From Legacy Fraud Control to Real-Time Trust Intelligence

A dual-stream transformation of telecom and fintech fraud management

etisalat and



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With 12+ years of experience at Etisalat, Ahmed is leading Revenue & Fraud Management, driving fraud prevention, risk mitigation, and revenue protection through technology, analytics, and strategic vendor partnerships.

One program. Two fraud systems. One intelligence foundation

THE TRANSFORMATION

The project protected today's telecom business while creating a new control plane for the financial ecosystem.

1 Modernize

Upgrade the existing FRM estate, software stack and user experience while preserving the operational knowledge already embedded in the platform.

CONTINUITY

2 Scale

Rebuild on new hardware, reconnect external feeds and sustain the processing big number of transactions every day.

CAPACITY

3 Expand

Launch a dedicated fintech fraud system with real-time transaction controls, advanced analytics and entity-centric risk scoring.

INTELLIGENCE

Fraud risk was evolving faster than the legacy operating model

THE STARTING POINT

Telecom fraud remained mission critical, while financial transactions introduced new channels, entities and decision-time constraints.

FRM

Legacy foundation

An older FRM version and base software stack constrained evolution.

120+

Operational complexity

120+ external feeds carried valuable signals across a highly interconnected landscape.

1B+

Extreme volume

The platform had to manage approximately one billion transactions per day.

RT

New threat surface

Wallet, payment, ATM and merchant activity demanded decisions in real time.

The project was not a simple upgrade. It was a controlled transition from transaction monitoring to multi-domain risk intelligence.

A phased transformation designed around continuity and controlled expansion

PROJECT JOURNEY

Each stage reduced transition risk while unlocking the next layer of capability.

01 — Design

Map current configuration, integrations, fraud controls and dependencies.

02 — Build

Prepare new hardware and supported base software environments.

03 — Upgrade

Upgrade FRM, preserve configuration and reconnect the existing data estate.

04 — Launch

Deploy the new fintech fraud system and real-time integration layer.

05 — Activate

Configure analytics, scoring, investigation and case workflows.

06 — Learn

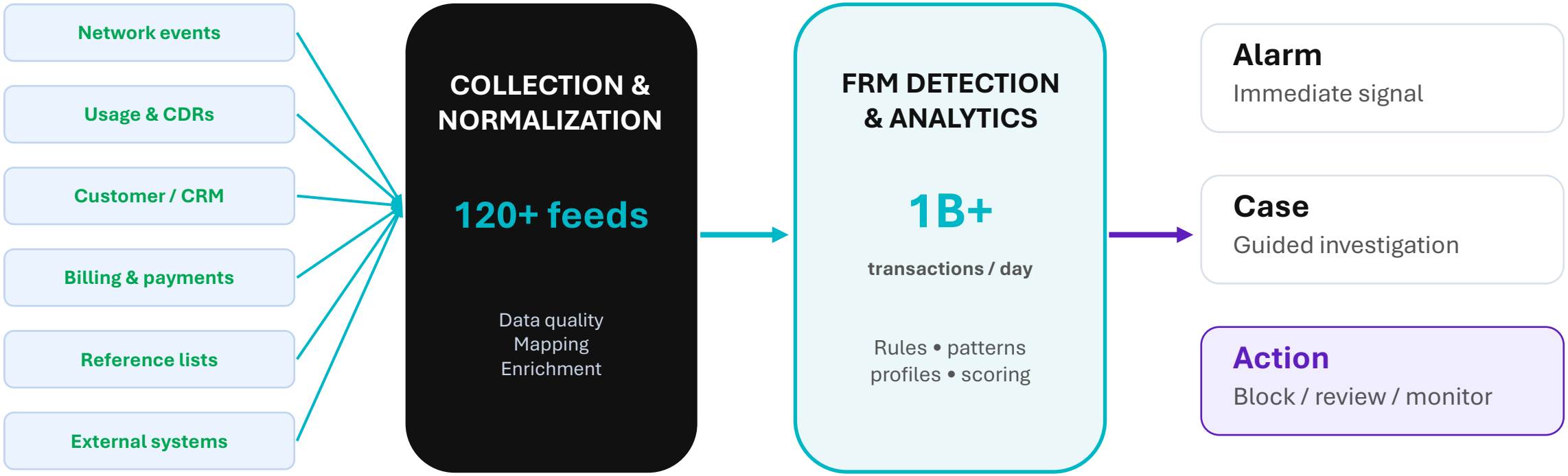
Tune controls using analyst feedback, outcomes and emerging patterns.

