Grant Thornton

Anti-money laundering and financial crime compliance

A viewpoint for revitalization and efficiency

Anti-money laundering (AML) is a fundamentally critical responsibility of the modern financial enterprise; it effects the stability of the financial system and is essential to safeguarding national and global interests. It is also a control function that despite significant political attention, regulatory reform and financial investments globally, has not been sufficiently effective at combating the challenges of corporate tax arbitrage, the narco-economy, global terrorism and human trafficking. In fact, money laundering has more than doubled from $1 trillion in 1989 (the year the Financial Action Task Force on Money Laundering (FATF) was formed) to over $2 trillion in 2016.*

This paper will identify reasons for AML weaknesses and explore several solutions for facilitating effective and efficient AML efforts.

*Source: United Nations Office on Drugs and Crime

Why are AML efforts falling short?

In summary, AML is both a cross-core system and a cross-enterprise challenge. Within institutions, it is a cultural program driven from the top and across every geographical location, impacting customer interactions and enterprise-wide customer processes, and heavily influenced by the legal department. As a result, AML presents impressive technical, organizational and cultural integration challenges, which few institutions have been able to effectively address.

However, the past few years have witnessed interesting and accelerating technical and automation developments that are worth exploring when looking to improve AML and financial crime oversight and management. Even with these technical developments, many firms' senior management teams have yet to oversee the adoption of innovations that other parts of the enterprise are currently utilizing and could be leveraged effectively to manage financial crimes. These developments should also be taken seriously by regulators to gauge overall firm compliance efforts and motivation, particularly as the Office of the Comptroller of the Currency and the Commody Futures Trading Commission have now established Offices of Innovation.

It is worth noting, too, that although technology advances and adoption are good for building effectiveness into AML and financial crimes initiatives, the technology alone does not fix a problem, especially in an enterprise-wide deployment. The same critical governance and line of sight that organizations build into the business programs need to also be planned into the requirements for enabling technologies at the forefront. The technology is never an end in and of itself.

The basics

In its most simple terms, AML is made up of five interconnected elements:

Step in AML	Simple definition
Customer understanding and onboarding	Who are you, do I want to do business with you, and do I have enough information to confirm that I can do business with you?
Transaction monitoring system	Are you doing what you said you were going to do, or are you involved in nefarious activities that you are hiding from us?
Operations financial investigation unit	If necessary, I must be able to prove that your activities are indeed nefarious and report appropriately. I need to make sure I do not get misled again when another client wants the same business relationship.
Governance and relevancy	I need to make sure that together we are clearly adhering to global rules, local rules and, at the same time, not undermining honest business relationships.
Organization and culture	Everyone from the boss down understands and can demonstrate that we understand what type of business we are; what type of clients we want; and how to spot the wrong type of customers, behaviors and activities.

In picture form:

Customer understanding and onboarding
Who are you, do I want to do business with you, and do I have enough information to confirm that I can do business with you?

Transaction monitoring system
Are you doing what you said you were going to do, or are you involved in nefarious activities that you are hiding from us?

Operations financial investigation unit
If necessary, I must be able to prove that your activities are indeed nefarious and report appropriately. I need to make sure I do not get misled again when another client wants the same business relationship.

Governance and relevancy
I need to make sure that together we are adhering to clearly global rules, local rules and, at the same time, not undermining honest business relationships.

Organization and culture
Everyone from the boss down understands and can demonstrate that we understand what type of business we are; what type of clients we want; and how to spot the wrong type of customers, behaviors and activities.

