Improve effectiveness of your Financial Crime Operations with ITC Infotech's Intelligent Automation Solution

Is your Financial Crime Compliance team grappling with too many AML False Positive Alerts? Are you spending most of your budget in human capital that is needed to triage and investigate the output of an ineffective technology? Are you facing challenges in meeting your SAR disclosure deadlines?

Do you wish there a way to identify True and False positive AML alerts, increase operational efficiencies, improve the effectiveness of the processes, deliver a better use experience, and reduce operational costs?

Transaction Monitoring Systems (TMS) used by financial institutions look at standard deviations, anomalies, and red-flag topologies. Being mostly rule based, they cannot assess a transaction in context of transaction patterns, customer risk score, past alert history, etc. These rules are designed to be overly cautious, as to not leave institutions open to a hefty fine should an instance of money laundering go unnoticed. Hence, more than 90% of the alerts generated by Transaction Monitoring System turns out to be false positive.

How can you overcome the challenges of too many false positive without refining the TMS rules and risk an instance of money laundering go un-noticed?

Combine the knowledge held by investigators with artificial intelligence software capable of screening millions of transactions at once, using the context of risk score of the customer, transaction patterns, past history of alerts to process and score the level of risk, freeing up investigators to focus on the real risk.

Why "Contextual Decision Making" is changing the way that we combat financial crime?

As opposed to having investigators logging on to different internal systems, external systems/websites, reading through unstructured data, as part of fetching information necessary to carry out their investigation, data from all these disparate systems can be injected into a "Contextual Decision-Making Platform" that will replicate analytical processes of a real-life investigator.

This intelligent led approach will enrich data by linking externally sourced information with that held within the organization, thus allowing creation of contextual network, enabling better understanding of relationships and driving better decision making.

What is the key enabler for implementing Contextual Decision-Making Platform?

Financial institutions on the path of building data driven intelligence capability and extending the same to solve financial crime challenges are best placed to have seamless operations. A "Single Risk View of Customer" that provides a 360 degree view of their customer's risk profile, as well as their behavur patterns, is the key enabler for Contextual Decision-Making Platform.

This is where ITC Infotech comes in

ITC Infotech's Financial Crime Management as a Service built as a part of our Digital Banking Capability uses Hyper Automation – Artificial Intelligence, Machine Learning, RPA and a strong data foundation – created by way of a "Single Risk View of Customer", to
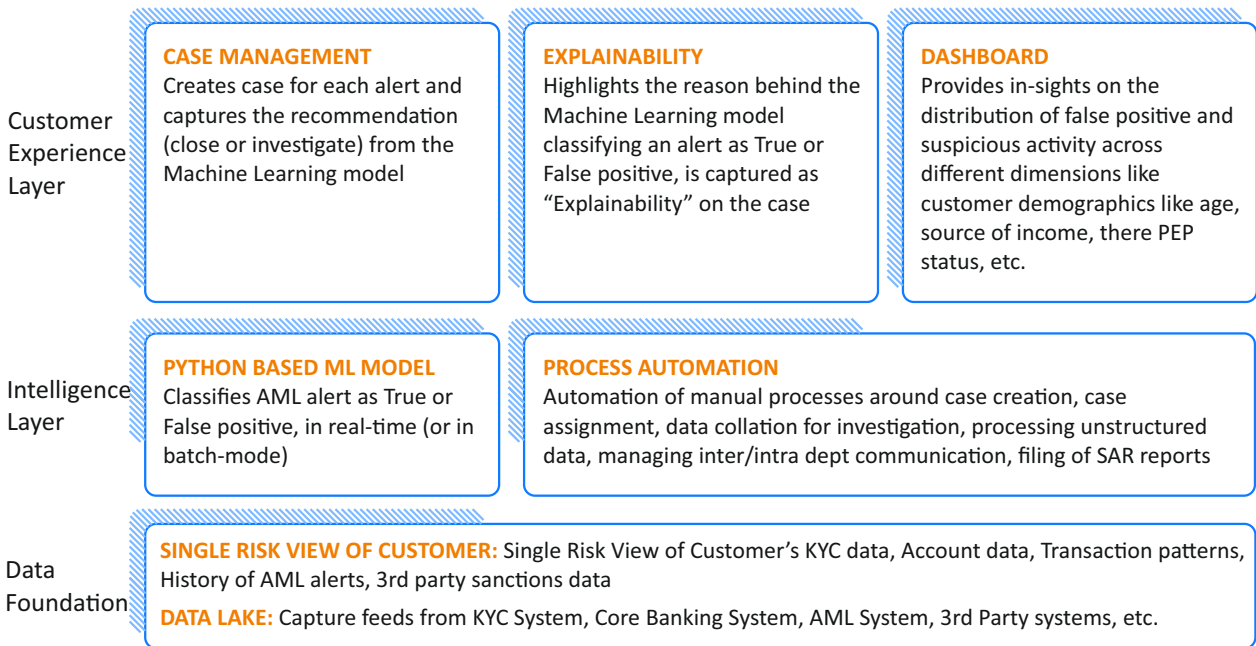
- Identify False positive alerts by way of responsible, ethical, and scalable AI/ML models to detect suspicious alerts from a huge set of red flags identified by rules-based AML system. Our model not only improves the hit rate but also greatly reduces the burden of the special investigation team, by