DROP 1 | Telecom FRM modernization

DROP 2 | Fintech fraud prevention

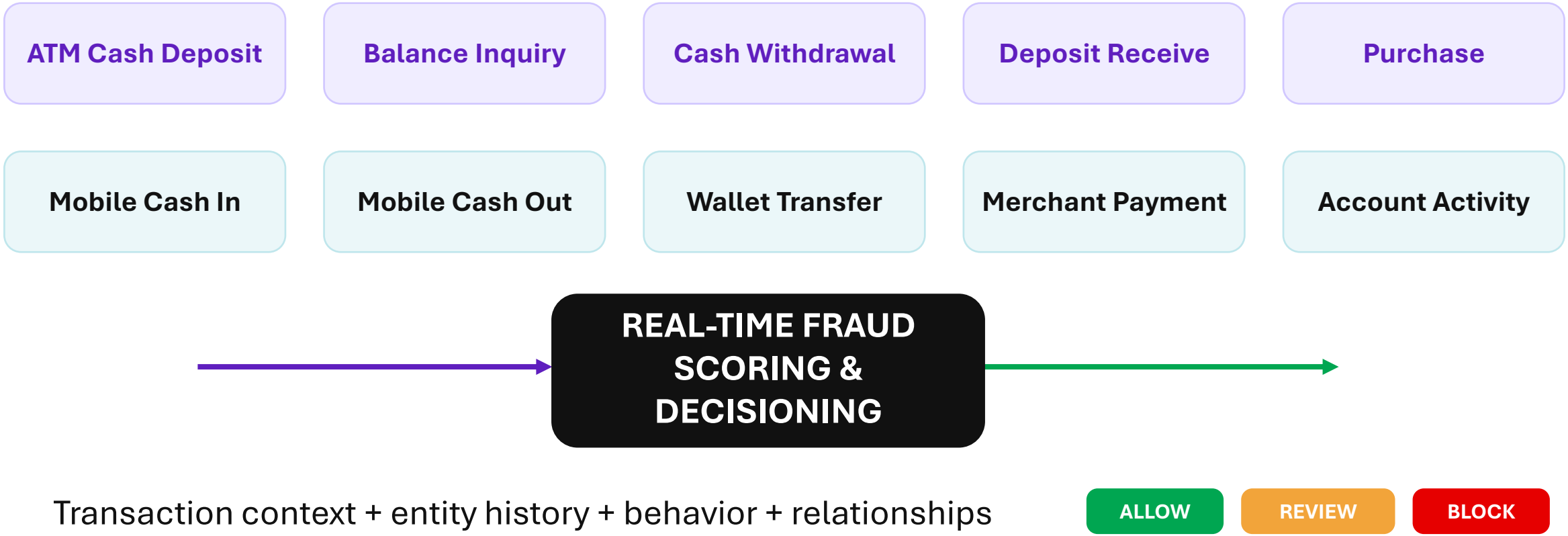
DROP1: From a complex data estate to one scalable fraud operating model

The modernization keeps source diversity at the edge and standardizes detection, analysis and action at the core.



DROP2: Extending fraud prevention into real-time financial transactions

The new system was built on dedicated hardware to score new transaction types at the moment of interaction.



DROP2: Seven capabilities turn raw events into explainable action

INTELLIGENCE STACK

Each module contributes a different lens: relationship, trend, similarity, anomaly, evidence or trust.

GLC

Reveal hidden networks and paths between entities.

Trend Prediction

Identify shifts, acceleration and deteriorating trajectories.

Behavior Matching

Find entities that resemble known patterns.

Group Matching

Compare behavior against peer groups and cohorts.

Anomaly Detection

Surface outliers without requiring known fraud labels.

Real-Time + Evidence

Combine immediate rules with historical evidence.

Entity Scoring

Maintain a living risk indicator.

ONE DECISION

Approve
Review
Block

The value is not in any single model. It is in the orchestration of complementary signals.

