OPPORTUNITIES AND CHALLENGES OF NEW TECHNOLOGIES FOR AML/CFT

Technology has the potential to make efforts to combat money laundering and terrorist financing (AML/CFT) faster, cheaper, and more efficient.

The FATF Standards are a dynamic tool that evolve in response to changing global money laundering and terrorist financing threats, vulnerabilities and risks, and to challenges that occur in their implementation. The world has changed significantly, including as a result of technological innovation. The financial system too, has seen drastic changes in recent years, with new digital payment methods, virtual assets such as bitcoin and an increasing number of online transactions.

FATF is committed to keeping abreast of innovative technologies and business models in the financial sector. Digital innovations continue to emerge, at an ever-accelerating pace. Given the profound impact of digital transformation on the financial system and the quest for greater effectiveness of FATF Standards, the FATF launched an initiative to examine how technologies, especially emerging technologies, can help in the fight against money laundering and terrorist financing. This initiative will ensure that the FATF's global AML/CFT standards remain relevant and effective. FATF's requirements can then drive "smart" and responsible financial sector regulation, which will make efforts to detect and disrupt illicit finance more effective. The FATF Report on *Opportunities and Challenges of New Technologies for AML/CFT* is for AML/CFT supervisors, technology developers and financial institutions.

HOW CAN TECHNOLOGY **IMPROVE IMPLEMENTATION** OF THE **FATF RECOMMENDATIONS?**

IMPLEMENTING THE RISK-BASED APPROACH.

The risk-based approach is the cornerstone of the FATF Standards. It requires public and private sector to understand fully the money laundering and terrorist financing risks they face, and take appropriate action to address these risks. Nevertheless, FATF's country assessments show that some countries still find it challenging to apply the risk-based approach. In some countries, banks and other regulated entities still rely on a rules-based approach, which is one of the contributing factors for defensive and over-reporting.

Technology can increase the capacity to collect and process data, and share it with stakeholders, including supervisors. Artificial intelligence-based tools can analyse data accurately, in real-time and help better identify emerging risks.   It can also assist the validation of the results of manual assessments, and their subsequent conclusions.

FINANCIAL INCLUSION

Around the world, one billion people struggle to provide adequate identification documents for opening bank accounts or maintaining access to financial services

Innovative technology-based solutions, such as digital ID, may contribute to financial inclusion, as long as they are implemented through a responsible and risk-based approach. They can provide solutions to disadvantaged or otherwise excluded societal groups and facilitate access to traditional financial products or services. Technology can minimise weaknesses in human control measures, improve customer experience, generate cost savings, and facilitate transaction monitoring. Any adoption of new technologies for AML/CFT purposes must follow a problem-solving approach, which does not create an additional burden or unintended consequences. This includes unintentionally exacerbating financial exclusion, for example, in sectors of the population that do not have access to electronic devices.

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OPPORTUNITIES AND CHALLENGES OF NEW TECHNOLOGIES FOR AML/CFT

JULY 2021

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Opportunities and Challenges of New Technologies for AML/CFT, July 2021, from www.fatf-gafi.org

HOW CAN NEW TECHNOLOGIES IMPROVE ANTI-MONEY LAUNDERING AND COUNTER-TERRORIST FINANCING ACTION?

Technology has the potential to make efforts to combat money laundering and terrorist financing faster, cheaper, and more efficient. It can process large volumes of information that go beyond human capability and provide data processing results in record time, releasing human resources for more critical work such as the analysis of complex ML/TF cases

PRIVATE SECTOR

Multinational financial institutions, retail and commercial banks and internet-based firms such as Fintech take the lead when it comes to implementing new technologies. The advantages for the private sector include:
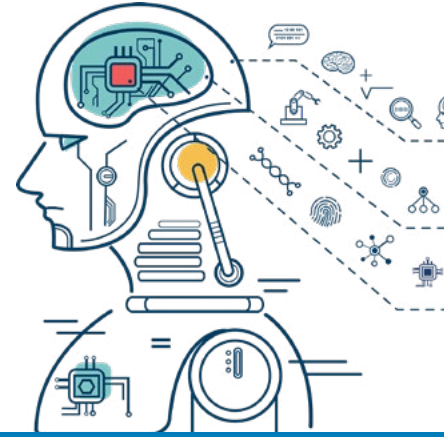
- Better identification, understanding and management of ML/TF risks

- Process and analyse larger sets of data faster and more accurately

- Efficient digital on-boarding

- Greater auditability, accountability and overall good governance

- Reduce costs and maximise human resources to more complex areas of AML/CFT

- Improve the quality of suspicious activity report submissions

Digital Solutions for Customer Due Diligence - can streamline on-boarding processes by adapting to the risk, context and individual. In particular, mixed approaches, where official ID's are provided in tandem with biometric identification may offer more robust identification processes. Digital ID has been widely adopted and supported in many jurisdictions. The enhanced use of technologies for client screening and matching could also improve efficiency as these tools allow for more accurate and up-to-date collection and processing.

