

Decisioning Digital Twins in Bank Account Fraud Monitoring

2022



Mule Account & Business Email Compromise

Digital Twins in Fraud Alert Management

Focus: Mule Account & Business Email Compromise Alerts

The Challenge - alert volumes and volatility

Banks continuously monitor customer accounts for suspicious and fraudulent activities including **Mule Accounts*** and **Business Email Compromise****.

Monitoring and detection system thresholds are extremely sensitive to ensure that nothing is missed by these systems. This leads to excessively large volumes of alerts being generated. Alerts are investigated by human analysts, who take on average 15 minutes to clear each alert. 90-95% of alerts are classified as 'false positives', a massively inefficient and expensive process.



Digital Twin Solution

Decisioning Digital Twins solve this challenge by clearing 'false positives' in near real-time, leaving the humans to spend their time more effectively tackling true risk.

Decisioning Digital Twins apply expert human judgment to every alert and determine quickly if it is a false positive.

Decisioning Digital Twins enable banks to more efficiently manage risk and cope with alert volumes and volatility through access to analysts' decisions in real-time, 24/7, 365 days a year.

Digital Twin Workflow Positioning



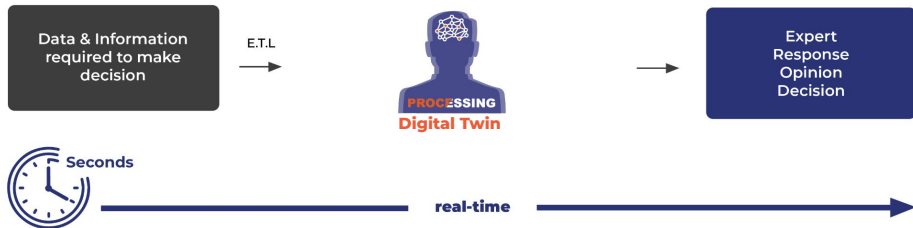
*A mule account or money mule is often the first phase of money laundering, called placement, in which illicit funds are integrated into the financial system. The account may be opened using the mule's actual personal information or using a synthetic identity. Learn more about [Money Mules](#).

**Business Email Compromise (BEC) is a type of email cyber crime scam in which an attacker targets a business to defraud the company. BEC includes CEO Fraud, account Compromise, False Invoice schemes, Attorney Impersonation, & Identify data theft. BEC targets organizations of all sizes across every industry around the globe. Learn more about [Business Email Compromise](#).



What is a TOM™ Decisioning Digital Twin?

Decisioning Digital Twins are AI replicas of a human expert's decision making - in this case the fraud analyst's determination of a false positive. Merlynn's Tacit Object Modeler (TOM™) technology captures the experience, insights and intuition of the fraud analyst to create a Decisioning Digital Twin. Digital Twins respond exactly as the analyst would only exponentially faster.



Case Study

Read our case study to see the impact Decisioning Digital Twins are having on the fraud monitoring capabilities within a leading banking customer.

Digital Twin Impact



Risk - 50 - 80% reduction in false positives enable analysts to focus on true investigations



Decision time - 15 min reduced to 0.03 seconds



Capacity - scaled resources to handle unlimited alert volume & volatility

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Merlynn Intelligence Technologies is a leading **Decision Intelligence** technology company focused on democratizing access to human expertise. To find out more or book a demonstration visit www.merlynn-ai.com or email: info@merlynn-ai.com.

Case Study: Decisioning Digital Twins in Bank Account Fraud Monitoring



Mule Account & Business Email Compromise

Case Study - Bank Account Fraud Monitoring

A Tier 1 bank, sought to introduce *Decision Intelligence* (Digital Twins) into their fraud management systems to enhance **efficiency** as well as improve **consistency and accuracy** in the management of bank account fraud alerts. Mule Account & Business Email Compromise (BEC) monitoring were selected for the initial project due to complexity, volume and demand on human resources.

Prior to using the Twins, alerts were reviewed by the team of analysts, taking 15-20 minutes per alert to determine if the alert was a false positive or warranted further investigation. Up to 90% of alerts were routinely found to be false positives.

Fraud Analyst Digital Twins

The bank's goal for using the Twins was to rapidly determine if the alert is a False Positive or if the alert needed more investigation and routing to human analysts.

The bank's experts created Decisioning Digital Twins using the UP2TOM platform, Merlynn's no-code Digital Twin Interface, to determine whether an alert is a False Positive.

Prior to using the Digital Twins all alerts were adjudicated by humans. Now the decision is made by the Digital Twins and is delivered in real time.

Results:

Decisioning Digital Twins reduced false positives created by fraud monitoring systems by more than 50% and exponentially freed up analysts' time to focus on true risk.

Alert Type	False Positives Identified by Digital Twins	Digital Twin Accuracy	Digital Twin time (per alert)	Human time average (per alert)
Mule Account/ BEC	50%	100%	0.03 sec	17.5 min

“Decision Intelligence introduced through the TOM Digital Twin technology has greatly improved the efficiency and efficacy of our fraud risk management, enabling the team to identify and focus on real risk much faster” Head of Fraud Risk Management