

Intelligent Automation and the “New Normal” in Economic Sanctions Compliance

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The debate over whether banks and other organizations should pursue advanced technologies — including intelligent automation, artificial intelligence and machine learning — to drive sanctions compliance has shifted from “if” to “when, how, and on what scale?”

Already, this shift is proving to be good news for control coverage, employee productivity, job satisfaction, and customer experience. But is it also bad news for illicit actors seeking to overcome banks’ compliance controls? These technologies redefine what is possible with sanctions compliance by helping to implement risk-management controls that would otherwise be impractical or impossible.

Sanctions risk is not restricted to a single governmental list, and effective compliance with embargoes typically extends beyond list screening. Many sanctioned entities are not explicitly placed on a list but must still be identified. Different governments’ sanctions lists can provide critical due diligence, even if that does not create a legal prohibition. Organizations have typically sought to meet

sanctions compliance needs through incremental technological improvements (such as a new, better screening system), large increases in hiring, and exiting high-risk business. However, current screening technologies may offer only marginal improvements in identifying sanctions risk or otherwise require drastic increases in resource needs; high rates of hiring can diminish banks’ return on equity; and exiting risky but important business lines can decrease overall profitability and the ability to retain valuable customers. New technology platforms, such as WorkFusion’s Intelligent Automation Cloud, meet these challenges head-on by complementing and improving existing controls and greatly expanding the aperture of risk identification — without introducing new permanent costs or complexities.





How can intelligent automation redefine sanctions compliance?

The “new normal” is defined as a transformation of a sanctions compliance program from being list-dependent and resource-constrained to making use of disparate data sources; from being forced to perform time-intensive and ultimately needless due diligence to allowing highly trained resources to focus on control needs; and by identifying risks that can easily be overlooked by a human operator alone. We see four specific benefits resulting from adoption of intelligent automation for sanctions compliance:

- 1 Incorporate sanctions evasion intelligence into screening**
- 2 Reduce false positives in sanctions screening alerts**
- 3 Identify and act on non-listed sanctions risk**
- 4 Expand sanctions control coverage**

1 Intelligent automation to incorporate sanctions evasion intelligence into screening

Improved Sanctions Evasion Identification

Enhanced Sanctions Screening

Improved Regulatory Compliance

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“Financial institutions around the world screen against the UN and OFAC lists. They also screen against other public lists, like companies identified in UN Panel of Experts reports. Those are good practices, but we encourage you to do more. We commend efforts by financial institutions to go levels deeper, asking for more information to help you conduct additional analysis to identify [sanctions evasion].”

U.S. Treasury Department Undersecretary
February 2018⁵

Over the past several years, governments, think tanks, and supranational organizations have released a wealth of robust information on sanctions evasion. Since 2015, the U.S. government’s sanctions administrator, OFAC, has released detailed accounts of how illicit actors seek to overcome Russian, Venezuelan, North Korean, and Syrian sanctions programs. Law enforcement indictments and administrative actions complement this information. In March 2019, the UN released a 150-page “panel of experts” report on North Korean sanctions evasion, which included not only lists of maritime vessels and companies used to evade sanctions, but also detailed schemes.¹ Banks can do more to make use of this rich data set. Compliance teams typically review this guidance and include summaries in trainings and briefings to business lines. In rare cases, a bank may seek to tune a screening system in direct response to new guidance. Most often, this highly valuable intelligence is left unused. Conversely, intelligent automation can make effective use of these genuine and confirmed sanctions evasions examples to better equip banks to identify similar activity.

Whereas current sanctions screening is “list dependent” — relying largely on flagging specific names or slight variations in a transaction — intelligent automation and machine learning can search for more nuanced patterns of keywords, word omissions, combinations of names, and context that may reveal sanctions risk and exposure. For example, the use of “Dubai,” “shipping” and “onward” in a wire transfer or trade finance transaction may reveal that goods shipped to the United Arab Emirates are destined for Iran, as cited in countless sanctions enforcement actions.² The use of vague descriptions in trade finance activity, such as “any port” or “open sea,” combined with context on the industry, countries involved and vessel behavior, may lead banks to identify indirect exposure to Syria, as cited in a recent law enforcement case.³ Detection of partial addresses, especially when funds are sent to Russian cities located near Crimea, an embargoed geographic territory, is a potential sanctions evasion red flag, according to an OFAC advisory.⁴ Keyword screening can also be a practical solution for securities-related sanctions prohibitions, like the Russian sectoral sanctions program, by identifying exposure to potentially prohibited debt and equity trading.