narrowing down the number of alerts to scrutinize in order to identify real perpetrators of financial crime

- Automate processes around
  - o Case Creation
  - o Case Assignment
  - o Data gathering for investigation
  - o Processing unstructured data
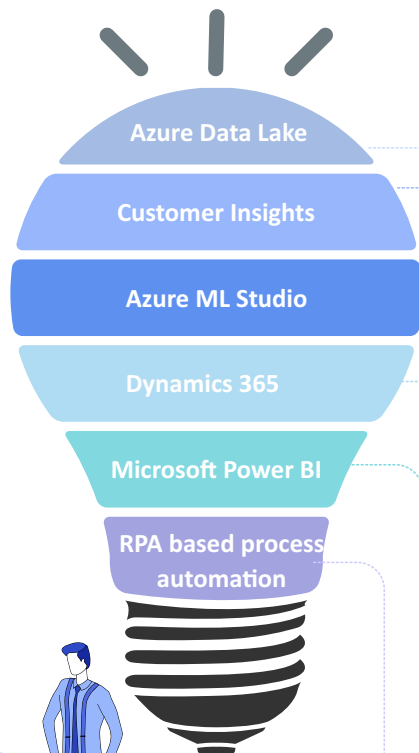 - o Managing inter/intra department communication
  - o Filing of SAR reports

FINANCIAL CRIME MANAGEMENT AS A SERVICE

Customer Experience Layer

CASE MANAGEMENT
Creates case for each alert and captures the recommendation (close or investigate) from the Machine Learning model

EXPLAINABILITY
Highlights the reason behind the Machine Learning model classifying an alert as True or False positive, is captured as "Explainability" on the case

DASHBOARD
Provides in-sights on the distribution of false positive and suspicious activity across different dimensions like customer demographics like age, source of income, there PEP status, etc.

Intelligence Layer

PYTHON BASED ML MODEL
Classifies AML alert as True or False positive, in real-time (or in batch-mode)

PROCESS AUTOMATION
Automation of manual processes around case creation, case assignment, data collation for investigation, processing unstructured data, managing inter/intra dept communication, filing of SAR reports

Data Foundation

SINGLE RISK VIEW OF CUSTOMER: Single Risk View of Customer's KYC data, Account data, Transaction patterns, History of AML alerts, 3rd party sanctions data

DATA LAKE: Capture feeds from KYC System, Core Banking System, AML System, 3rd Party systems, etc.

Solution

Built on Microsoft cloud platform, our solution is designed to run large scale data and analytics workloads in a scalable and cost-effective manner. The key technology components include

Azure Data Lake

Customer Insights

Azure ML Studio

Dynamics 365

Microsoft Power BI

RPA based process automation

Azure Data Lake brings together all your big data from disparate sources across cloud and on-premises environments into one central place.