These efforts all sound rather straightforward, yet there are significant challenges:

Step in AML	Simple definition	Challenge
Customer understanding and onboarding	Who are you, do I want to do business with you, and do I have enough information to confirm that I can do business with you?	Do I, along with everyone else in the institution, clearly know the difference between right and wrong, and high- and low-risk customers? If you're not the type of customer we want, am I able to say "no" to you, and am I supported by the institution's culture and remuneration program?
Transaction monitoring system	Are you doing what you said you were going to do, or are you involved in nefarious activities that you are hiding from us?	Your real intentions do not want to be discovered — you're agile and able to change much quicker than I can, and so I am by definition looking for a needle in a constantly changing stack of needles. Moreover, I can't change as fast as you, so are you nearly always a few steps ahead of me?
Operations financial investigation unit	If necessary, I must be able to prove that your activities are indeed nefarious and report appropriately. I need to make sure I do not get misled again when another client wants the same business relationship.	There are just too many false-positive red-flagged activities requiring review and/or investigations coming out of transaction monitoring. It's really hard to see the forest for the trees, thus undermining the whole process.
Governance and relevancy	I need to make sure that together we are clearly adhering to global rules, local rules and, at the same time, not undermining honest business relationships.	A clear inventory of what, when and how up-to-date local and global jurisdictional rules are owned, understood, measured and executed against is often absent or based on personal, unstructured feedback rather than formalized assured knowledge.

As a result, the AML control function at most institutions is inefficient, opaque and inconsistent with firm standards, and at worst, the function institutionalizes the very problem it is trying to solve because volume undermines efficiency and forces poor decisions on operational and technology executives.

Step in AML	Simple definition	Challenge	Result
Customer understanding and onboarding	Who are you, do I want to do business with you, and do I have enough information to confirm that I can do business with you?	Do I, along with everyone else in the institution, clearly know the difference between right and wrong, high- and low-risk customers? If you're not the type of customer we want, am I able to say "no" to you, and am I supported by the institution's culture and remuneration program?	• Lack of an enterprise view and understanding of a customer. • Lack of effectively evolving onboarding standards and validation at branches and customer-facing units. • Holes in client risk information in customer due diligence (CDD) plastered over with expensive enhanced due diligence (EDD) projects. • Pricing and incentive structures and also penalties for incorrect behavior are fragmented and localized.
Transaction monitoring system	Are you doing what you said you were going to do, or are you involved in nefarious activities that you are hiding from us?	Your real intentions do not want to be discovered — you're agile and able to change much quicker than I can, and so I am by definition looking for a needle in a constantly changing stack of needles. Moreover, I can't change as fast as you, so are you nearly always a few steps ahead of me?	• Lack of analytical agility to stay up-to-date with versatile adversaries • Lack of focus on new risk rather than known behaviors that have been publicized in the past • Lack of firm protection other than that defined by regulators
Operations financial investigation unit	If necessary, I must be able to prove that your activities are indeed nefarious and report appropriately. I need to make sure I do not get misled again when another client wants the same business relationship.	There are just too many false-positive red-flagged activities requiring review and/or investigations coming out of transaction monitoring. It's really hard to see the forest for the trees, thus undermining the whole process.	• Huge numbers of alerts create large operational resource costs and underutilizes experienced investigation teams. • Operational efficiency decisions are driven to reduce volume and costs rather than discover the actual hidden AML risks. Over 95% of alerts as such are not fully or effectively investigated. • Lack of lessons-learned leverage in which knowledge learned from investigations is not factored back into the onboarding and transaction monitoring system (TMS) functions.
Governance and relevancy	I need to make sure that together we are clearly adhering to global rules, local rules and, at the same time, not undermining honest business relationships.	A clear inventory of what, when and how up-to-date local and global jurisdictional rules are owned, understood, measured and executed against is often absent or based on personal, unstructured feedback rather than formalized assured knowledge.	• Execution confusion, different global standards and indecisive staff producing weaknesses in the entire AML program

How do we solve these challenges?

From all of the aforementioned AML complexities, clearly there is no silver bullet. Indeed some of the problems stated are now institutionalized, globally accepted by FATF and other regulatory bodies, and even reinforced by market norms. Overcoming this inertia in the face of the stated need to involve cultural, organizational and technical innovation, and common communication across the enterprise from the top down, means employing a holistic enterprise-wide approach with mutually supporting elements.

