

# What is the role of Digital Transformation in AML/CFT?

25th September 2019

Yoshiyuki Minegishi, NTT DATA Getronics Corporation, General Sales Manager  
Catarina Soares, NTT DATA UK, Data & Analytics everis Banking UK

# Brief Introduction to NTT DATA

# Let's start by introducing ourselves...



## Yoshiyuki Minegishi

**General Manager of Financial  
Solution Sales in NTT DATA  
Getronics Corporation**

Yoshiyuki has been working in the  
Payment and Compliance area for  
more than 15 years.

**NTT DATA**

NTT DATA Getronics Corporation

## Catarina Soares



**Senior Manager and Head Data &  
Analytics Banking in everis UK,  
NTT Data company**

Catarina has been working in the  
Banking Industry for the last 12  
years in large transformation  
programs around Data & Analytics.



an NTT DATA Company

# NTT Data Group at a glance

NTT DATA (as part of NTT group) is a global consulting firm with a worldwide reach.

We support you with your digital transformation and operations of integrated IT platforms. With a new perspective on banking's digital future, NTT DATA helps create digital value to your business and a smoother banking experience for your customers.



Operations in  
**88**  
Countries



**\$105Bn**  
In revenues



We work with  
**80 of the  
TOP100**  
companies listed in  
Fortune Global 100

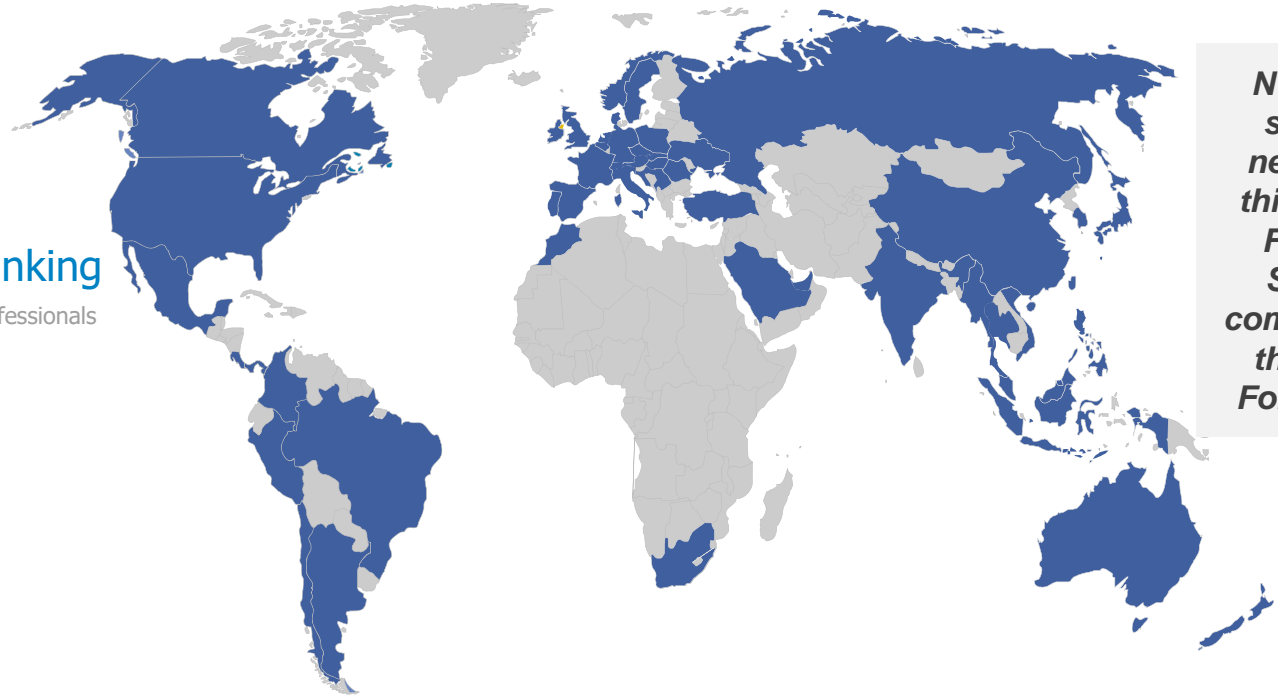


More than  
**242,000,**  
**25,000 banking**

Professionals

**+\$2Bn**  
invested annually in **R&D**

Ranked  
**#6**  
In the IT Services field



*NTT DATA  
supports  
nearly two-  
thirds of the  
Financial  
Services  
companies on  
the Global  
Fortune 500.*

