



Fraud Governance & AI

Prevent, counter and mitigate fraud by supporting processes and information with Artificial Intelligence



ELETRONICA GROUP

FRAUD SCENARIO

5,8 Bln\$
2021 worldwide financial loss to fraud

Source: Internet Crime Report FBI

252 days
Average time to identify and contain a breach

Source: Cost of a Data Breach Report 2021 – IBM security

Average cost of a Data Breach by security automation deployment level

Deployment Level	Average Cost
Not deployed	\$6.71m
Partially deployed	\$3.85m
Fully deployed	\$2.90m

The biggest cost savings was to organizations with high levels of security AI and automation.

Source: Cost of a Data Breach Report 2021 – IBM security

Number of Fraud Reports by Payment Method, 2020

Payment Method	Number of Reports (Relative)
Credit Cards	High
Debit Cards	Medium-High
Payment App	Medium
Wire Transfer	Medium
Gift/Reload Card	Medium-Low
Bank Transfer	Low
Cash	Low
Cryptocurrency	Low
Check	Very Low
Money Order	Very Low
Other	Very Low

Source: Fortune Insight – Fraud Detection and prevention Market Report

Total Amount of Fraud Loss by Payment Method, 2020

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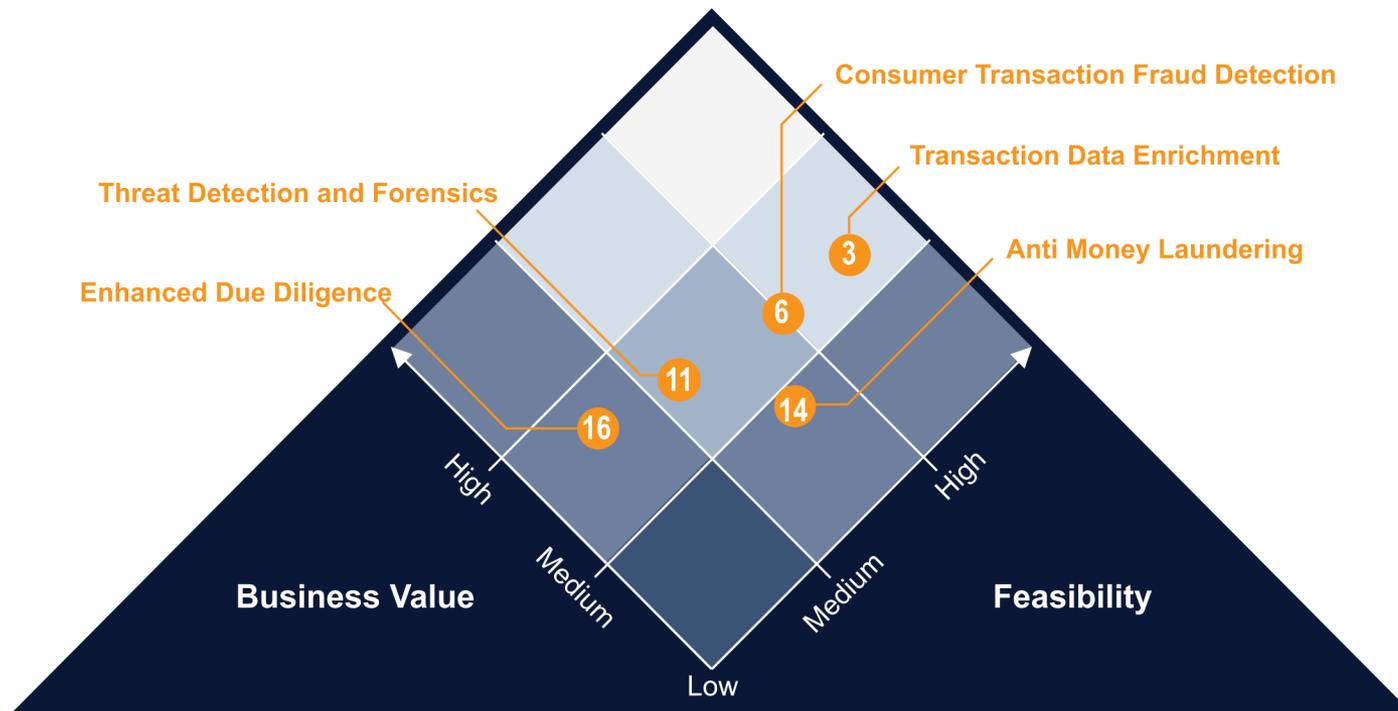
Source: Fortune Insight – Fraud Detection and prevention Market Report