How the FinTech fraud platform was turned into an operational system

A controlled journey from infrastructure readiness and data integration to real-time decisioning, analyst tools and production acceptance.

Two systems. One connected intelligence foundation.

FRM TELCO

Near-real-time telecom fraud detection

1B+ EVENTS / DAY

120+ EXTERNAL FEEDS

- Usage & network
- Customer & SIM
- Billing & payments

SHARED INTELLIGENCE

Entity and data context

- Relationships
- Risk scoring
- Behavior
- Cases & evidence

FRM FINTECH

Real-time financial transaction decisioning

250 ms AVG RESPONSE

600K REQUESTS / DAY

- Wallet & payments
- ATM & merchant
- Allow • review • block

CROSS-DOMAIN ANALYSIS

Telecom behavior enriches FinTech investigations, while financial activity adds context to customer and network risk.

GLC | ENTITY SCORING | BEHAVIOR ANALYTICS | CASES & DASHBOARDS

A structured installation path from new hardware to live fraud decisions

The installation combined platform engineering, integration, fraud configuration, validation and knowledge transfer.

1 Design

Translate transaction, entity and API requirements into system, communication and data-collection designs.

2 Platform

Prepare Production and Test environments, software prerequisites, connectivity and security.

3 Install

Deploy the FinTech fraud platform and related product components on the new environment.

4 Integrate

Connect batch entity feeds and real-time channels through a unified API integration pattern.

5 Configure

Build rules, evidence, cases, profiles, dashboards, GLC relationships and operational monitoring.

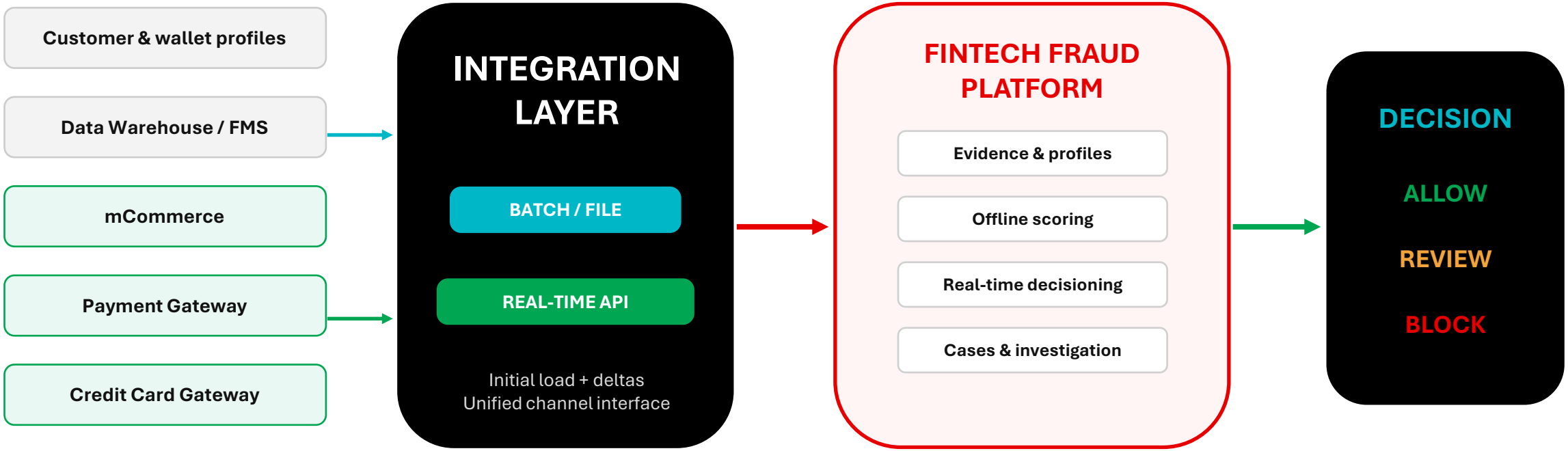
6 Validate

Execute integration and acceptance tests, train users and transition the solution into operation.