# Banking Capabilities Worldwide

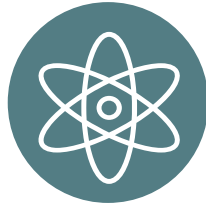
NTT Data is composed by professionals with different backgrounds and experiences that can cover the full range of services/technologies:



Big Data &  
Analytics



Digital  
Experience



Machine  
Learning



Biometrics



Robotic Process  
Automation



Hybrid Cloud &  
DevOps



Infrastructure  
& Application  
Transformation



Artificial  
Intelligence



Testing  
Services



Blockchain

# AML

# NTT DATA Getronics Corporation

# AML functional landscape

*NTT DATA Getronics Corporation has worked on the below components from systems perspective*

Customer Information Capture	Document Management	OCR	Identification & Verification	Ultimate Beneficiary
Screening	Hits Investigation	PEP Check	Negative Media Check	Credit Check
Transaction Monitoring	SAR	Workflow	Case Management	TBML
CIF Integration	Interface with companies' databases	Risk Categorization	Reporting	Customer Risk Scoring

 Has experience

 No experience

# Fircosoft Overview

*Strategic partner with Fircosoft since 2003.*

Extensive experience in implementation of Firco Filtering Suite

Only Japanese vendor with a partnership with Fircosoft

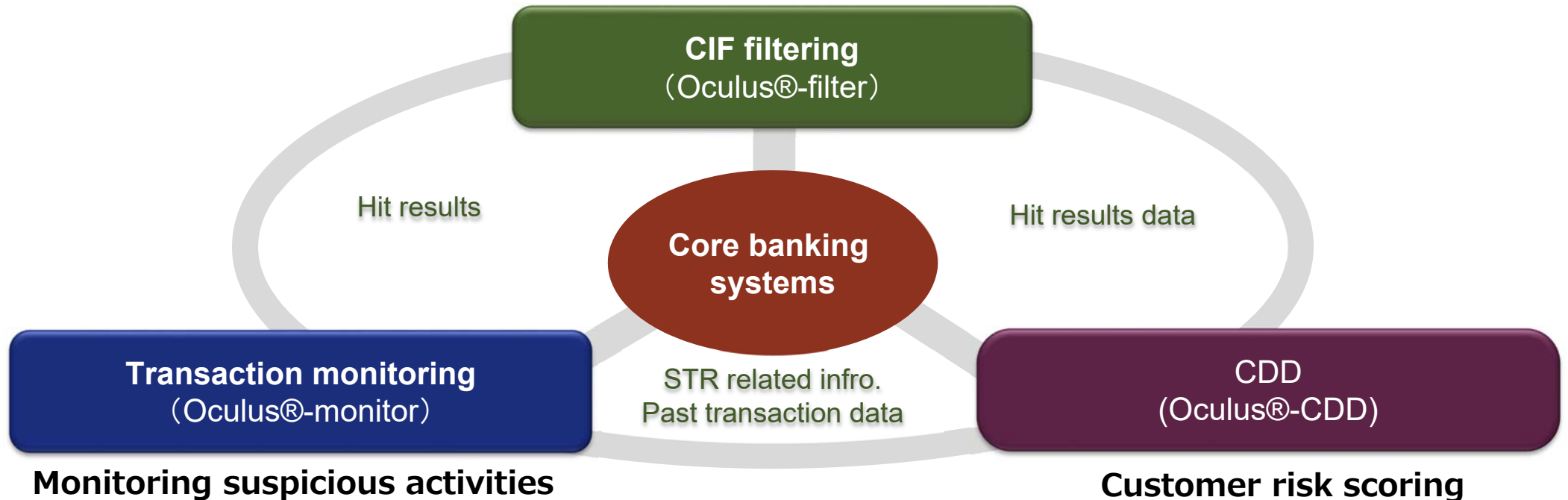
Consulting services provided by ACAMS certified experts