82%

Of the transactions considered suspicious and blocked by the anti-fraud systems, are actually from legitimate customers, who see their use of services limited.

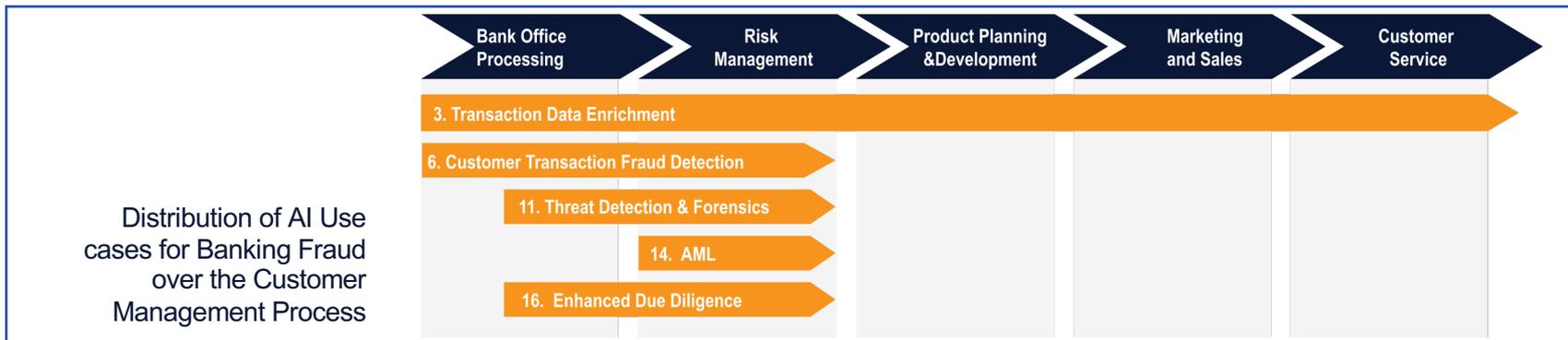
Source: Internet Crime Report FBI

AI USE CASE FOR BANKING FRAUD 1/2



Source: Gartner - AI Use Case Prism for the banking Industry

AI USE CASE FOR BANKING FRAUD 2/2

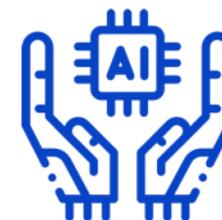


Business Values and Feasibility Levels for each use case

		Business Value				Feasibility	
		Cost Reduction/Operational Efficiency	Revenue Growth/Sustainment	Customer Experience	Reputation and Risk Exposure	Technical Feasibility	Nontechnical Feasibility
3	Transaction Data Enrichment	●	●	●	●	●	●
6	Customer Transaction Fraud Detection	●	○	●	●	●	●
11	Threat Detection & Forensics	●	●	●	●	●	●
14	Anti-Money Laundering	●	●	●	●	●	●
16	Enhanced Due Diligence	●	●	●	●	●	●

