

The FATF logo is a red shield-shaped emblem with the letters 'FATF' in white at the top and a stylized white graphic below. The background of the entire page features a blue digital grid with glowing nodes and circuit-like lines, suggesting a global network or data flow.

FATF

The Egmont Group logo is a white rectangular box with a blue border. It contains the text 'EGMONT GROUP' in a large, blue, serif font, with 'OF FINANCIAL INTELLIGENCE UNITS' in a smaller, blue, sans-serif font below it. A globe icon is integrated behind the text.

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# DIGITAL TRANSFORMATION OF AML/CFT FOR OPERATIONAL AGENCIES

## DETECTION OF SUSPICIOUS ACTIVITIES AND ANALYSIS OF FINANCIAL INTELLIGENCE

Technology has immense potential to increase the efficiency of anti-money laundering (AML) and counter terrorist financing (CFT) workflows and the effectiveness of AML/CFT efforts. In recent years, operational agencies across the Financial Action Task Force (FATF) Global Network and Egmont Group of Financial Intelligence Units (Egmont Group), regardless of their development and size, have been incorporating different digital tools to assist their operational efforts. These tools range from automation to the use of large datasets, big data and advanced analytics such as artificial intelligence (AI) and machine learning.

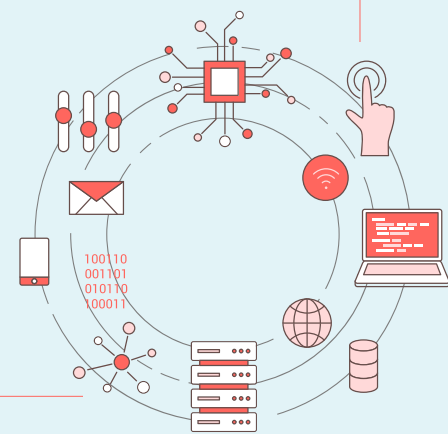
To assist Financial Intelligence Units (FIUs) in leveraging technology to strengthen their operational capability and resilience, the FATF and Egmont Group adopted a report on *Digital Transformation of AML/CFT for Operational Agencies* in October 2021, which focuses on the detection of suspicious activities and analysis of financial intelligence. This report for government authorities focuses on “how” and “when” to find the right digital tools, and introduce and optimise them for AML/CFT purposes, and to overcome the practical and operational challenges arising throughout different stages and processes in the daily operations of operational agencies. This summary highlights key findings of the report.

# WHAT IS THE DIFFERENCE BETWEEN DIGITALISATION AND DIGITAL TRANSFORMATION?



**DIGITALISATION (OR DIGITISATION)** refers to a process of converting analogue data from a paper or text/image-based form into a digital form that can be easily read, processed, reproduced and transmitted by computers. In financial intelligence, digitalisation can refer to turning suspicious transaction reports (STRs), suspicious activity reports (SARs), cash threshold/transaction reports (CTRs), and other images and information into a digital format. It can also involve automation, which helps streamline repetitive workflows and minimises processing time. One example is automated submissions of STRs.

**DIGITAL TRANSFORMATION** refers to a process of adoption of digital tools and methods by an organisation, typically those that have either not been including the digital factor as part of their core activities or have not kept up with the pace of change in digital technologies. Contrary to digitalisation and digitisation processes, digital transformation is more holistic, involving the whole organisation and changing organisational culture and relationships to users, as well as business processes.



Source: OECD Glossary of Statistical Terms, 2005

## WHY DIGITALISATION / DIGITAL TRANSFORMATION?



### VOLUME

To handle large amount of unstructured data coming from an increasing number of reporting entities, sectors, and transactions.



### VELOCITY

To process data received at high speed in order to detect and disrupt money laundering and terrorist financing (ML/TF) transactions in time.



### VARIETY

To process and analyse data received from different databases, in different formats and structures.

# KEY DRIVERS

## INCREASE EFFICIENCY

**Need to streamline the repetitive manual process of collecting large volumes of unstructured data from a huge number of reporting entities.**

Automation and other digital initiatives allow pooling and sorting of large volumes data and information from disparate sources and differently structured databases for subsequent analysis. As a result, FIUs can process more data quickly.

## ENHANCE QUALITY

**Need to prioritise STRs of higher investigative value for detailed and targeted analysis.**

Unsupervised text mining techniques such as natural language processing or supervised machine learning such as data labelling allow training computer systems to learn from the data received in STRs and various reports, to identify patterns, and to draw inferences based on the rules set by FIUs. As a result, FIUs can prepare analysis of higher quality.

**What are the key drivers that prompt FIUs to introduce digital initiatives from automation to advanced analytics to support their efforts in handling financial intelligence, received suspicious transaction reports (STRs), and other available information?**

## OPTIMISE RESOURCE DEPLOYMENT

**Allow for better assignment of finite human resources.**

Digital tools save analysts time in mundane tasks such as data verification and sorting of large volumes of data and allow them to focus on more sophisticated analytical tasks. As a result, FIUs can maximise the value of analysts' tasks.