#	Solution	Overview
1	Firco Continuity	Firco Continuity is a <b>real time watchlist filtering solution</b> designed to ensure compliance and detect & block <b>transactions</b> including listed parties. The solution is multi-alphabet ready and can be interfaced to any banking application, operates on all major platforms and filters any message type including SWIFT, FEDWIRE and SEPA. The solution can filter against any sanctions list (such as EU OFAC, HMT and UN), third party lists or internal Watchlists.
2	Firco Trust	Firco Trust is a <b>customer and entity screening solution</b> that combines filtering intelligence with high performance processing capabilities. With Firco Trust, users can implement KYC programs by filtering existing and new customers, counterparties or beneficiaries against any sanctions, PEPs or Negative newlists. Firco Trust enables a risk based approach to scan customer databases, and offers a web based user interface to streamline and expedite decision making.



# Oculus®: in-house AML package solutions

Match clients data against watch-list data



\* "Oculus" are trademarks of NTT DATA Getronics Corporation registered in Japan.

\* Trademarks of the other products/corporations/organizations are omitted on this paper.

# Challenges in current AML/CFT field

1. **More sophisticated money-laundering methods** are getting being used than ever
  - Techniques are getting more sophisticated & complicated
2. **BIG DATA** is getting more and more available **as means of AML** than ever
  - Expected to be applied to reduction of False Positives & findings of True Positives
3. **Much stricter sanctions & regulations** are getting imposed to Financial Institutions
  - 5<sup>th</sup> Anti-Money Laundering Directive (AMLD), FinCEN CDD final rule, U.K. Senior Managers Certification Regime (SMCR), etc.

# Know Your Data (KYD): a substantial means of KYC

## 1. Define your “Customers” in consistent rules

- Definition of Customers is a first step in KYC/CDD.
- If the definition of Customers is inconsistent over jurisdictions/regions, the data to be aggregated as “Customers” would be inconsistent.

## 2. Aggregate & collate “Data” of “Customers” in consistent rules

- Under consistent definition and rules, the data of Customers could be aggregated and collated consistently.

## 3. Then, analyze “Customers data” which are aggregated & collated correctly

- By looking into the data which accurately represents the “Customers” of the organization, the organization can assess the risk of “Customers” correctly.

# New concepts of AML as data analytics

## 1. “Actors based” monitoring

- Usually Monitoring rules and models are set based on transactions. But currently there are new ways available to set them **by criminal groups and networks**.

## 2. Behavior-based detection

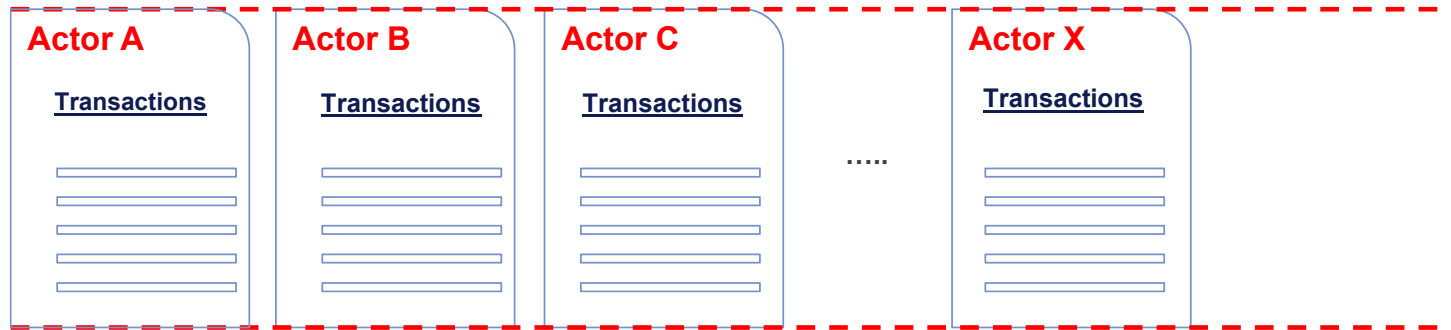
- Segment customers by behaviors
- Analyze which segments were detected for escalation, which activities seem to be involved in money laundering, which activities are close to false positives
- Connecting them together will enable more effective detection