\$3.59 billion USD

VALUE OF 79 SANCTIONS AND ANTI-MONEY LAUNDERING PENALTIES ISSUED OVER THE PREVIOUS 12 MONTHS BY REGULATORS IN THE UNITED STATES, BELGIUM, ENGLAND, HONG KONG, LATVIA, INDIA, AND OTHER COUNTRIES.

2 Intelligent automation to reduce false positives in sanctions screening alerts

Raised Employee Productivity

Reduced Alert Review Cost

Reduced Manual Effort

Improved Employee Satisfaction and Reduced Turnover

Higher Straight-through Processing

As banks minimize manual review of obvious sanction screening false positives using intelligent automation, highly trained resources can be re-allocated to more pressing compliance needs. False-positive reduction is as much about risk enhancement and governance as it is about cost

Across the banking, insurance, and securities industries, false-positive rates in the alerts generated by screening tools can exceed 99%, based on our experience and data shared by clients. Banks directly employ or contract out dozens or hundreds of individuals to manually review these alerts. It is not uncommon that alert review teams (sanctions and anti-money laundering combined) make up 75% of a bank's compliance staff. Nearly all banks perform some form of false-positive reduction. Currently, this is done either with "good guy" rules whitelisting words, careful selection of settings and algorithms, or raising screening thresholds to decrease the number of alerts generated. These methods are time-intensive, require ongoing refinement, and may call into question whether a bank is selectively eliminating alert volumes only because of resource concerns. Regulators have stated that eliminating lead information just to save money on hiring is not acceptable.

Intelligent automation and machine learning go beyond "good guy" rules and system tuning to eliminate noise. The technology can be trained to study human behavior in identifying false positives and mimic cognitive decision-making. Whereas "good guy" rules need to be redesigned based on slight changes in the transaction text and can have infinite variations, machine learning can re-train itself to account for these changes. Sanctions compliance teams may have different resources reviewing identical or nearly identical transactions; machine learning can detect these similarities and group them together to realize additional efficiencies. In WorkFusion's direct experience implementing intelligent automation and machine learning-driven solutions for multiple financial institutions, approximately 65% of false positives were identified, dispositioned with clear justifications, and either closed or routed to a human operator for confirmation, based on the risk threshold of the bank.

Whereas traditional sanctions screening tools largely treat all inputs identically, intelligent automation for sanctions screening can operate customer, product, or transaction-specific nuances that help mitigate high false-positives rates. For example, WorkFusion's false-positive mitigation tools make different decisions about alerts generated in a reference field, address field, or free-text field. This approach is being adopted by financial institutions. In a recent publication, Societe Generale noted that their approach to false-positive mitigation for sanctions alerts focused on product-specific rules.⁶

Eliminating clear false positives is not solely a cost-efficiency consideration. A range of academic research indicates that human operators make mistakes when faced with performing and re-performing identical, manual tasks. Using time and money to review thousands of false positives is an efficiency problem. Missing the "needle in the haystack," that rare true positive, due to resource strain from reviewing thousands of false positives is a governance problem. Job productivity, satisfaction, and ultimately employee retention can suffer when highly manual and repetitive tasks are part of "business as usual" for highly demanded resources.

65%

SANCTIONS SCREENING FALSE POSITIVES THAT WERE IDENTIFIED WITH WORKFUSION'S AUTOMATION AND MACHINE LEARNING PLATFORM IN A RECENT CLIENT ENGAGEMENT.

70%

SANCTIONS SCREENING ALERT REVIEW TEAM PRODUCTIVITY INCREASE, FOLLOWING IMPLEMENTATION OF A FALSE POSITIVE REDUCTION SOLUTION.

3 Intelligent automation to identify and act on non-listed sanctions risk

Enhanced Sanctions Screening

Improved Regulatory Compliance

Intelligent automation can streamline compliance with the 50% rule by aggregating ownership data, validating links to sanctioned entities, and presenting actionable information to compliance teams.