## ADOPT A RISK-BASED APPROACH TO AML/CFT

**Lay down the essential precondition for the implementation of a dynamic risk-based approach in FIU workflows.**

Machine learning and other AI-based tools can partially automate the process of risk analysis drawing from large volumes of unstructured data. These tools may enable FIUs to identify emerging risks which do not correspond to already known profiles, and to verify and adjust findings prepared based on traditional risk analysis.

# STRATEGIC CONSIDERATIONS

Digitalisation and digital transformation have the potential to bring immense opportunities to FIU workflows and there are practical needs for FIUs to harness technology to solve some of their day-to-day challenges. Formulating key strategic considerations prior to the introduction of digital initiatives is instrumental in jumpstarting any programme.



## VISION-SETTING:

### WHAT TO ACCOMPLISH?

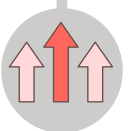
- Define the objectives, principles, and goals, and articulate intermediate and long-term goals, business value, and positioning of the programme.
- Align a common vision shared within the FIU, both across different units and between senior executives and frontline analysts.



## MAPPING AND BENCHMARKING:

### WHERE ARE WE?

- Review the existing workflow and available data/information (in terms of its strengths and weaknesses), available resources (including manpower, financial, hardware), and capability and capacity (in terms in AML/CFT and IT).
- Understand the gaps of needs, resources, and capability of the FIU, and identify available technologies or tools to help FIU to identify appropriate potential solutions that match operational needs most.



## PRIORITISATION:

### WHERE TO START?

- Identify the most urgent needs of the FIU and the most crucial steps of the workflow that would be benefiting most from the programme.
- Start small and strategically by finding a small but significant problem, and experiment with possible solutions.



## **BUILDING AN ENABLING ENVIRONMENT:**

### **ROLLING OUT A PROGRAMME THAT SUPPORTS DECISION-MAKING AND MACHINE LEARNING DEVELOPMENT**

- Seek stakeholder buy-in from senior government leadership, FIU staff/analysts, to reporting entities through understanding their needs and translating the specific benefits to them.
- Build a digital and change-friendly environment by providing the necessary resources throughout the development (e.g. establishing an advanced analytics team, whether internal or outsourced; providing sufficient resources covering initial development, ongoing operational and maintenance costs), and providing training opportunities for relevant personnel.



## **EXECUTION:**

### **HAVE THE OBJECTIVES BEEN ACHIEVED?**

- Measure, monitor, and track the development to ensure that objectives and deliverables are achieved.
- Test-and-learn through gathering feedback from users. If the process works, repeat and scale it up. If the process does not deliver as planned, review and fine-tune programme.



## **COLLABORATION:**

### **WHOM TO LEARN FROM AND HOW TO IMPROVE?**

- Engage with both internal and external stakeholders (such as reporting entities, other FIUs or AML/CFT competent authorities) to understand their end-user needs, their similar experiences, and to obtain their feedback on the programme.
- Adopt a team approach based on open communication between developers and users to ensure the proposed digital application will bring meaningful results.

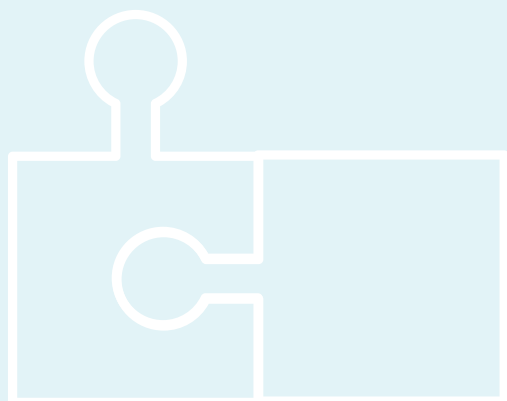
# OPPORTUNITIES

## INCREASED DATA UTILITY FROM NEW AND MORE DATA SOURCES

Digital initiatives allow FIU analysts to have a wider, up-to-date, real-time, and more direct and convenient access to data stored in multiple internal databases, and potentially other external databases belonging to other AML/CFT competent authorities or reporting entities, as well as open source information. This gives opportunities for analysts to prepare more relevant and comprehensive analysis.

## INCREASED DATA HANDLING CAPACITIES

Digital initiatives provide opportunities for FIU analysts to handle large volumes of unstructured data of different formats from disparate sources in a timeframe which manual process would not allow. This has the potential to allow analysts to draw connection of suspicious transactions and networks through analysing a larger amount of relevant information.