## 3. Link Analysis

- Detecting suspicious or hidden relationships

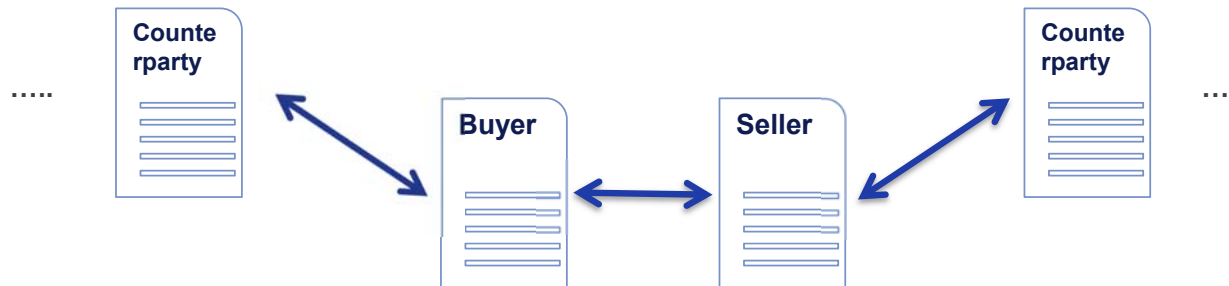
# New concepts of AML as data analytics

1. Monitor in **“Actors”** base, not only in **“Transactions”** base.



2. Behavior-based detection

3. Link Analysis



# Technology as a lever for transformation



**Big Data & Analytics**

**Artificial Intelligence**

**Blockchain**

**Robotics & Automation**

**Machine Learning**

**Biometrics**



How  
to leverage  
emerging  
technologies to  
transform banks?

**Data X  
2 every  
2 years**

**33  
trillion  
GB 2018**

**175  
trillion  
GB 2025**

**Data consistency  
=  
Wider investigations**

How can Big  
Data & Analytics  
improve AML/  
KYC processes ?