SUPERVISORS

Technology can also improve supervision through better live monitoring, exchange of information with counterparts, and a more informed oversight of regulated entities. The advantages for the supervisors include:

- Supervise a larger number of entities

- Better identify and understand the risks associated to the different sectors individual entities

- Live monitor compliance with AML/CFT standards and act in cases of non-compliance

- Communicate more efficiently with regulated entities and carry out additional information requests

- Store, process and report on larger sets of supervisory data

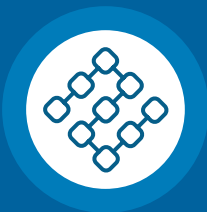- Exchange information with other competent authorities

WHICH **TECHNOLOGIES** OFFER THE **MOST POTENTIAL** TO **AML/CFT?**

MACHINE LEARNING offers the greatest advantage through its ability to learn from existing systems, reducing the need for manual input into monitoring, reducing false positives and identifying complex cases, as well as facilitating risk management. The most useful applications of Machine Learning to AML/CFT include:

- *Identification and Verification of customers* through authentication AI, including biometrics, and liveness detection techniques (micro expression analysis, anti-spoofing checks, fake image detection, and human face attributes analysis)

- *Monitoring of the business relationship and behavioural and transactional analysis* by using Machine Learning algorithms to place customers with similar behaviour into cohesive groupings to monitor and alert scorings to focus on patterns of activity

- *Identification and implementation of regulatory updates:* Machine Learning techniques can scan and interpret big volumes of unstructured regulatory data sources on an ongoing basis to automatically identify, analyse and then shortlist it based on the institutions' requirements.

- *Automated data reporting (ADR)* can make granular data available in bulk to supervisors.

DISTRIBUTED LEDGER TECHNOLOGY (DLT) may improve traceability of transactions on a cross-border basis, and even global scale, making identity verification easier. It may speed up the customer due diligence process, as consumers can authenticate themselves. They can even be automatically approved or denied through smart contracts that verify the data.

DLT continue to pose challenges from an AML/CFT perspective as they are decentralized in nature and enable un-intermediated peer-to-peer transactions without any scrutiny.

NATURAL LANGUAGE PROCESSING AND SOFT COMPUTING TECHNIQUES

simulates human decision-making, as a result, it can take incomplete, ambiguous, distorted, or inaccurate (fuzzy) input and produce useful outputs. Like with all technological solutions, when they are integrated with broader monitoring systems, they should include an element of human analysis for specific alerts or areas of higher risk.
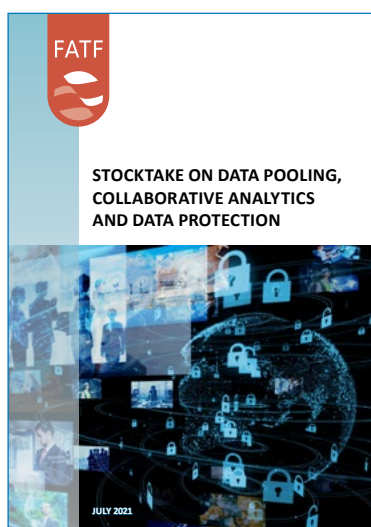
Application Programming Interfaces (APIs) connect customer identification software with monitoring tools, or risk and threats identification tools with customer risk profiles. An API will generate alerts or alter risk classifications as relevant. This can:

- Improve the interoperability between traditional banking data, moving away from siloed systems with fragmented frameworks.

- Increase automation and optimise resources and output accuracy.

- Supply an aggregated and normalized data feed, helping to build a more complete risk profile for new customers.

Does the FATF validate or recommend any particular tools?

The FATF does not validate, contribute or in any way get involved in the development of technologies. The FATF does not take a position on individual technologies or providers.

See also

Stocktake on Data Pooling, Collaborative Analytics and Data Protection, July 2021, from www.fatf-gafi.org

WHAT ARE THE **CHALLENGES** IN IMPLEMENTING
NEW TECHNOLOGIES FOR AML/CFT?

Adoption and demand for new technologies has been unequal. There are significant gaps between large financial institutions and smaller stakeholders, but also at a regional and national level, with some countries falling behind in digital innovation.   **What are the particular challenges that are holding back implementation of new technologies?**
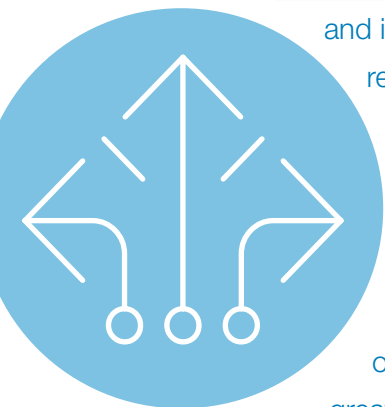
Regulatory obstacles – are one of the main challenges to the use of technology for AML/CFT.