## STRENGTHENED ANALYTICAL CAPACITIES

To deal with increasing volumes of STRs, SARs, CTRs and other reports through prioritisation of limited human resources on more advanced level of analysis and feedback, and in turn:

- increasing efficiency, accuracy, and quality of operational analysis and case work through the uses of digitalised STR collection systems, followed by advanced analytics;
- enabling FIUs to mine data so as to identify wide-scale or dispersed patterns of activity that may indicate structuring or ML, which may not be visible on the basis of single or a few individual STRs;
- improving the quality of strategic analysis by using the full breadth of data available in the most thorough and efficient way supported by advanced analytics.

## BETTER UNDERSTANDING AND MANAGEMENT OF ML/TF RISKS

Machine learning and other AI-based tools allow for the processing of larger volumes of data, and can partially automate the process of risk analysis. They may enable FIUs to identify emerging risks which do not correspond to already known profiles, and to verify and adjust findings prepared based on traditional risk analysis.



## **SECURED COLLECTION, COMMUNICATION, DISSEMINATION AND STORAGE OF STRS AND OTHER RELATED INFORMATION**

Communication and dissemination of STRs and other related information could take place across different departments within the FIU, and with reporting entities and domestic/international competent authorities. Digital tools provide opportunities for a secured collection and transmission of such information. The application of digital tools may also allow communication in a secured manner that aligns with relevant legal framework (including data protection and privacy requirements).

## **IMPROVED STR MANAGEMENT**

Relevant for receiving, storing, and analysing STRs, as well as providing feedback to reporting entities.



# BENEFITS

Digitalisation and digital transformation has the potential to bring immense opportunities to FIU workflows and there are practical needs for FIUs to harness technology to solve some of their day-to-day challenges. Formulating key strategic considerations prior to the introduction of digital initiatives is instrumental in jumpstarting any programme.



## DATA COLLECTION

- Minimises human intervention in repetitive tasks, and consequently increases data accuracy and enables resources to be allocated on higher priority tasks.
- Minimises time required for data collection and subsequent entry by reporting entities and FIUs.
- Allows subsequent retrieval of data for analysis and dissemination.
- Allows subsequent use of advanced analytics, as the use of AI and machine learning require a large pool of available data in a structured and harmonised format.



## DATA TRIAGE

- Obviates the time required for manual sorting of STRs, thereby allowing analysts to focus on reviewing and analysing the most relevant STRs and less on those of low relevance or quality.
- Reduces the noise generated by a large number of false positives, or filters low value STRs and other information received from the reporting mechanism and other channels.



## DATA FUSION

- Allows the production of more accurate, relevant, and meaningful results for analysts' use through better organisation of data within a shorter timeframe.
- Allows the possibility of conducting automatic one-stop search at the front-end by analysts instead of spending significant amount of time going through multiple databases and conducting manual searches. Makes a more comprehensive and targeted search feasible.
- Prepares for subsequent use of advanced analytics.





## DATA ANALYSIS

- Allows better and efficient interpretation of vast amount of data used in strategic analysis to uncover previously unknown criminals or criminal networks, and to help identify potential cases for further in-depth operational analysis:
  - Through viewing complex data in a graphic manner, thereby facilitating analysts' visualisation of potential fund flows and ML/TF trends, connections, and patterns in early stage.
  - Through linking different isolated individuals, entities, and transactions, especially involving a large network, thereby facilitating the mapping of potential connections between various different entities, and their nature of these relationships.



## DATA COMMUNICATION AND DISSEMINATION

- Allows for efficient, timely, early and secured communication between reporting entities, and with other domestic/international competent authorities.
- Reduces the amount of time that analysts spend on responding to routine communication and dissemination requests and frees them to focus on higher value-added analysis.

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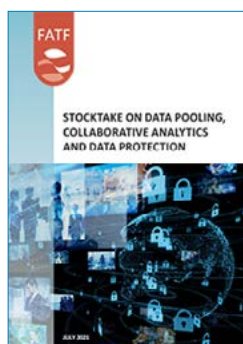
[www.fatf-gafi.org](http://www.fatf-gafi.org) | [www.egmontgroup.org](http://www.egmontgroup.org)

October 2021

## Digital Transformation of AML/CFT for Operational Agencies - Detection of Suspicious Activities and Analysis of Financial Intelligence

This document summarises the key findings a joint FATF/Egmont Group report for government authorities on “how” and “when” to find the right digital tools, and introduce and optimise them for AML/CFT purposes, and to overcome the practical and operational challenges arising throughout different stages and processes in the daily operations of operational agencies.

**For more information on FATF’s other projects on digital transformation, please see:**



*Opportunities and Challenges of New Technologies for AML/CFT*

*Stocktake on Data Pooling, Collaborative Analytics and Data Protection*

Available on [www.fatf-gafi.org](http://www.fatf-gafi.org)