If we look at AML in a holistic way, considering how each contributing business element (organization leadership, governance, technology and involved stakeholders) is commissioned in an aligned fashion, we can begin to see opportunity for process and organizational synergies to be aimed at small and digestible investments that can make a recognizable difference in early wins. Over time, this positive feedback and modeling of success leads to more transformational opportunities with considerable impact that will change the way the market manages AML, finally giving institutions a fighting chance against sophisticated money launderers who consistently have firms outmaneuvered.

Some ideas on improving, modernizing and transforming AML

Let's look again at the key elements of AML with some of those opportunities in mind using a simple measure of incremental transformation within each stage. Though mutually reinforcing, each of these activities are not co-dependent and can be undertaken independently or as a whole.

Customer understanding and onboarding

The entry point into a financial institution's enterprise and the most critical element in the fight against money launderers is developing a clear understanding of a customer on the front end through effective onboarding.

On the following page are simple process steps that assimilate and industrialize lessons learned and supported by exciting new innovations in distributed analytics, business orchestration and even blockchain. These offer great opportunities in data collection, identification of expected activities and prevention of incorrect client selection. Beyond process and technology opportunities, more focused and robust incentive structures can make a real difference in taking pressure off activities further downstream in the AML process.

Step in AML	Challenge	Example opportunities
Customer understanding and onboarding	Do I, along with everyone else in the institution, clearly know the difference between right and wrong, high- and low-risk customers? If you're not the type of customer we want, am I able to say "no" to you, and am I supported by the institution's culture and remuneration program?	**Process** — Feedback from investigation units should be integrated into the know-your-customer (KYC) process and platform, and onboarding questions should be updated on a regular basis. Asking more focused and relevant questions that are additive rather than repetitive ultimately provides more data points for monitoring. For example – expected behavior questions should be much more focused to reduce numbers of "deviation from expected behavior" alerts within the TMS. Note that these are often in the top three of alert volumes created by the TMS. This does not imply adding more burden to the client onboarding experience. Rather, a more methodical and integrated approach to customer data as a whole would both improve the experience and also increase the transparency needed in the onboarding process. **Technology** — Distributed analytics, business orchestration and even blockchain-related innovation offer significant opportunity to access and interrogate what are typically heterogeneous prospective client data and information sources, both internal and external. The result of such deployments increases CDD effectiveness, reduces EDD expense, and establishes speed and consistency across all customer onboarding activities. These distributed technologies also offer the potential to reveal very interesting common identifiers for customers and their activities across the enterprise. It is too early to be certain but, conceptually, blockchain goes a couple of steps further and offers a fascinating opportunity for the management of the entire client relationship spectrum — not only for AML but for compliance and credit risk as a whole. **Cultural** — Sales incentive structures remain a focus with both positive and negative consequence structures to ensure conformance. These structures should include financial punishments for onboarding customers without appropriate due diligence, and higher incentives, paid over multiple years, for respectable customer business. By way of example, this would establish a much stronger gate against poor players accessing the firm. Governance and relevancy of oversight escalation and reporting elements must also be integrated early in the process to ensure regulatory requirements are both integrated and followed as customer onboarding decisions are made.

What is the impact of such changes and innovations at this stage? Every project is inevitably aligned to the available assets, resources and challenges it faces. However, from our experience, project estimates are beginning to show a 20%-30% improvement in customer onboarding and CDD costs in some deployments, with outliers in the 40% range. Here are examples of several companies offering solutions to address such challenges:

- Distributed data and information access: Pneuron, Apache Nifi.
- Sanctions, politically exposed persons and list validation and certification: AML Analytics.
- Artificial intelligence (AI) structures (to enable question and answer management): Kasisto.
- The cross-market, multibank consortium recently announced in Spain by Cecabank is an excellent example of a growing focus on blockchain in secure, complete customer information management. (For more information, see: enterprisetimes.co.uk/2017/05/30/spanish-bank-consortium-chases-the-blockchain/)

Transaction monitoring system

The transaction monitoring system (TMS) has taken the vast majority of the weight of AML, and as a result, TMS's inherent weaknesses have been magnified with larger costs, greater opacity and poorer return than was ever anticipated.