# Case Study UK Bank – Starting point



Complex ecosystem of systems

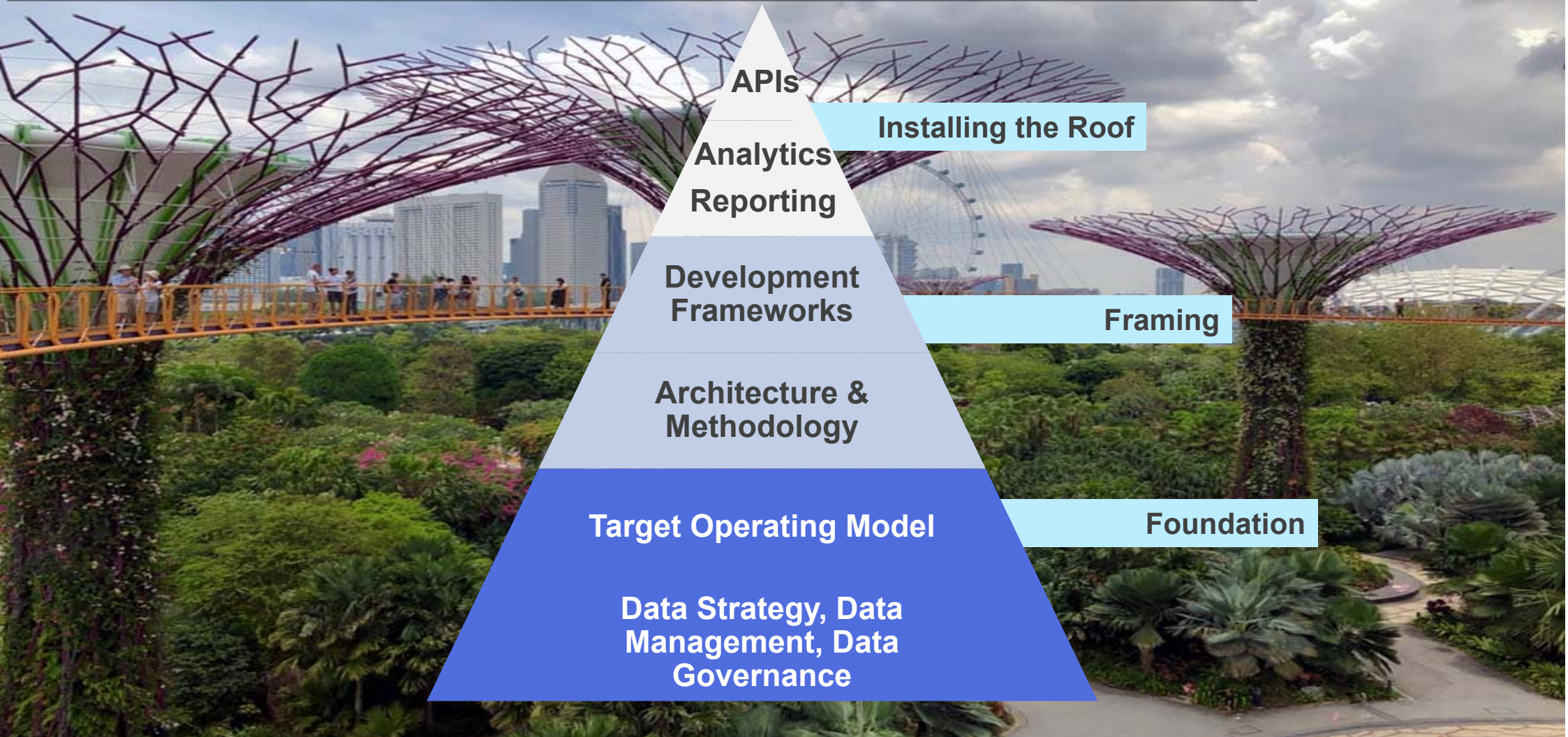
End user computing sources/tools

Data Governance structure but no processes defined

Lack of internal skills/knowledge

Resistance to change

# Case Study UK Bank – 3 step approach



From static rules to a model based on self-learning that identifies patterns

Lower false positives

Increase speed of analysis

Automate the analysis of low risk cases

Focus on higher risk cases

How can Machine Learning & AI improve AML/KYC processes ?

**Adopted by 15% of Business,  
but 30% plans to use it**

**Robotics market is expected to  
grow by 175% over the next decade.**

**In Europe between 1999 and 2010,  
the number of employees grew in  
tandem with automation**

How can Robotics  
& Automation  
improve AML/  
KYC processes ?

# Case Study EMEA Banking Retail Group

Starting point:

