fraud controls, legitimate and sub-account activity detection and visibility into N-tier supply chain, retail-to-company and bank-to-nonbank relationships.

Implementing these activities at scale and keeping the information up to date requires a shift away from the manual or semi-automated tick-box compliance practices that many organizations follow today. Many organizations still require employees to manually complete KYC tasks, resulting in frequent backlogs that expose banks to compliance risk.



Because the risk landscape now is so large and dynamic, effective KYCC requires automated approaches to gathering, analyzing and monitoring risk data.

15. Fenergo, *KYC in 2022*, 2022.

16. PwC, *Know Your Customers’ ESG Risks*, 2022.

Because the risk landscape now is so large and dynamic, effective KYCC requires automated approaches to gathering, analyzing and monitoring risk data:

AUTOMATICALLY RESOLVED ENTITY DATA

Most organizations use multiple data sources for investigations. The result is often multiple records for each entity, which must be reviewed to verify that they correspond to that identity. This process results in slow, human-error prone investigations.

The ideal state is a solution that automatically analyzes and unifies entity data from multiple sources to streamline searches, then graphs resolved entities to illustrate their relationships. This scenario offers the fastest, most accurate and clearest view of entity and KYCC risks, and it can benefit virtually all organizations.

AUTOMATED RISK MONITORING FOR CONTINUOUS COVERAGE

With automated entity resolution to handle the flow from disparate data sources and a graph that shows entity relationships more clearly, it's possible to enable perpetual KYC and KYCC. Organizations with large customer bases and/or high-risk business models can benefit from pKYC to detect and respond to changes in risk status quickly, rather than waiting for calendar-based, manual reviews.

REAL-TIME PORTFOLIO RISK ASSESSMENT

Automated entity resolution, graphing, and monitoring of entities for KYC and KYCC also lay the groundwork for AI-driven real-time risk assessments at the cluster, segment or portfolio level, based on the risk profile of each entity in each group. Large organizations and those with a high level of overall risk can continuously monitor their portfolios and rebalance them as needed to maintain an optimal level of risk.

Implementing at scale and keeping information up to date requires a shift away from manual or semi-automated tick-box compliance practices...

Key Components of Modern Risk Management

Automated entity resolution, pKYC and real-time portfolio-level risk monitoring require an evolution in the existing technology that supports compliance operations today. Sigma remains at the leading edge of evolving compliance technology with its new platform, Sigma360.

Sigma360 builds on Sigma Terminal's records aggregation capabilities, going beyond the rapid collection of records to resolving risk data across thousands of data sources and transforming it into actionable risk insights that can be surfaced faster than ever before.

Create a Strong Data Foundation for More Accurate and Efficient Compliance

Sigma360 brings data from many sources, including adverse news reporting, together in one place. Having the information required to make good decisions at their fingertips gives modern risk and compliance teams the resources they need to work more effectively. It also helps organizations expand their data horizon by bringing in more data than they could previously analyze, which demonstrates to both stakeholders and regulators that more risk analysis has been performed than was possible using legacy approaches.

Resolve Entities Automatically

Leveraging data at scale is possible even for small teams with Sigma's automated entity resolution. Using deterministic and fuzzy logic, Sigma360 lifts the manual resolution burden from employees, so they're free to work on other risk and compliance tasks.

Monitor and Update Resolved Entities

Sigma360's data collection and analysis capabilities allow for daily reviews and updates of entities in a company's system. Companies no longer run the risk of undocumented changes in exposure between manual entity updates. Sigma can alert teams when there's a change that affects an entity's risk level, so they can take immediate action if needed.

In Sigma360, risk is surfaced efficiently using 14 important risk indicators with 150 sub-indicators. Based on organizational priorities, these indicators can be leveraged to fit a number of use cases, including identifying shell companies, surfacing corruption-related risk, detecting sanctions evasion, and more.

Automated entity resolution, pKYC and real-time portfolio-level risk monitoring require an evolution in the existing technology that supports compliance operations today.

Find and Trace Specific Entities Without Searching

Resolved entities can quickly get lost in a huge system. Sigma ID makes each entity easier to find, share with colleagues, embed in reports and more, without the need for team members to run a search.