Source: Gartner - AI Use Case Prism for the banking Industry

DECISION INTELLIGENCE TO SUPPORT FRAUD MANAGEMENT



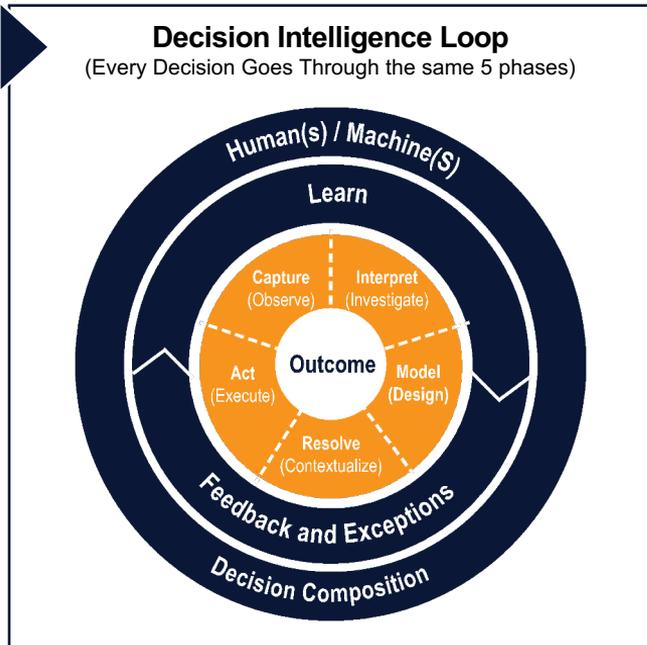
Decision intelligence components

 Humans: Actor with bias and goals making and supporting decisions	Analytics: 1010 1010 supports, augments and automates decisions
 AI: Actor with goals and bias making and supporting decisions	Data: Informs 1010 1010 Decisions
	Applications: 1010 1010 Sequences decision steps

Data Fabric



Shared Information and Data Architecture



 **Predictive Analysis**
What is likely to happen?

- Predictive Models (random forest, deep learning,...)
- Forecasting (smoothing, trend...)

 **Prescriptive Analysis**
What can we do?

- Scenario analysis
- Optimization
- Simulations (Monte Carlo, Markov,..)

CHALLENGES IN ANTI-FRAUD AND HOW TO FACE THEM...WITH AI



THE CHALLENGES

- Anti-fraud analysts need to make the right decisions;
- Decreasing manual operations (analysis and investigation activities)
- Reduce false positives and verification activities
- Centralize the anti-fraud analysis in all business channels (home / mobile banking, card transactions, ATM withdrawals)
- Define a risk indicator for each customer
- Safeguard investments made and support the evolving roadmap

• **Decision Intelligence = Decision Augmentation**



THE SOLUTION

- The use of predictive algorithms (what will happen) together with prescriptive algorithms (what to do) exponentially increases the automation factor of the decision-making phase in an "augmented decision-making" process and that orchestrates data and processes between existing anti-fraud systems and platforms according to the standards of market.
- The result is a Fraud AI Governance which, through advanced case management, helps operators easily analyze millions of data.

