The Role of AI in KYC
Aezed Raza
Solutions Engineer

Onfido
Key Components of KYC

- Client Onboarding
- Customer Screening
- Transaction Monitoring
- Payment Screening

KYC-AML Key Components
Current Challenges

**Ever Evolving Regulations**

- 185 # of regulatory changes that big banks handle per day (up from 10 in 2004)

**More Regulatory Scrutiny**

- $321 bn Amount global banks have paid in fines since 2008

**Cost Pressure**

- $70 bn Compliance cost for the top 6 global banks in 2013

**Legacy Systems**

- $366 Cost of compliance per customer for 1 British bank in 2015 (up from $83 in 2013)
Unsustainable Practices

“The amount banks have been spending on regulations and compliance is not sustainable. Something has to give.”

TOMEK JANKOWSKI, OF ALM
Machine Learning
[Machine Learning is the] field of study that gives computers the ability to learn without being explicitly programmed”

Arthur Samuel in 1959
What is Machine Learning?

Artificial Intelligence
Replicates part, all or more than human intelligence

Machine Learning
Enables computers to learn, usually on their own, often with big datasets

Deep Learning
Builds multiple layers of abstractions on datasets to construct higher-level meaning (neural networks designed to mimic the human brain)

Source: Medium, 2016
Types of Machine Learning

Supervised Learning

Unsupervised Learning

Reinforcement Learning
How Machine Learning Works

1. Select data
2. Model data
3. Validate model
4. Test model
5. Use the model
6. Tune model

Feedback
How Artificial Intelligence is Transforming KYC
“[Machine Learning] allows systems to automatically reassess and refine processes in reaction to input from users, replacing firms’ more complex, high volume, and repeatable regulatory tasks.”

Source: “The Changing Landscape: How to use RegTech and make regulatory compliance your strategic advantage”
Using AI in KYC Compliance

- Pattern Recognition
- Intelligent Data
- Centralize Data
- Workflow Automation
- Link Analysis
- Policy Definition & Implementation
Onboarding Example: Which ID is Real?

- **Original**
- **Invalid ID Number**
- **Security Feature**
- **Image Editing**
- **Font Verification**
- **Pixel Tampering**
Benefits of Machine Learning in KYC

- Solving human error
- Keep in-step with fraud (and regulations)
- Automate repeatable tasks
Sources


- https://blog.kurtosys.com/compliance-how-to-use-artificial-intelligence-to-know-your-customer/