See Associations Among Entities Clearly

The Sigma Entity Graph automatically resolves and visualizes the associations among resolved entities. Each association resolves to a Sigma ID, so it contains a full complement of risk and profile data. Team members can click association nodes on the Entity Graph to follow relationship chains without running searches. Investigations can get as granular as the detailed information about each association node—and as high-level as a network view that includes three degrees of separation among connections.

Quickly Assess KYCC Risk

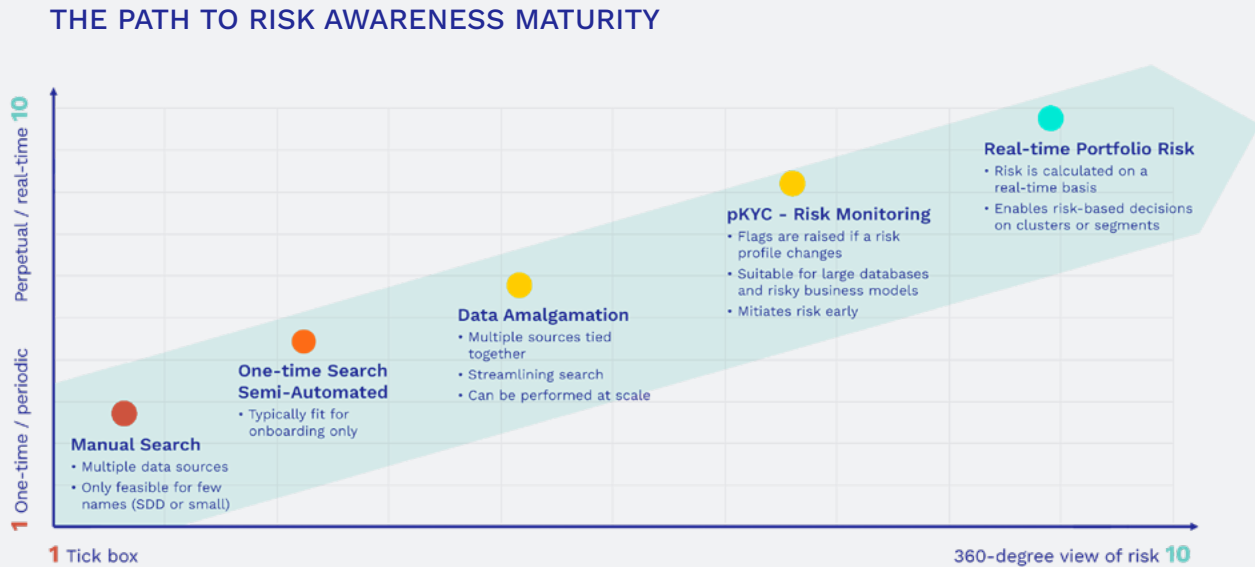
Sigma360's new Transitive Risk Indicator surfaces risk up to three degrees of separation away from a primary entity when sanctions, enforcement or critical risks are high. Team members receive immediate notice when Sigma360 detects a new risk on monitored entities and when serious risk appears within those entities' networks. This allows for more nuanced and proactive risk management and can help to identify risk clusters in specific industries, geographies or customer segments.

Optimize Workflow

Sigma360 delivers these capabilities in seconds, with a high degree of accuracy, to save teams time and reduce the risk of data-entry errors. Sigma360 also gives teams control over how they want to manage alerts and reviews, to tailor the platform to their risk level, team capacity and requirements.

Leveraging data at scale is possible even for small teams with Sigma's automated entity resolution.

Planning the Path Toward Risk Awareness Maturity



Compliance requirements and best practices are evolving toward perpetual, automated analytics for continuous customer context and to surface risk across entities and their associations.

Organizations need to chart a course to manage their compliance transformations for better risk detection and management, more effective use of risk teams' time and skills, and more preparedness for future regulations, stakeholder expectations and voluntary standards.

The journey to risk awareness maturity progresses through five stages. Each organization's path and timeline regarding risk management maturity will be unique, based on their resources and risk profiles. Companies should identify their current stage as the first step in creating a roadmap for improvement.

Stage One: Entirely Manual

This initial stage is the definition of tick-box compliance.