Fraud Analytics platform

Fraud Investigation

Fraud Operations

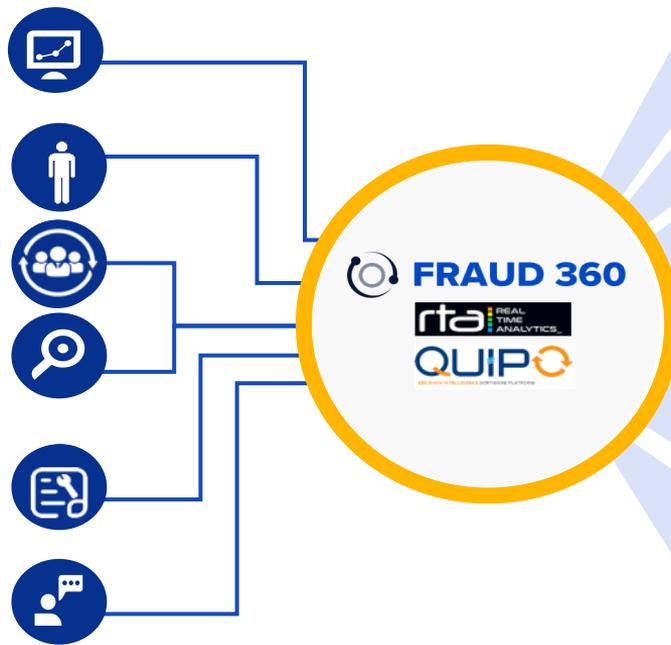
Reporting and Dashboarding

Fraud Intelligence

ANTI-FRAUD PORTAL FOR DECISION INTELLIGENCE



- Fraud Monitoring & Improvement**
360° Fraud Monitoring
Shared Taxonomy
- Customer-Centric Vision**
- Strategist 360°:** sets new prevention strategies and methodologies and manages the scouting for new technologies
- Analysts 360°:** performs investigative analysis supported by intelligent tools and strategists
- Best practices**
Centralized and shared procedures
Shared support tools
- Fraud Awareness**
Reduction of suffered frauds and reports from sensitized customers

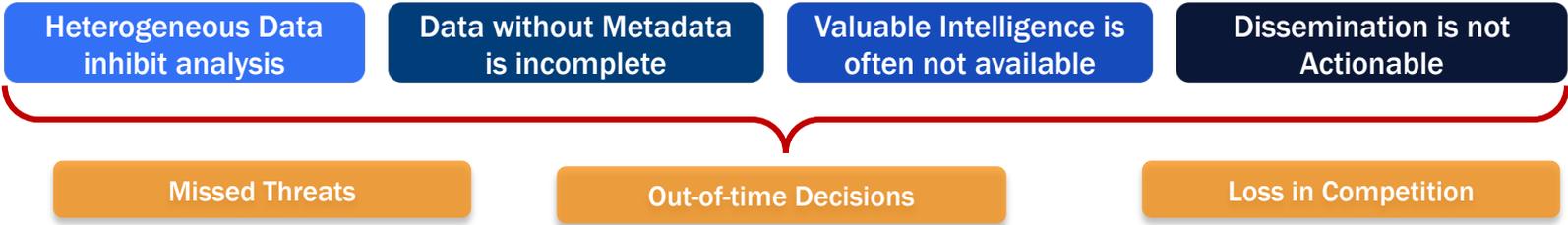


- Availability of the customer book that collects all the events to find new possible frauds
- Single operational desktop for analysts for quick investigation and call center / customer support
- Independence of the analyst from knowledge of the analysis process
- Procedural management following the evolutionary dynamics of fraud affecting customers or the bank
- Ability to update procedural flows with automatic analysis of analyst behavior
- The operation of the Antifraud Collaboration Portal is not bound to the analysis technologies available to the bank.

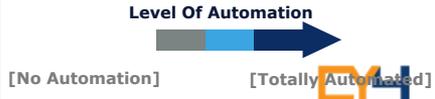
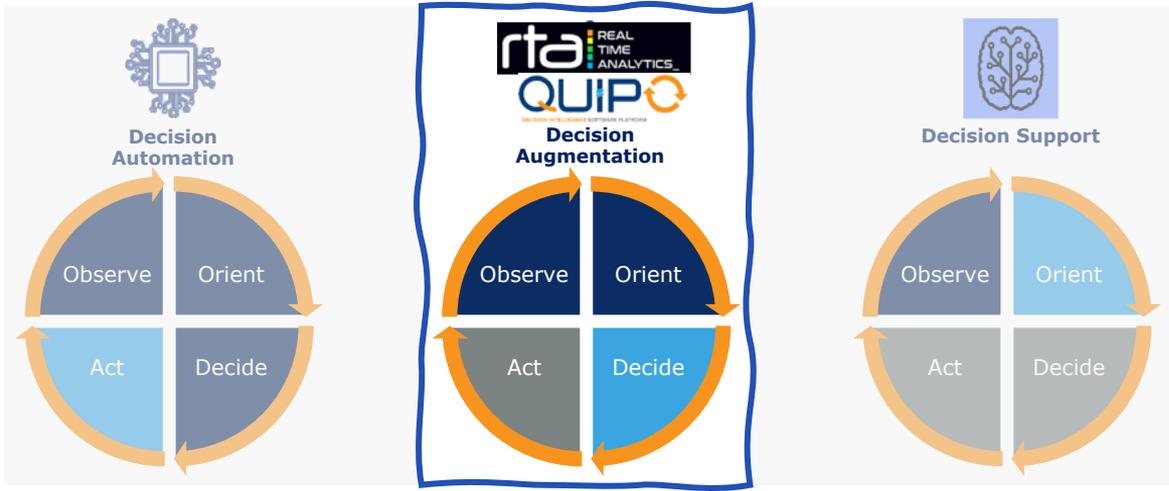
DECISION INTELLIGENCE = DECISION AUGMENTATION

