

USING MACHINE LEARNING TO IMPROVE AML EFFORTS

PRESENTERS

ROBYN TODD, SENIOR PRODUCT MANAGER, ENCOMPASS
KEVIN BOGDANOV, DIRECTOR MARKET DEVELOPMENT 3PRM, REFINITIV
CAROLE SWITZER, Co-Founder and President, OCEG

Discussion Participants



Carole Switzer

Co-Founder & President, OCEG



Kevin Bogdanov

Director, Market Development 3PRM, Refinitiv



Robyn Todd

Senior Product Manager, encompass



Housekeeping

- Download slides at https://go.oceg.org/using-machine-learning-to-improve-aml-efforts
- Answer all 3 polls
- Certificates of completion (only for OCEG All Access Pass holders)
- Evaluation survey at the close of the webinar
- Find the recording on the Resource tab of the OCEG site, under Archived Webinars



Learning Objectives

- Understand the terminology of and around machine learning
- Identify the AML challenges that can be addressed by modern technology
- Apply machine learning to different stages of AML programs
- Consider risks of machine learning and how to manage them





Poll 1

Do you have an OCEG All Access Pass (a paid membership) and would you like to receive CPE credit for this event?

- a. Yes, I have an All Access Pass and I would like to receive a Certificate of Completion for this event
- b. Yes, I have an All Access Pass but I do not need a Certificate of Completion
- No, I do not have an All Access Pass but I would like to get one and receive CPE credit for this and future webcasts I attend
- No, I do not have an All Access Pass and I don't want to buy one at this time (so I won't get CPE credit for this event)



Discussion Questions

What is meant by machine learning?

Is it the same as AI?

What are some of its techniques?



Machine Learning Defined

- Artificial Intelligence (AI) suggests a cognitive framework designed to emulate advanced elements of intelligent human behavior. It's a machine that can think and rationalize.
- Machine Learning is a sub-set of AI that can ingest and process vast volumes of data and learn from it to optimize performance against a specific goal or outcome.
- Machine Learning is the creation of models from algorithms that "learn" from data without being explicitly programmed.



How the Machine Learns

- Supervised Learning integrating feedback from the human user.
- Unsupervised learning learning and drawing inferences from unlabeled data sets by using iterative deep learning techniques to continually learn and evolve.



Discussion Questions

What are some of the challenges faced when trying to perform necessary AML tasks without the aid of Machine Learning?

What limitations are presented?



Challenges in manual processes for AML

- Inefficiency and errors expand with data growth and complexity
- Near impossibility of separating the critical from the less important
- Ever increasing staffing needs and operational costs
- Growing number of potential combinations of data, with more variables and relationships to analyze and understand
- Broader and deeper categories of data that must be evaluated
- New and more specific regulatory requirements arising



Machine Learning Tasks

- Machine Learning tasks include
 - ingesting data across numerous internal and external sources (both structured and unstructured),
 - mapping and rationalize data and coalescing information in a way that standardizes it and makes it easy to consume.
 - In AML this may include
 - event clustering
 - de-duplication
 - entity resolution
 - natural language processing in the analysis of transaction models and typologies, etc.



Poll 2

Select all areas in which you are currently using technology or SaaS that incorporates machine learning

- a. Business risk assessment
- b. KYC
- c. Beneficial ownership identification
- d. SARs investigation
- e. None of these or I don't know



Discussion Questions

Let's get specific – what are some examples of the capabilities of machine learning and how might they be used in each of the key aspects of an AML program?

- Know Your Customer including Beneficial Ownership
- SARs Investigations
- Transaction Monitoring
- Regulatory Change Management



Advanced Machine Learning Capabilities



Data Management



Natural Language Processing



Consolidation of Structured and Unstructured Data



Predictive Analysis



Machine Learning in Know Your Customer



Mine unstructured data for customer information



Go beyond databases to analyze social media and press reports



Support dynamic onboarding questionnaires



Identify linkages in beneficial ownership analysis



Machine Learning in SARs Investigations



Extract information such as subjects, financial institutions and amounts from reports



Expose hidden key relationships



Resolve disparate data



Machine Learning in Transaction Monitoring







Process natural language to translate applications and payments

Analyze patterns for classification and triage

Enrich alerts with account, transaction, and customer information from external and internal data sources



Machine Learning in Managing Regulatory Change



Scan, compare and comprehend

Scan, compare and comprehend regulatory proposals and changes



Deliver

Deliver identified proposals and rules to relevant personnel



Identify

Identify trends in regulatory changes and predict future changes



Poll 3

Which machine learning capability would most benefit your organization?

- a. Unstructured data analysis
- b. Data management and modeling
- c. Analytics
- d. Predictive capabilities
- e. I don't know





QUESTIONS?