However, the investments in TMS have created some exceptional value that can be effectively leveraged, especially in the realm of a common, homogenized data model covering customers and transactions — an asset that should be utilized considerably more across not just AML, but compliance, risk and regulatory reporting.

The TMS market is dominated by several large players — all of whom are solid in what they provide, though the differences between them can be hard to discern. In fact, their AML "scenario" coverage is largely the same. Therefore, the differences between them should be far less of a factor in deciding which system to use than how a particular system is implemented in the first place. Replacement decisions between them should therefore not be based on a perception of lacking functionality or AML scenario coverage since their functional coverage is largely the same.

Traditional TMS platforms also suffer from a similar problem — specifically the slow speed of analytics or scenario development and the lack of agility versus laundering adversaries who are able to change activities very quickly.

Step in AML	Challenge	Example opportunities
Transaction monitoring system	Your real intentions do not want to be discovered — you're agile and able to change much quicker than I can, and so I am by definition looking for a needle in a constantly changing stack of needles. Moreover, I can't change as fast as you, so are you nearly always a few steps ahead of me?	**Development and organization** — RAnD™, or rapid analytics development, offers the ability to supplement existing transaction monitoring system (TMS) deployments with experimentation, fail fast, agile development and testing, and what-if or risk exposure reviews against ever-changing market events, input from investigation units, regulatory or hotline tips, as well as new emerging product developments in an increasingly dynamic money laundering environment. Such emerging threats include: • Crowd sourcing • Digital charities • Digital gambling • Digital retailing • Mobile payments and peer-to-peer payments • Reinvigorated interest in high net worth real estate for money laundering • Human trafficking financial patterns that have a different pathology than drug money laundering New analytical tools are not necessarily needed though multiple are available. Rather, by establishing an analytical center of excellence to focus a team of analysts, organizations can develop and test new ideas and behaviors to transform and focus the TMS budget, reduce the sense of urgency for TMS replacement, add agility and flexibility in the process, and ultimately provide key valuable feedback into the TMS provider's roadmap. Rather than simply satisfying regulators' requirements, several firms have been very successful with such teams in getting ahead of regulators' considerations of risk. Additionally, a group of internal "ethical" money launderers could continually test the TMS environment and investigation teams, resulting in an improved end-to-end process. This approach also adds excitement to a role that is often dismissed as a middle- or back-office function rather than a critical component. **Technology** — New players are entering the TMS space, although they remain embryonic and largely opportunistic. There is significantly more innovation supporting small- to medium-sized firms than larger deployments, and we should expect to see TMS utilities running outside the firms themselves starting to be offered. AI is also being experimented with here though its application is much more exciting in the operations unit below.

The impact of RAnD versus wholesale TMS deployment is both significant and financially material, specifically to the point earlier that the AML scenario coverage in leading TMS systems is largely the same. Companies worth considering when looking at these challenges should generally include existing business intelligence contracts and providers with investment into intellectual and analytical skills rather than new technology.

The result is agility, speed, better use and focus of funds, and strong leverage of an enterprise's global and local business and analytical skills, market knowledge and intellectual property.

All aspects are improved in order to leverage the very significant investments made in the application and data integration projects required as part of the initial TMS deployments (which is often by far the biggest cost of an AML solution deployment).

It is important to note that traditional TMS providers offer solutions for first deployments. Following are some examples:

- On the top tier: Oracle Financial Crimes (Mantas), Nice Actimize and BAE Detica
- For small- to medium- sized businesses: Fiserv, Verafin, Bankers Toolbox and Navaera

Also, some interesting cross-industry innovations are starting to appear that mix multiparty computation and blockchain to develop a cross-market AML perspective. It is still the early days for blockchain, but these endeavors seek to find laundering activities not in individual banks, but between them.

Such systemic risk is a huge challenge, but one worthy of new and exciting distributed analytical approaches and encryption. Enigma is an example of a startup in this space.