Use of predictive algorithms (what will happen) together with prescriptive algorithms (what to do) exponentially increase automation factor of the decision phase in an Augmented Decision Process

Challenge



Solutions

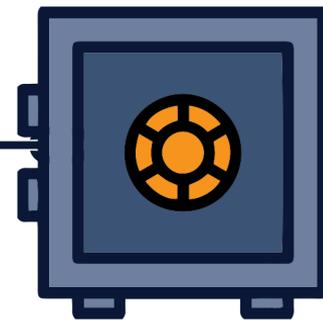


THE SECURITY CHAIN

Possible Actions

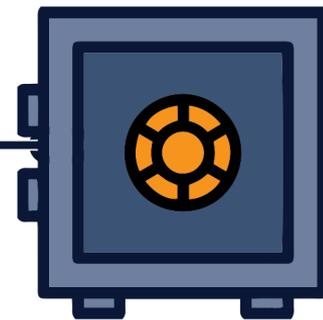


Awareness



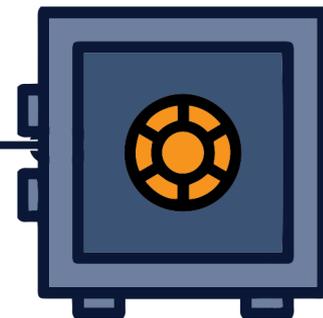
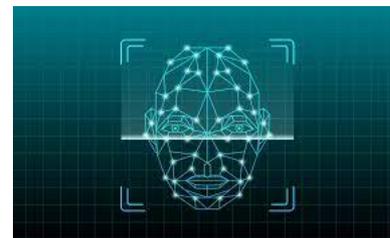
AWARENESS