Sanctions risk is not defined by a binary presence or absence of a listed sanctioned entity being involved in a transaction. OFAC's guidelines are clear that an entity which is 50% or more owned by a listed sanctioned entity is considered sanctioned. For example, a November 2018 enforcement action highlighted that a U.S. company violated sanctions regulations when it engaged with a company that "was not explicitly identified on OFAC's List of Specially Designated Nationals and Blocked Persons, [but] was 51 percent owned" by a sanctioned entity.⁷ The United Kingdom sanctions administrator is just as explicit that both ownership and controlling stakes in a non-listed entity by a sanctioned entity create a prohibition.⁸ While official figures are not available, it is likely that there are tens of thousands of companies that would potentially be considered sanctioned entities under the 50% rule. Furthermore, many institutions seek to understand exposure to companies that are owned less than 50% by a sanctioned entity, including to manage reputational risk. Banks currently do not have an efficient way to control for this indirect risk at scale. Incorporating lists of by-ownership sanctioned entities into screening tools can lead to spikes in alert volumes. Manually reviewing the owners and sanctions risk of each party in select transactions would be impossible without halting straight-through processing rates. However, intelligent automation and machine learning can be used to identify all entities in a transaction, retrieve open-source or subscription-based information on indirect sanctions risk, perform other targeted searches in corporate ownership databases, suppress close but not actual matches, and present to a human operator detailed and relevant risk information if exposure to a non-listed sanctioned entity is detected. Compliance with the 50% rule can become as standard as complying with traditional sanctions lists, without significant resource demands.

12 : 1,300

12 OFAC SANCTIONED ENTITIES WERE ASSOCIATED BY OWNERSHIP WITH 1,300 COMPANIES THAT WERE NOT ON THE AGENCY'S LISTS AND IDENTIFIED ONLY THROUGH DUE DILIGENCE.⁹

\$15,634 USD

COST, IN PENALTIES, FOR EACH OF THE 159 TRANSACTIONS SENT BY A LARGE BRITISH BANK TO A NON-LISTED SANCTIONED ENTITY.¹⁰

4 Intelligent automation to expand sanctions control coverage



Raised Employee Productivity

Expanded Compliance Coverage

Reduced Manual Review Cost

Improved Accuracy

Faster Document Processing

Many banks can identify a non-electronic or paper-based financial product that is subject to minimal or incomplete compliance controls because of the manual, time-intensive, and error-prone work required to extract information. Most commonly, banks struggle with robust screening of commercial checks and trade finance letters of credit. However, certain securities trading processes, customer due diligence data, and credit card activity may fall outside robust screening controls due to the enormous volumes, lack of standardized data, and incomplete information to help disposition sanctions alerts. The decision to not perform screening is typically driven by a consideration that the ability to hire additional compliance staff is impeded by financial constraints. Intelligent automation and machine learning do not share the same constraints. A typical trade finance transaction will have 15 –75 pages of paper records, including the letter of credit, insurance guarantee, email exchanges, bill of lading, export permissions, and SWIFT message updates. Extracting key data from these papers and performing screening can take anywhere from 15 minutes to an hour. Error rates are typically high and can result in up to 10% of key data not being considered for sanctions compliance. Trained employees can miss obscure references to sanctioned entities, vessels, or jurisdictions, as was cited in an OFAC enforcement action several years ago.¹¹ Intelligent automation-driven “optical character recognition” (OCR) — which digitizes text from paper records — can perform the same data extraction with accuracy rates that can exceed 95%, and improve over time through machine learning. This solution can operate outside of core working hours and submit the extracted information directly into a sanctions screening engine, further saving time and effort. Leading banks are already turning to intelligent automation for this application. For example, Citibank in April 2019 announced that it would digitize 25 million trade finance document pages through OCR for risk analytics, including sanctions compliance.¹²

For some institutions, robust and effective sanctions compliance may not be possible with existing technology. Unique risks stemming from product exposure, enormous transaction volumes, and manual processes often lead banks to “risk accept” certain compliance gaps.