Step in AML	Challenge	Example opportunities
Operations financial investigations unit	There are just too many false-positive red-flagged activities requiring review and/or investigations coming out of transaction monitoring. It's really hard to see the forest for the trees, thus undermining the whole process.	**Technology and organization** — Investigation, particularly in tier-one alerts, is repetitive, fairly simple and often focused on innocuous events. As such, they are an excellent starting point for machine learning and robotics-solution deployments. Several innovators are experimenting with such tools to significantly reduce the expensive and inconsistent, often outsourced or third-party, labor forces that are currently the only alternative to investigating huge numbers of alerts. Machine learning and robotics can address alert volumes with greater consistency and transparency. These solutions offer not only a significant cost improvement but also consistency in investigation and documentary support, a clear feedback line back to the TMS and onboarding components of the AML continuum and an ability to clearly focus on true risks. These technologies are potentially transformative. Of all innovations, these are the most exciting for the AML function: • The use of digital bots (RPA or robotic process automation) together with AI-applied learning could automate the tedious, manual and repetitive work of negative news searching, background and historical transaction storing, and documenting activity. • Critically, if the speed and consistency of the investigation can significantly improve, then focus can move to alerts that are not normally investigated — alerts that are below the TMS threshold or auto-closed without investigation. These alerts make up 95%-97% of all alerts and any money laundering within these activities is ignored because investigating them would inundate the current investigation assets. With automated investigation reviewing 40% of alerts rather than 3%, our chances of stemming money laundering increases dramatically. If successful, such a deployment would transform the AML function overnight. • Finally, but further out, an AI solution will learn and thus be able to investigate more complex alerts and cases as it evolves. It will not replace the experienced investigator since this is often intuition, but it will enable organizational focus and increase the leverage of high-value investigation assets. This has the potential to reduce investigative costs and also leverage high-skills assets with a much better return. **Process** — To close the loop, the AML continuum should be refreshed continuously — with investigation successes, behaviors that have been found to be a new risk and questions that should be asked at onboarding. Whether that be new insights into the RAnD team testing and experimenting for new behaviors, product types or other focus areas, or whether that be at the onboarding and customer entry points, the data from the financial investigation unit is a critical input to ensure the AML function remains relevant, vibrant and up-to-date.

Operations

Here technology offers something truly transformative, and it is a real focus for many firms in the application of new innovations that offer speed, consistency and repeatability in what remains a hugely expensive, manual and opaque investigation process.

The impact of AI in the investigation process is potentially profound, enabling increased transparency, broader coverage of investigative diligence, more rapid interdiction, and more consistent evidence and reporting processes. The deployment of such technologies can potentially reduce costs by up to 50 percent while simultaneously doubling coverage against alerts that normally would be ignored.

Following are examples of companies offering solutions to address these challenges: Ayasdi, Cortical.io, QuantaVerse, MindBridge and IBM's Watson.

Firms specializing in RPA include: Blue Prism, AutomateWork, Data Robot and UiPath.

Governance and relevancy

Step in AML	Challenge	Example opportunities
Governance and relevancy	I need to make sure that together we are clearly adhering to global rules, local rules and not undermining honest business relationships.	Although global regulatory inventories are often comprehensive, they are often housed in simple Excel or SQL lists with limited value in stimulating, monitoring and managing execution of organizational responsibilities, dependencies, time and reporting performance expectations, and key risk indicators (KRIs)/key performance indicators (KPIs). The key is to visualize regulatory inventory and process documents for technology execution in order to answer the questions of: "Have I got the inventory covered with processes, ownership and reporting; how do I keep the inventory current; and how well are we performing against the regulation?" Here process and monitoring technologies offer some excellent opportunities to establish transparency and proactive management, not just across AML but all the other global complex regulations as well. **Process** — Such alignment should also map robustly to incentive and remuneration structures at the onboarding and client acquisition function. Simple questions that add transparency to such matters are: "What is the average speed of onboarding at a branch; what are the outliers in the number of new clients being acquired?" Additionally, reports that map transaction monitoring system and financial investigation unit output to age of client and number of alerts created over the first year of activities should be included.