These processes may work for organizations that have adequate employee resources and/or low volumes of customer data, but it's virtually impossible to scale in an accurate and cost-effective way. As the speed of change and regulatory updates picks up, this approach is prone to missing risk now and in the future.

Stage Two: Semi-Automation

The next step for many organizations is to automate some but not all search tasks.

This stage automates bulk searches across multiple sources, but employees still manually resolve the results. Onboarding reviews go faster now, but resolution remains resource-intensive and poses a barrier to scalability. Moreover, risk triage suffers, creating missed opportunities for greater efficiency.

Stage Three: Data Amalgamation

Midway along the risk awareness maturity curve, organizations implement automated search and entity resolution technology.

Now, the organization has moved away from tick-box compliance, with the capability to search multiple, unified data sources and resolve entities quickly and accurately. This stage is where scalability and automated periodic reviews become possible, which can mean a better customer experience.

Stage Four: Perpetual KYC

Large, automatically resolved entity datasets are the foundation for this later stage of risk awareness maturity, which leverages AI and machine learning for ongoing entity monitoring and automated risk alerts.

Because this stage requires more data and more technology investment than earlier stages, it's most urgent for businesses that deal with a relatively low level of risk tolerance or high volume of entities, although any organization can benefit from the reduction in exposure that this stage provides.

Stage Five: Real-Time, 360-Degree Portfolio Risk Visibility

Organizations with a fully mature risk awareness program enjoy the benefits of pKYC and a real-time view of risks at the entity and portfolio levels for more effective and timely decision making.

A platform that automatically aggregates disparate data, resolves entities, makes them traceable, locates them within a network of traceable associations, and continuously monitors and updates entity and association data can be a key resource for compliance transformation — to minimize risk, maintain compliance with changing standards, and strengthen stakeholder trust.

WHERE DOES YOUR ORGANIZATION FIT?

	STAGE 1 Manual	STAGE 2 Semi-Automation	STAGE 3 Data Amalgamation	STAGE 4 Perpetual KYC	STAGE 5 Real-time, 360° Risk View
Entity Search Capabilities	One at a time search	One at a time + bulk search	One at a time + bulk search + automated review	Continuous review, ongoing monitoring	
Multiple Data Source Search	Manual	Semi-automated, manual data refresh		Continuous, automated data refresh	Continuous, automated data refresh + ingestion
Entity Data Resolution	Manual		Automated	Continuous resolution, internal & external sources	
Risk Reports & Assessments	Manual			Automated	Continuous
Alerts	No alerts			Automated alerts, risk profile changes	
Scalability	Very Difficult	Difficult	Scalable		Futureproof & Scalable

CONCLUSION

The Compliance Transformation Has Already Begun

Regulators are looking deeper into organizations' risk exposure in general and supply chain in particular, to root out financial crime, corruption and exploitation. Customers, investors and employees expect organizations to uphold ethical standards. Financial institutions and enterprises must make sure their compliance programs keep up with the growing complexity and scope of requirements and expectations.

The right compliance platform makes it possible to maintain and enhance compliance, reduce exposure, optimize workflows and avoid costly penalties. Sigma360 allows organizations to instantly evaluate risk at the customer level, connect the dots on network risk at global scale, proactively monitor and manage risk as it changes, visualize and investigate relationships, and build a future-proof, 360-degree view of customer risk.

Ready to begin your
compliance transformation?

[CONNECT WITH OUR TEAM](#)

...for more information or to request your demo.

*The right
compliance
platform makes
it possible
to maintain
and enhance
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reduce exposure,
optimize
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ABOUT SIGMA RATINGS

Sigma Ratings was started in 2017 with the goal of creating a more transparent world through data. Today, Sigma's technology has evolved to surface and analyze risk for any company or person, including direct and indirect relationships with sanctioned entities. Leading firms use Sigma's AI-powered platform to mitigate AML, KYC and association risks by identifying, screening, monitoring and reviewing clients against the largest cloud-native database for risk intelligence. By consolidating global datasets and resolving information for a single view of risk on any entity, Sigma transforms compliance teams from data gatherers into confident decision-makers.

Be certain in an uncertain world. Explore [Sigma Platform](#) or connect with [@sigmaratings](#) on LinkedIn.

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