40 million

ESTIMATED HOURS SPENT BY US BANKS TO EXTRACT DATA FROM COMMERCIAL CHECKS, INCLUDING TO FACILITATE SANCTIONS SCREENING.¹³

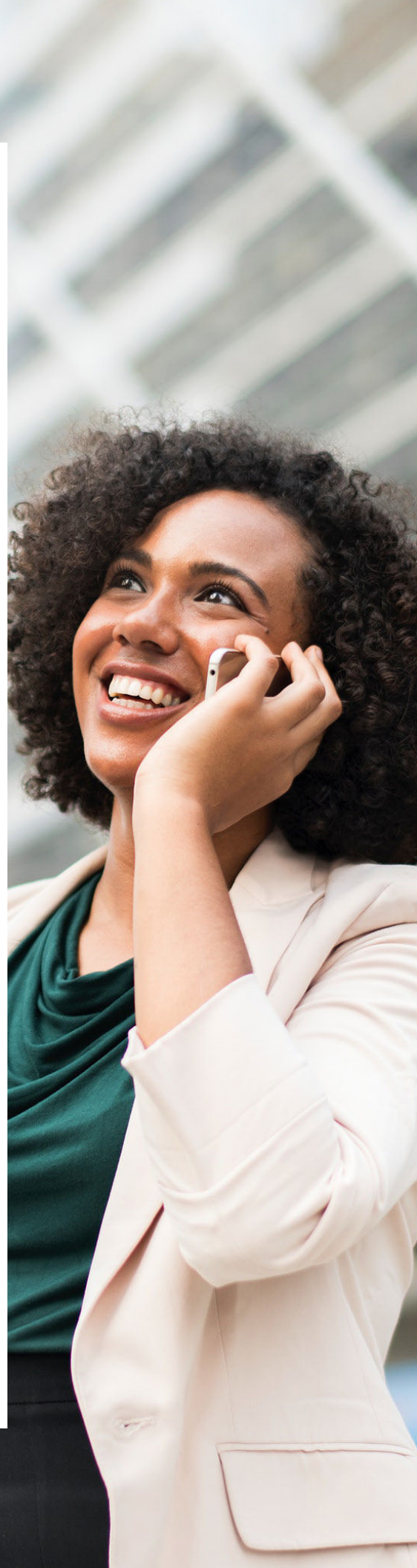
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WEEKS FOR IMPLEMENTATION OF WORKFUSION INTELLIGENT AUTOMATION SOLUTION FOR DATA EXTRACTION AND SCREENING FOR TRADE FINANCE DOCUMENTATION.

Achieving scale in AI-driven sanctions compliance

Banks' sanctions (and wider financial crime) compliance spending is outpacing revenue growth. Banking assets — a rough proxy for growth — increased by about 2.6% from January 2018 to June 2019.¹⁴ Conversely, the number of entries on the U.S. government's sanctions list grew by about 13% during the same period.¹⁵ Continuing with “business as usual” sanctions compliance is not a practical option as resourcing needs will continue to grow and cut into profits. As mentioned at the opening of this article, implementation of intelligent automation solutions is moving from “if” to “when, how, and on what scale?” because banks view it as an answer to a difficult operational, business, legal, and compliance problem set. Sanctions compliance complexity seems set to increase over the next several years. The U.S. and other governments' reliance on economic sanctions tools is one factor; however, the expansion of different payment formats, banking of financial technology companies, supplier due diligence requirements, growth in trade flows, access and collection of “big data” due diligence on customers, and new regulatory expectations will also increase this complexity. As demonstrated over the past several years, added regulatory complexity translates directly into higher costs. Introducing artificial intelligence solutions for sanctions compliance at scale — across multiple business functions, countries, and control processes, and with training to identify additional uses — is one answer to this challenge.

Any of the artificial intelligence applications cited above can help strengthen a sanctions compliance program, but they can be most potent and transformative when working together. Achieving scale in sanctions compliance is not the same as automating one process for one team in one country through a bespoke solution. Simply automating sanctions-related searches escalates the number of alerts that require manual review. Solely introducing machine learning to suppress false positives may call into question a bank's commitment to identifying risks during regulatory exams. However, implementing a bank's end-to-end sanctions compliance vision and strategy through the lens of what is now possible using advanced technology helps to introduce scale — of automation, of risk identification, of program effectiveness, and of cost savings.