Customer Insights comes equipped with the Power Platform. This makes it easy to import data from just about any source, and includes Power BI, Power Apps, Microsoft Access, Excel, JSON and REST APIs. It is easy to Map, Merge and Unify the data and create a "Single Risk view of Customer"
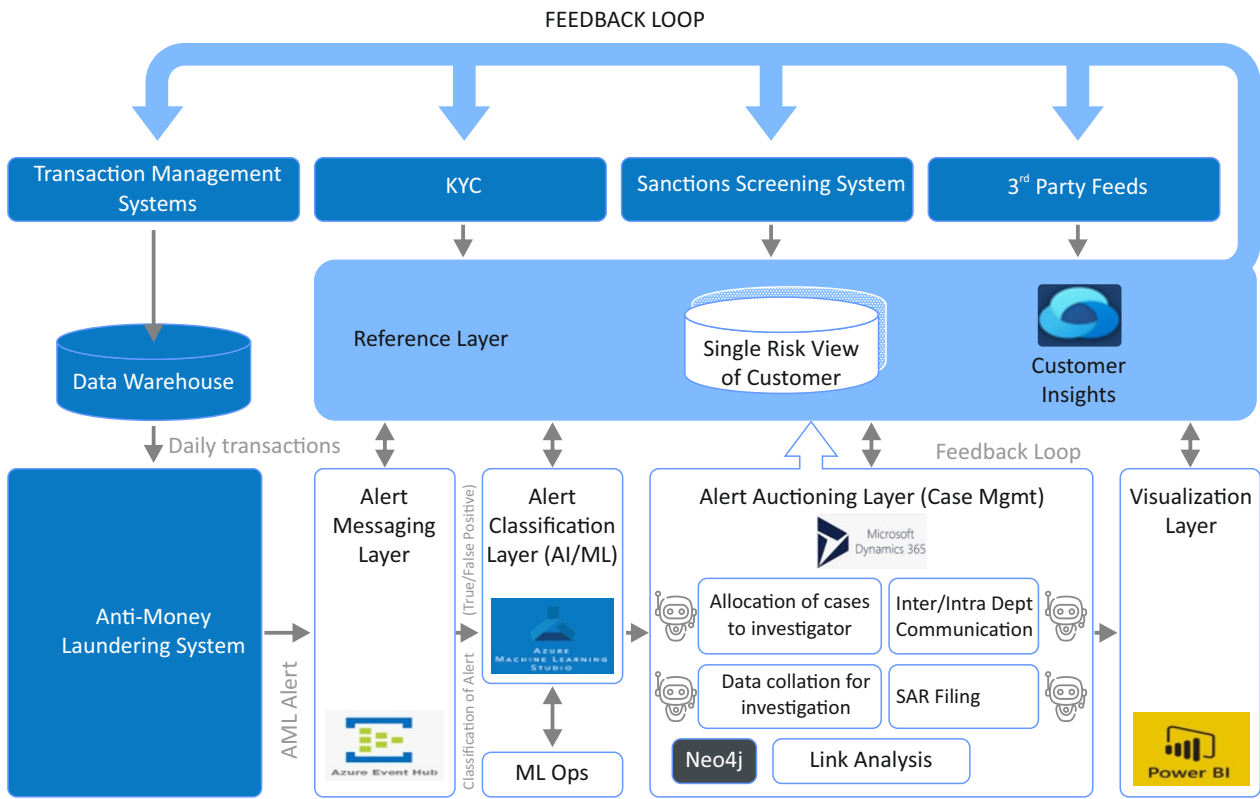
Azure ML Studio offers an easy and flexible low code platform for building advanced machine learning solutions.

Dynamics 365 can be leveraged to build a robust case management system. It is ideal for organizations with a BOYD policy. Dynamics 365 easily integrates with other Microsoft products and this allow companies to move from Dynamics 365 to Outlook for communication, to Power BI for data analytics or to SharePoint for documentation.

Microsoft Power BI allows for creation and sharing of interactive data visualizations on Financial Crime Compliance data across different dimensions. It meets the need for a self-service and an enterprise data analytics on a single platform

RPA based process automation to automate manual operational processes like case assignment, managing inter/intra department communication, filing SAR reports, etc.

Architecture

FEEDBACK LOOP

Transaction Management Systems | **KYC** | **Sanctions Screening System** | **3rd Party Feeds**

Data Warehouse

Reference Layer — Single Risk View of Customer — Customer Insights

Daily transactions

Anti-Money Laundering System

AML Alert

Alert Messaging Layer
Azure Event Hub

(True/False Positive)
Classification of Alert

Alert Classification Layer (AI/ML)
Azure Machine Learning Studio

ML Ops

Alert Auctioning Layer (Case Mgmt)
Microsoft Dynamics 365
- Allocation of cases to investigator
- Inter/Intra Dept Communication
- Data collation for investigation
- SAR Filing
- Neo4j
- Link Analysis

Feedback Loop

Visualization Layer
Power BI

Benefits

EFFICIENCY	EFFECTIVENESS	EXPERIENCE
• Reduction in false positive rates • Increase in investigation productivity • Reduction in operational costs	• Reduction in average duration of open cases • Increase in case resolution rates • Increase in SAR disclosure rates	• Reduction in time spent non-investigation activites • Allows team to focus on real risks

Our Financial Crime Success Stories

Our service experiences across UK, Nordic & Saudi Financial Institutions range across implementation of case handling solution as well as leading third party back end platforms, besides building out and managing data ecosystem supporting financial crime compliance. We are also currently designing and building a transaction monitoring system for a UK challenger bank to ensure regulatory compliance