

# Leveraging Emerging Technologies to Combat Fraud and Other Crime



## Introduction

The incidence of fraud does not look like it will go away so soon. The fact that the triangle for fraud perpetration remains valid and probably 'rewarding' makes it imperative that more attention be put on fraud prevention, detection, and continuous combating. The speed of information processing enhanced by rapid technological development further complicates the matters for fraud investigators, auditors, and even regular law enforcement agents worldwide. To be ahead of the curve and, if possible, some steps ahead of the perpetrators, professionals in fraud-related issues should acquaint themselves with emerging technologies and seek means of harnessing them to ameliorate their tasks both as operatives and advisors in the onerous task of fighting the global phenomenon of fraud and its allied practices.

## The Convergence

The unimaginable benefits accruing to perpetrators of frauds may continue to be the attraction that professionals should have more than cursory awareness but are duly equipped to devise means of combating. Though it is becoming more apparent that as much as perpetrators seem to be converging and building more networks that make tracing more cumbersome and complicated, the professionals should be thinking more of collaborative efforts to confront the convergence of operations. It is, therefore, envisaged that the preponderance of data needs to be combined with technology to achieve meaningful success in what perhaps may be regarded as the endless war in fraud combating.

## Basic Approaches to combating financial and related frauds

### Appropriate Technology

Without a doubt, many money launderers and financial crime perpetrators take advantage of technology to continue their nefarious activities. Thus, it behooves fraud fighters to identify and utilize appropriate technology for tracking, tracing, and blocking the easy flow of these heinous crimes against humanity.

### Effective Internal Control Systems

At the organizational level, sound internal control systems' establishment and diligent implementation cannot be overemphasized. Indeed, internal control systems may not be fool proof; they may help detect the semblance of fraud perpetration in the organization early. More so, with top management support for internal control systems, it may not be farfetched that it may become effective.

### Applicants Screening

Applicant screening is one basic approach that many organizations often neglect. While a thorough background check on a would-be employee may be helpful at the initial stage of employment, other aspects of screening may include access controls and operations control through roles assigned and supervisory controls.

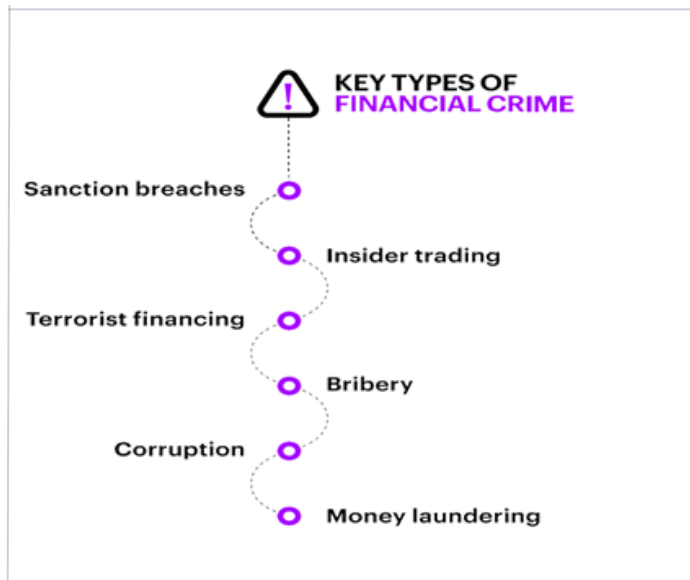
### Workplace Continuous Education about fraud

Some organizations have the wrong impression that the need for continuous education about fraud is a waste of time and resources. Some even think, why teach your employees about fraud if you do not want them to commit fraud? This is wrong thinking, and organizations should constantly educate the workforce about the damages of fraud to the organizations and the collective individuals.



In the table below, the United Nations Office on Drugs and Crime indicated that an average of two to five percent of the world's GDP, estimated as between \$800 Billion to something in the region of 2 trillion USD, is laundered every year. Though the percentage may look negligible on the surface, the figure is undoubtedly frightening. Though laundered money may come from allied sources such as drugs, politics, and other crimes such as wars and banditry, it may not be too inconvenient to think that a substantial part will be attributable to fraudulent practices. There are instances that it may be impracticable to separate the enormous amount into separate silos as they may be seen to be interwoven. Breaking further down means that the amount may be more than the annual GDP of so many countries combined. This alone should not be very comforting both in contemplations and realities.