Sanctions and Anti-Money Laundering: Advanced Technologies Redefining the “New Normal”

The introduction of new compliance technologies is shifting what was once considered new and “emerging” into standard industry practice. Real-time sanctions screening prior to payment settlement was once considered a novel technology — it is now a regulatory requirement. Whereas the “new normal,” below, is based on what is seen today as advanced technology applications, banks are increasingly adopting them and hence the wider industry, and regulators, will in due time view them as critical enablers of an effective compliance program.

ECONOMIC SANCTIONS

STANDARD PRACTICE

- Transaction, Customer Screening
- Due Diligence (Sanctions, AML)
- Rules-Based Transaction Monitoring

LEADING PRACTICE

- “50% Ownership” (Customer Screening)
- Good Guy Rule False Positive Suppression
- Ongoing Screening System Tuning
- Customer Lifecycle Negative News Analysis
- Real-Time Customer Risk Rating Updates
- Automated Regulatory Reporting (SAR, CTR, etc.)

THE “NEW NORMAL”

- Multi-Source Sanctions Evasion Identification
- “50% Ownership” (Transaction Screening)
- Machine Learning-Enabled False Positive Identification
- Optical Character Recognition-Enabled Screening
- Machine Learning-Enabled, Multi-Source Due Diligence
- Automated Beneficial Ownership Identification
- Machine Learning-Enabled Alert Disposition
- Multi-Source Link Analysis
- Predictive Monitoring Thresholds

ANTI-MONEY LAUNDERING

WorkFusion is the leader in intelligent automation solutions for banking organizations, including for sanctions compliance and anti-money laundering compliance needs. For more information on how our solutions and services can deliver value to your business, please contact:

Alex Lyashok

Chief Executive Officer

alex@workfusion.com

Dmitriy Galper

Global Head of Consulting

dgalper@workfusion.com

Kirill Meleshevich

Automation Consulting

kmeleshevich@workfusion.com

About WorkFusion

WorkFusion's AI-driven automation and RPA software offers intelligent automation at scale for companies across the globe. Forward-thinking businesses and leading enterprises across the business spectrum choose WorkFusion to reduce their total costs, up-skill their workforces and gain a competitive edge. WorkFusion is headquartered in New York City with operations throughout Europe and Asia.

workfusion.com

¹ <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N19/028/82/PDF/N1902882.pdf?OpenElement>

² <https://www.treasury.gov/resource-center/sanctions/CivPen/Pages/civpen-index2.aspx>

³ <https://www.justice.gov/opa/pr/russian-and-syrian-nationals-charged-laundering-millions-us-dollars-designated-russian>

⁴ https://www.treasury.gov/resource-center/sanctions/Programs/Documents/crimea_advisory.pdf

⁵ <https://home.treasury.gov/news/press-release/sm0286>

⁶ <http://gtb.societegenerale.com/en/testimonial/future-trends-sanctions-automation-artificial-intelligence-outsourcing-resolve-inefficiencies>

⁷ https://www.treasury.gov/resource-center/sanctions/CivPen/Documents/20181127_metelics.pdf

⁸ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/685308/financial_sanctions_guidancemarch_2018_final.pdf

⁹ <https://www.bvdinfo.com/en-gb/knowledge-base/videos/compliance-and-financial-crime/how-effective-is-your-sanctions-screening>

¹⁰ <https://www.treasury.gov/resource-center/sanctions/OFAC-Enforcement/Pages/20160208.aspx>

¹¹ https://www.treasury.gov/resource-center/sanctions/CivPen/Documents/20140903_citigroup.pdf

¹² <https://www.citibank.com/tts/about/press/2019/2019-0429.html>

¹³ WorkFusion analysis, based on Federal Reserve Check Volume data (https://www.federalreserve.gov/paymentsystems/check_commcheckcolqtr.htm), estimates for non-screened checks and time expended per data extraction and screening.

¹⁴ <https://fred.stlouisfed.org/series/TLACBW027SBOG>

¹⁵ WorkFusion analysis based on data released by the Office of Foreign Assets Control