The global financial client management, reporting and investigation culture is driven by tone and execution; monitoring; and feedback from the lines of business, from internal audit, and from regulatory and brand integrity stakeholders. Without harmony between these stakeholders, compliance becomes a check-the-box exercise, stagnating and ultimately weakening the mission. The complexity of regulations and the global and local interpretation of them directly challenges the ability to add consistency and uniformity in AML execution and effectiveness.

The challenge therefore is not just an inventory of regulations, but who is responsible for them; how are they executed; what dependencies are involved; and how effectively are they being managed, updated and maintained before they go into practice?

Governor Software, as well as governance, risk and compliance platforms like MetricStream, RSA Archer and Oracle, are known to provide capabilities that can help establish a structure to organize varying global and local requirements, best practices, internal and external KPIs/KRIs, and a plethora of other transparency and proactivity objectives.

Summary conclusions

Sound considerations when looking at AML include:

- **The most critical element in the AML program is the initiation of the client relationship** — customer onboarding, KYC and due diligence. Line of business profit-and-loss pressure to reduce the time to onboard, as well as fragmentation of information, undermines this solution, as does the poor assimilation of lessons learned from TMS and FIU discoveries. Investment in distributed analytics solutions as well as stronger assimilation of intelligence processes, will radically improve this vital gatekeeping function. Certainly, the challenge is the distribution and diversity of information about prospective customers — an area where innovations leveraging blockchain offer more value and real opportunity than hype.
- **The value and effectiveness of the TMS has become over relied upon with nagging sense that a better TMS is out there. Yet on the whole, most TMS solutions offer exactly the same features and functions and have the same drawbacks.** A principal drawback is the lack of agility in developing new scenarios against rapidly changing market events, real-time intelligence and knowledge of internal risk factors. A refocus of TMS investment away from replacement to adding strong compliance analytical skills supported by a rapid analytical development tool would transform the speed and agility of the TMS function at a fraction of the cost and time of current TMS replacement projects.
- **The FIU or investigation units are the most inefficient in the whole continuum.** The volumes of alerts from the TMS are undermining their ability to effectively investigate and interdict unlawful activity, capital flight related to tax arbitrage or dirty money. Traditional approaches of either reducing volumes through data analysis or building larger, cheaper offshore investigation units are limited stopgaps that tend to institutionalize many of the risks the enterprise seeks to avoid. The introduction of automated, consistent investigation technology around AI not only offers exceptionally exciting opportunities to both radically change the cost structure of the investigation, but it also enables the unit to actually increase the number of investigations, opening up an opportunity to discover risks that previously remained hidden. AI, if managed correctly, offers a transformational opportunity of significant magnitude in cost and risk avoidance, which could potentially change the balance of power against our laundering adversaries.
- **Each of these elements form a circular ecosystem that relies on each other to improve and be current.** Communication, constant adjustment, and realignment based on both internal and external inputs are critical to the success of the AML program. For example, the integration of the TMS to assess data collected within the KYC platforms and the transactional clearing platforms is critical to gauge normal and expected vs. red-flagged or unusual activity that warrants further monitoring and/or investigation. Efficiencies in building scenarios that consider the financial purpose of the transfers juxtaposed to expected activity through expected products and services within expected jurisdictions linked to the collected KYC information could greatly reduce the false-positive red-flagged alerts, as well as investigations to be vetted.

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About Grant Thornton Financial Crimes Practice

The Grant Thornton LLP Financial Crimes team is a global team of experienced anti-money laundering, anti-fraud market abuse and compliance professionals offering end-to-end objectivity and deep technical knowledge. Ensuring clients' risk management and compliance teams are up-to-date, the team focuses at identifying and mitigating risks, ensuring its clients understand applicability and relevance of market events, organizational trends and technology opportunities, and addressing and resolving regulatory enforcement or risk management actions. The result — effective, scalable, agile and assured financial crimes protection and compliance.

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