*2–5% of the world's GDP (\$800 BN–\$2 TN) is laundered each year.*





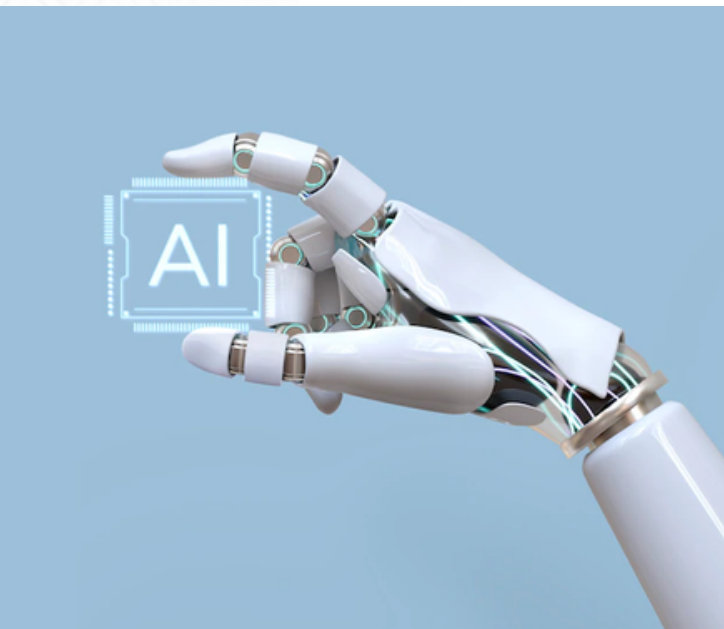
## Prosecution of indicted offenders

One powerful means of deterrence is the prosecution of indicted offenders with the appropriate punishments, including asset seizures, loss of employment, and jail time. When these are done, the tendency towards fraud commitment may be drastically reduced. While offenders are not prosecuted, the tendency is that others may be 'encouraged' to do the same.

## Basic Technological approaches

- Artificial Intelligence
- Machine Learning
- Cloud Computing
- Natural Language Processing
- Big Data/Data Analytics
- Robotic Process Automation (RPA)
- Network Analysis
- Encryption
- Blockchain
- Biometrics
- Functionalities

## Artificial Intelligence



This is the simulation of human intelligence processes by machines. Most FAQs today are handled by AI

## Machine Learning

It helps reduce false positives and assists in detecting new and strange techniques. It reports exceptions for further inquiry and investigations

## Cloud Computing

With sophistication in storage and security, it enables the management of complexity required for some analytics processes. It also enables access beyond physical locations



## Natural Language Processing

It enhances financial crime detection, especially when combined with robotic process automation

## Big Data/Data Analytics

Predictive analytics makes data collection and risk detection easier and assists compliance functions.

## Robotic Process Automation (RPA)

It automates repeatable, voluminous activity, which assists greatly in investigation processes

## Network Analysis

It helps analyze large data to reveal hidden patterns, duplicated transactions, and general relationships.

## Encryption

It enhances the integrity of data and allows for seamless sharing. It also boosts data privacy, especially when reporting to regulatory authorities.

## Blockchain

This prevents unnecessary changes and dubious alterations to past records and thus makes them irrefutable.

## Biometrics

It traces the authentication of customers and employees involved in transactions by capturing the unique physical or behavioural characteristics for further analysis.



## Some Tips in Preventive Measures

- Know-your-customers (KYC)
- Digital identification verification solutions
- Focus on crypto currencies.
- Adoption of automation processes
- Stay secure and compliant with Security Applications

## Some Challenges to Overcome

- Inadequate risk assessments affecting decision-making.
- The risk of terrorist financing and money laundering are insufficiently assessed and mitigated.
- Static analyses of a pre-determined set of risk factors
- The use of static reporting platforms such as Microsoft excel spreadsheet hinders large scale data analysis
- Priority are not given to combating new and emerging risks
- Regulatory and policy environment that frames adequate data pooling and sharing.

## Some Remedies

- Using new data sources
- Creating a data lake to respond to regulatory demands.
- Working with complete datasets to analyze potential fraud.
- Disrupting the fraudster's learning curve
- Helping to develop regulatory frameworks.

## The three-pronged approach

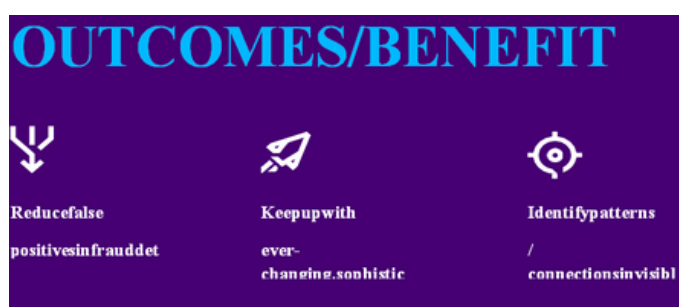
### Collaboration across practices

It is evident that many practitioners may not be able to invest in all these technologies all by themselves. The acquisition, deployment, and training costs may be huge to bear. Therefore, it is advisable that some collaboration across practices may be a way of solving such challenges. Some forms of joint bidding, technology sharing, and outsourcing among practices may become essential, with the possibility of reducing the cost burdens of individual clientele.

### Harnessing the power of technology

Sequel to the collaboration across practices, joint efforts across practices may make it easier and cost-effective to harness the power of technology. A kind of hub where each practice can contribute may be established, allowing full utilization of capacity in a shared arrangement or other forms of operating agreements. Development of a talented and resilient workforce

The need for a talented workforce that may adequately use and manage the available technology cannot be overemphasized. In addition, through continuous workforce education about fraud prevention, detection, and deterrence, the leveraging of technology can be meaningfully applied with the utmost realization of its benefits and a good return on investments. The human interface in technology deployment calls for the deliberate sourcing of talented workers and training them to have zero tolerance for fraud-related activities. The approach will help derive gainful outcomes from utilizing technology as tools for combating fraud and related crimes, which have terrible consequences on the future of commercial and governmental business.



Source: Accenture



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