Some supervisors are still at the early stages of developing expertise and resources to properly understand and supervise new technologies. Even when supervisors do understand the interpretability and explainability of new technologies, the regulatory practices still need to be adjusted to the conditions of new AML/CFT technologies.

Technology will not improve effectiveness without accurate and high quality data. The optimal use of new technologies for AML/CFT relies on data that is easier for technology developers to integrate into their tools, easy to understand and explain to non-experts, and easy to communicate to counterparts and competent authorities when needed. Ensuring data quality is also essential to the adoption of AML/CFT technology-based solutions.

Operational challenges – relate mostly to adapting practices to new technologies. Developing and implementing new technologies requires a significant investment. It often means replacing legacy systems with the new tools. And investing in developing the necessary skills to understand the technology and to train additional staff.

Replacing or updating legacy systems can be complex and expensive. This makes it challenging for both industry and government to exploit the potential of innovative approaches to AML/CFT. For industry, the cost-benefit analysis stemming from a lack of regulatory incentives, whether real or perceived, continues to pose an obstacle to a greater uptake of innovative solutions for AML/CFT. Difficulties with the explainability and interpretability of digital solutions are another key challenge for both industry and regulators. In part, this can be due to the limited availability of relevant expertise and some lack of awareness of innovative technologies' potential among AML/CFT professionals, both in industry and government.

The unintended consequences of new technologies – such as ethical and legal issues, can arise from a misguided implementation of these tools.

New technologies must be adopted in a responsible, proportionate and risk-based approach manner, which maximises effectiveness gains whilst ensuring financial inclusion and the protection of underserved populations, data protection and privacy.
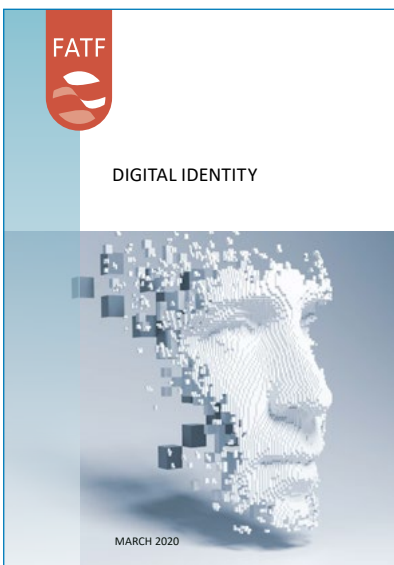
Operational risks and risk mitigants of new technologies, including unintended exclusion and privacy risks, are discussed in FATF's Guidance on Digital Identity.

How can we address these risks and benefit from the advantages that technology can offer?

Industry must continuously examine the effectiveness of these new technologies to detect and combat ML/TF risks, as well as their relation to emerging risks or any unintended consequences. Both public and private sector should re-calibrate their technology-based solutions, if they do not fulfill the intended purpose. It is also essential to ensure that there is no over-reliance on new technologies. Human input and capacity building also continue to be essential, in particular regarding elements that technology still cannot overcome, regional inequalities or expertise on emerging issues.

See also

Digital Identity, FATF Guidance, February 2020, from www.fatf-gafi.org

FATF

DIGITAL IDENTITY

MARCH 2020

HOW CAN WE CREATE AN ENVIRONMENT THAT
ENCOURAGES AND **ENABLES**
NEW TECHNOLOGIES IN AML/CFT

The opportunities and challenges of using new technologies for AML/CFT rely on regulatory and policy responses as well as on technological development.

Some countries and mostly large financial institutions or banks have already begun adopting and using new technologies as part of regular compliance efforts.

However, for digital innovation to reach its full potential of making global AML/CFT efforts more effective, it needs to be adopted in scale and by the majority of stakeholders around the globe.

Supervisors should take a proactive approach to technology. This would help address some of the outstanding risk and trust concerns that some banks or other private sector entities have.

Tech-sprints, accelerators, innovation hubs, and other collaborative initiatives can allow the private sector to develop, present, and test its tools. It can also receive feedback on how such tools apply to the AML/CFT frameworks.

FATF encourages countries to work together and with the private sector to consider a holistic approach to new technologies, taking into account its potential as well as its limitations.

The adoption and implementation of new technologies must reflect threats as well as opportunities, and ensure its use is compatible with international standards of data protection and privacy, and cybersecurity.