Time consuming activities

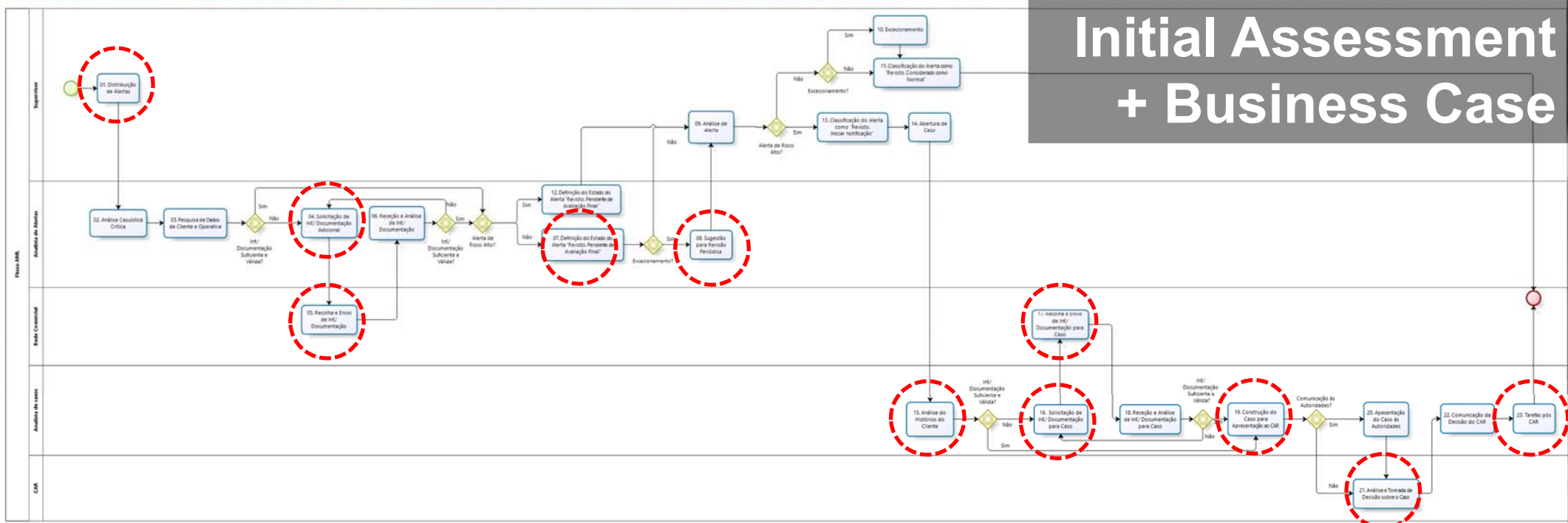
Long processing time

Human errors

Re-work

# Case Study EMEA Banking Retail Group

## Initial Assessment + Business Case



Validado e aprovado juntamente com Paula Borges no dia 02/05/2019

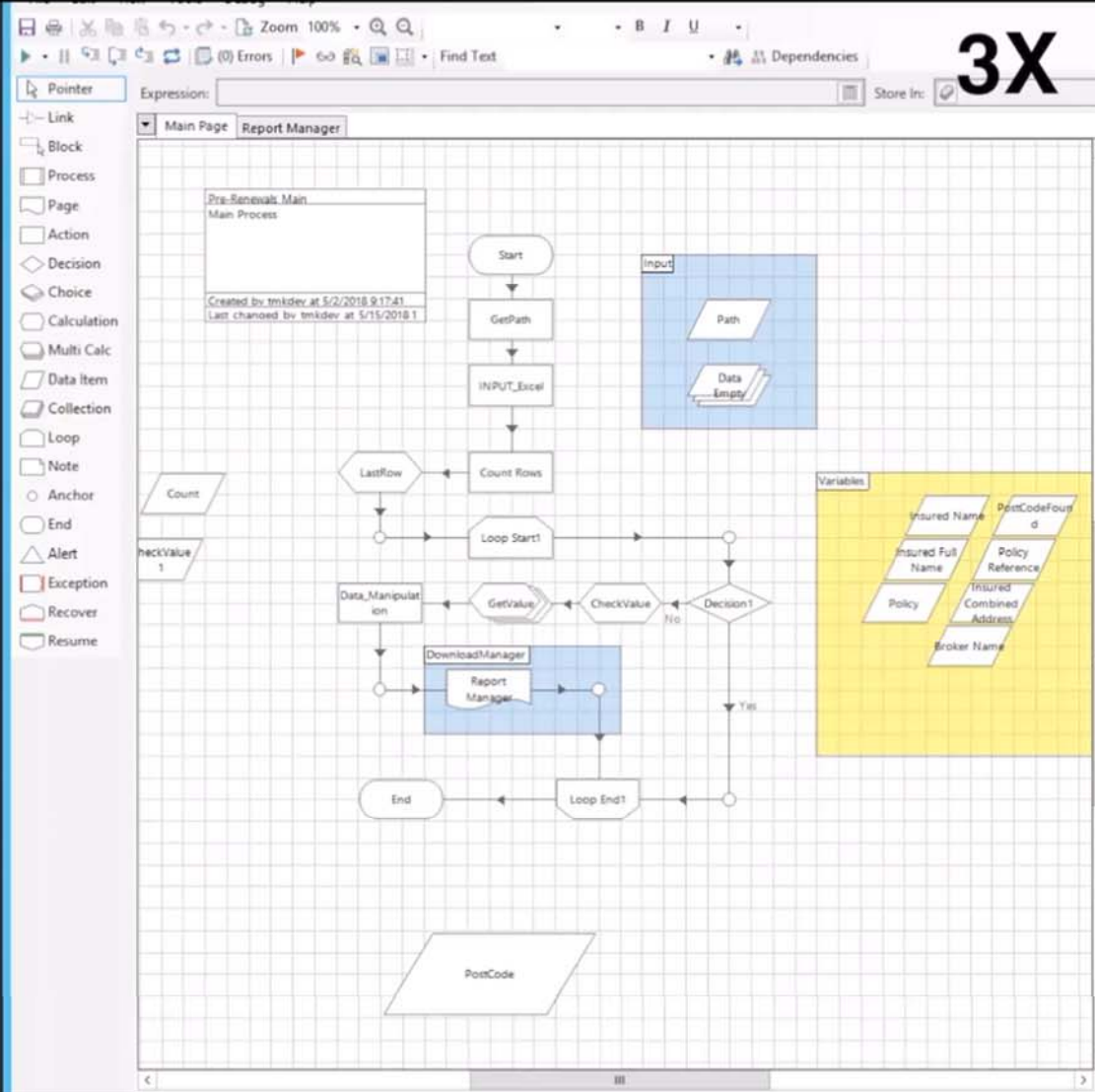
# Case Study EMEA Banking Retail Group

## Robots activities:

- **Filing of documentation.**
- **Request information / documentation.**
- **Information Upload on Systems and Portal.**
- **Search and compile information for analysis.**
- **Validation of information / documentation.**

**Savings  
€1.5  
million**

- Blue Prism
- hosts
- POC\_File
- RPA\_POC
- RPA
- MAPI32.dll
- Recycle Bin
- bluePrism...
- MAPIEx.dll
- Test\_Test
- PA Object - blue Prism ...





**Blockchain can provide  
an unique client registry**

**Reduce Fraud**

**Reduce KYC Costs**

**+Interoperability**

**Improve Customer experience**

How can  
Blockchain  
improve AML/  
KYC processes ?