Doing anything possible could not be enough



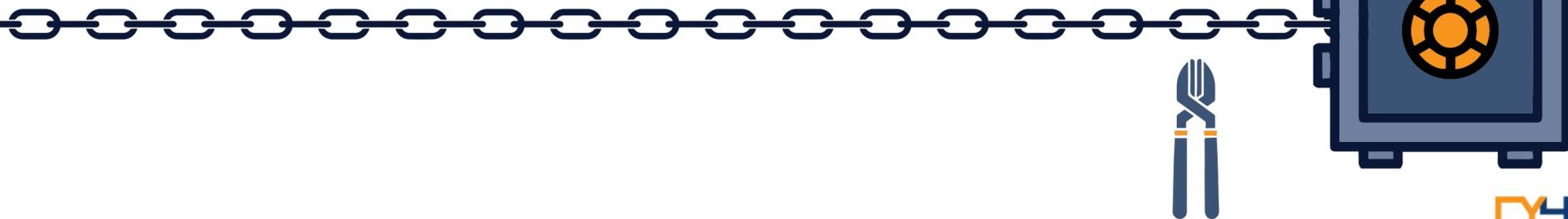
PROCESSES

A delicate balance



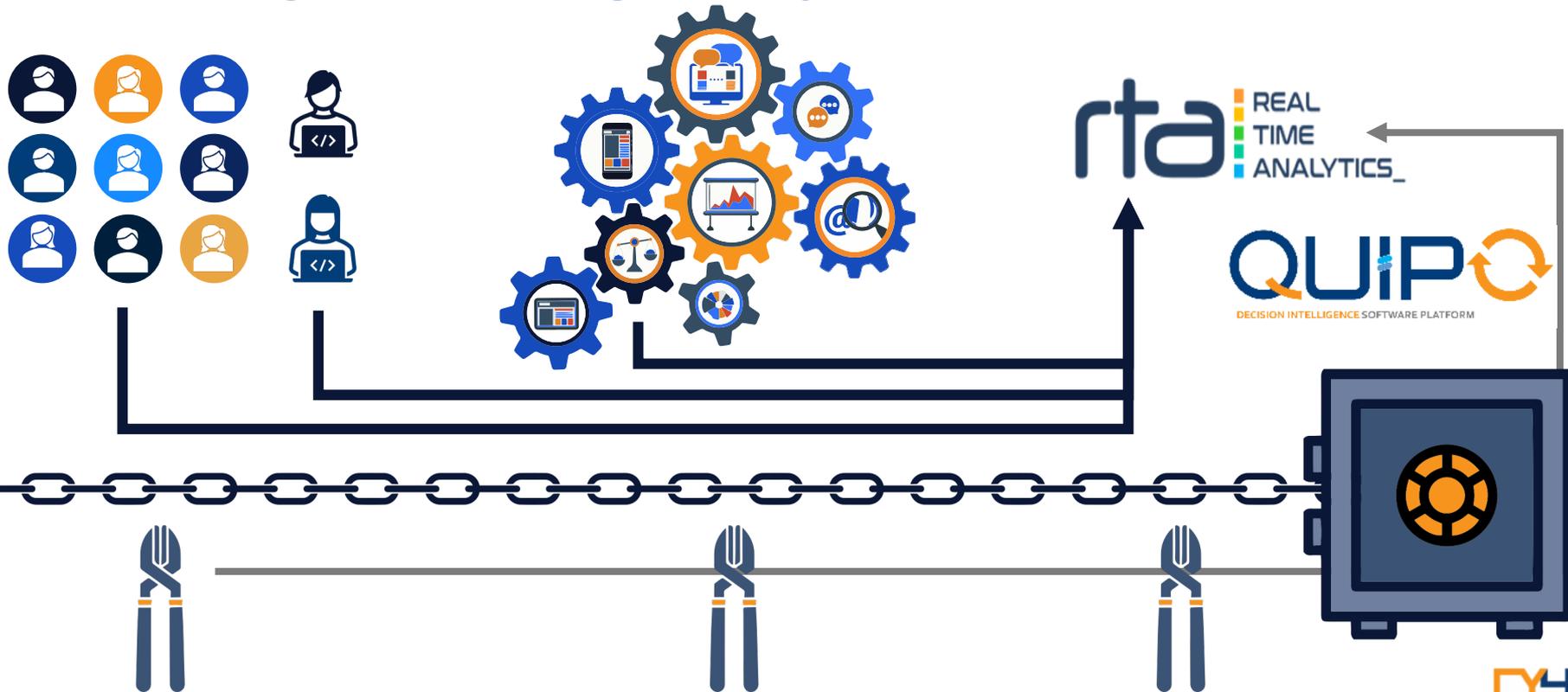
TECHNOLOGY

AI, Source integration, CTI and big data analytics



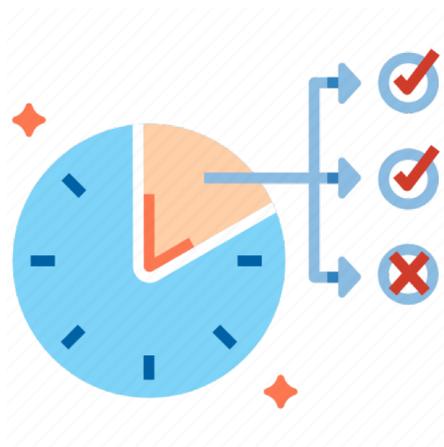
TECHNOLOGY

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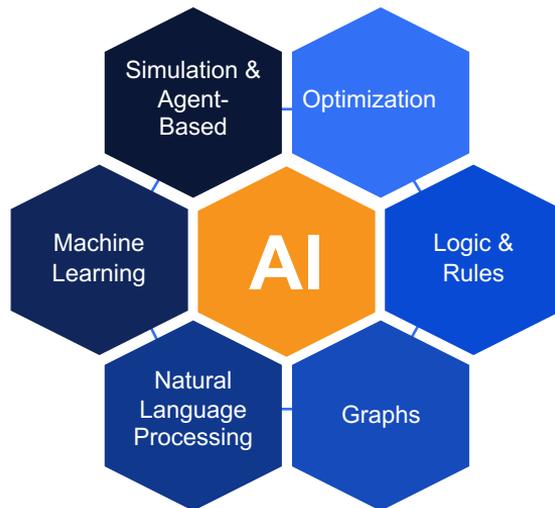


DEEP- DIVE ANALYTICS

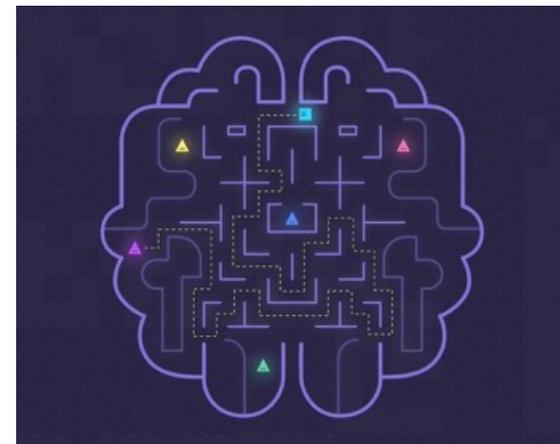
challenges, approaches and Technology



Real Time



Composite AI (multisource)



Behavioural

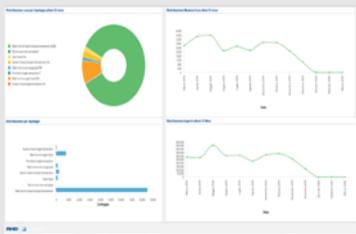
RHD FRAUD 360: MAIN FEATURES



FRAUD 360

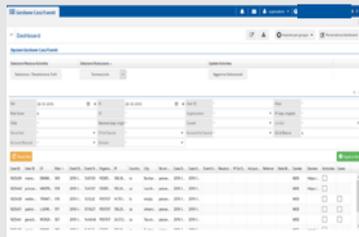
Fraud Analytics

- Perform statistical processing
- Analyze authentic and fraudulent transactions
- Identify possible fraud patterns and power the learning level
- Data Modeling to create Reports



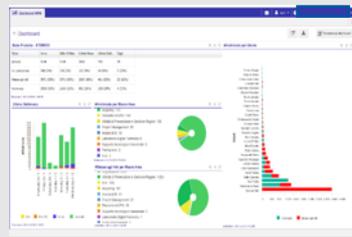
Fraud Investigation

- Advanced search with filters e groupings
- Massive case closure
- Fraudulent and suspicious events alerting
- Event and case correlation with external sources (IP/Account in blacklist, greylist, whitelist, etc...)
- Integration via web services



Fraud Operations

- Monitoring and management of the progress of Fraud Prevention activities.
- statistics
 - Incident management
 - Times of Work and Loading of Resources



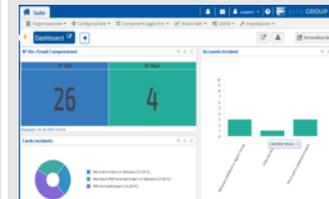
Reporting and Dashboarding

- Executive Reporting
- Reporting & deep analysis
- Meta-information management
- Case Collection



Fraud Intelligence

- Bank Accounts and Compromised Cards
- «Blacklist» and «Greylist» distribution through Anti-fraud platforms
- Investigation and Fraud Prevention process
- Evidence of records registered



Questions?



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