**Voice-based biometrics for  
telephony contact centres**

**Device-based biometrics  
for digital interactions**

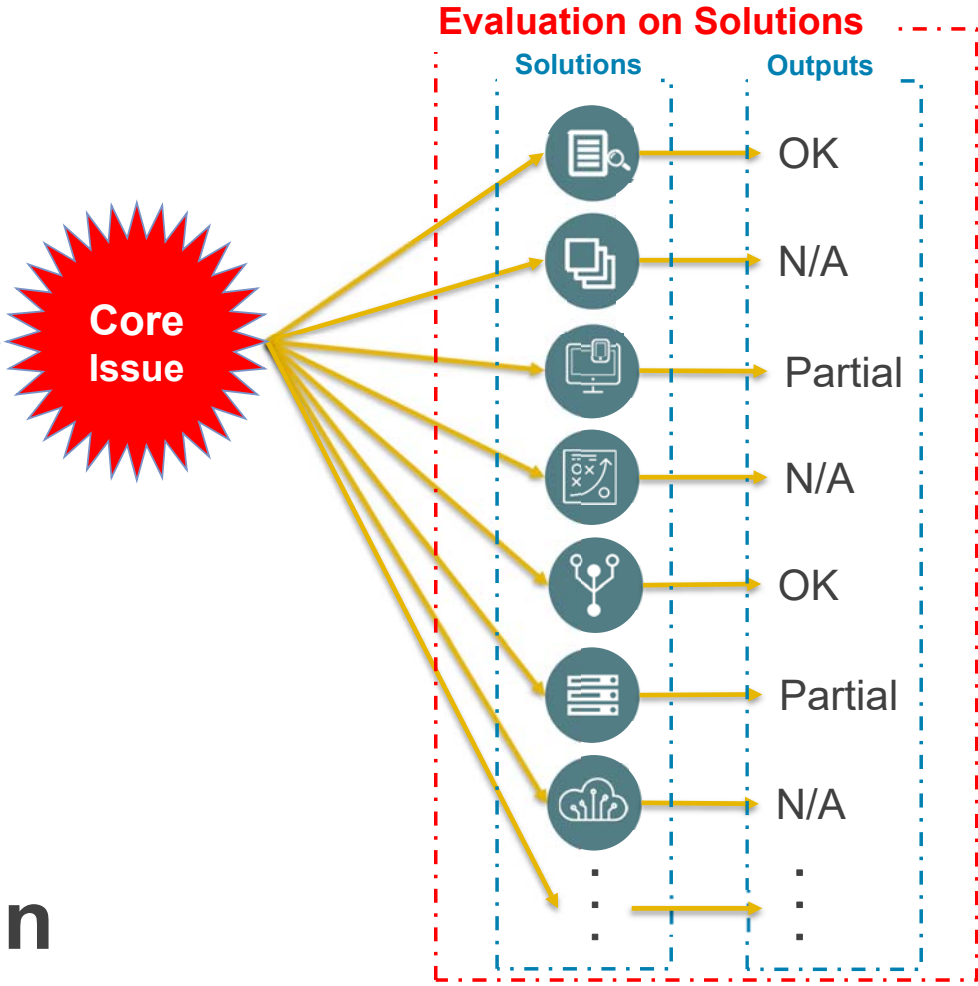
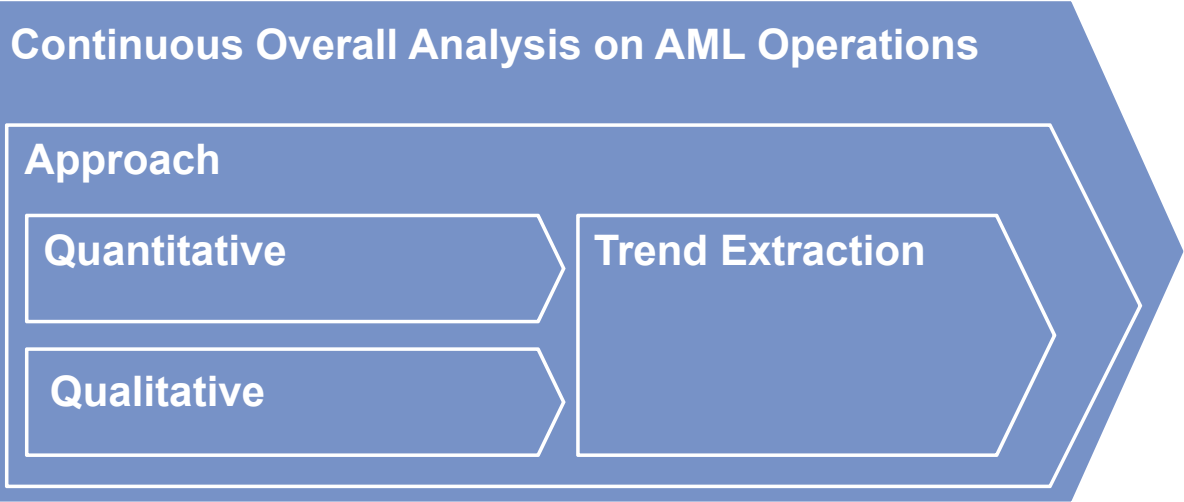
**Facial Recognition**

How can  
Biometrics  
improve AML/  
KYC processes ?

Before reaching out to new  
technology for transformation

# First, analyse data from multiple aspect to capture the core issue

It is not as simple as putting the new technology (such as AI) into the operations that will solve the problem.



## Data driven Purpose & Purpose driven Solution

## Second, clarify how to perceive the new technologies

There are two main aspects that need to be considered and aligned...

Position	Explanation
<b>Question...</b>  How to utilize the new technology in production?	<b>Question...</b>  Does the logic behind the results derived by new technology is needed?
<b>Further Question...</b>  Is it something that supports human operation? Is it something that replaces the human operation? Does the both? But at what level? Or something else?	<b>Further Question...</b>  To whom this needs to be disclosed? And why? What is the definition of the clarity? At what level of the explanation is it needed? How much information is needed?



# Value Alignment



# NTT DATA

Trusted Global Innovator