Two data speeds, one fraud context

FINTECH INTEGRATION

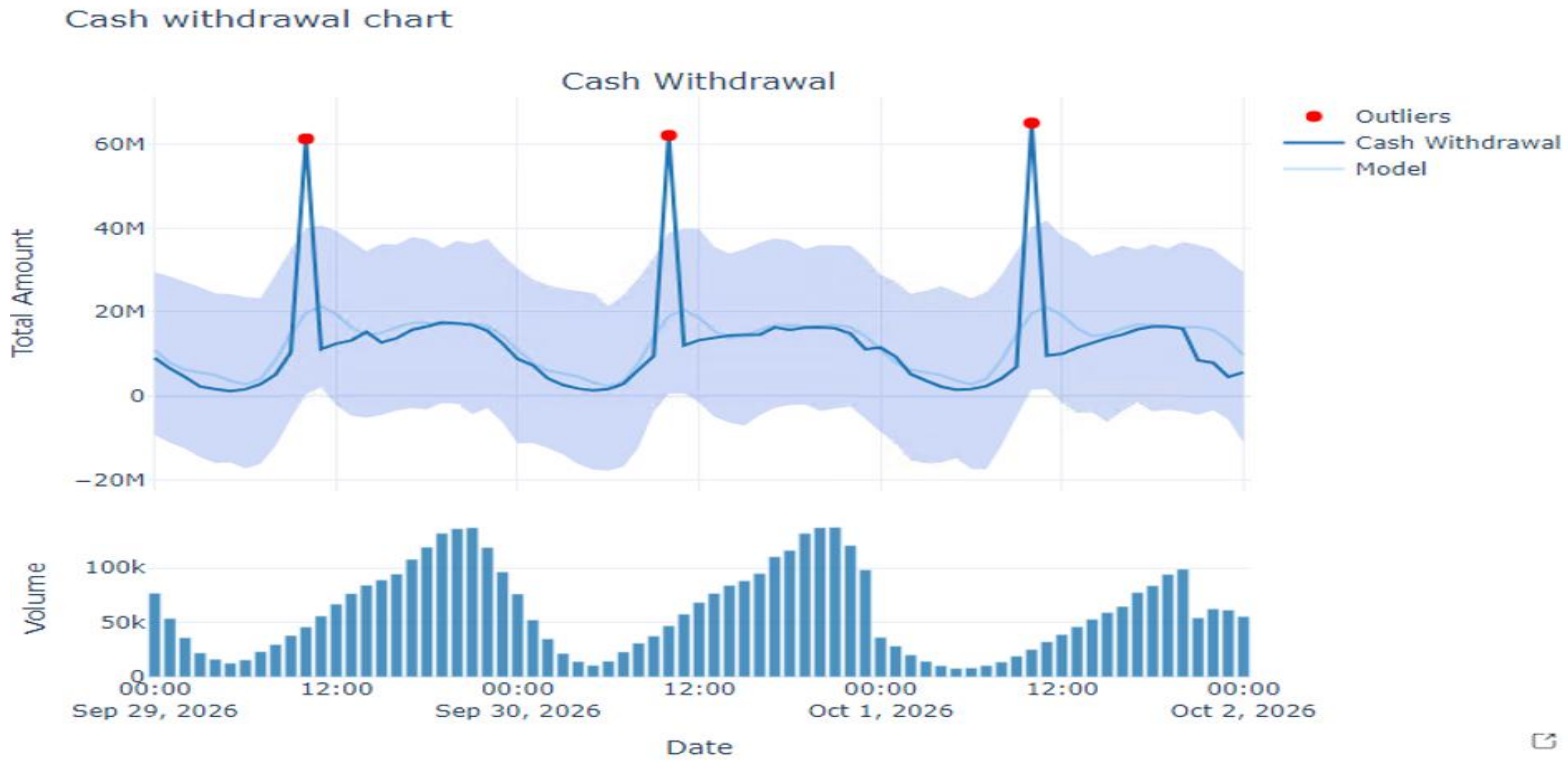
Periodic entity intelligence enriches the platform; real-time requests activate immediate decisioning.



Trend analysis and anomaly detection: surface the unexpected

PRODUCT IN ACTION

Forecasting and unsupervised models highlight deviations, then let analysts drill into the entity and transaction detail.



Trend Analysis

Models historical activity, seasonality and business patterns to flag significant deviations.

Anomaly Detection

Uses clustering and Isolation Forest techniques to highlight Low, Medium and High deviations.

Behavior Matching

Searches for entities with a similar behavioral footprint.

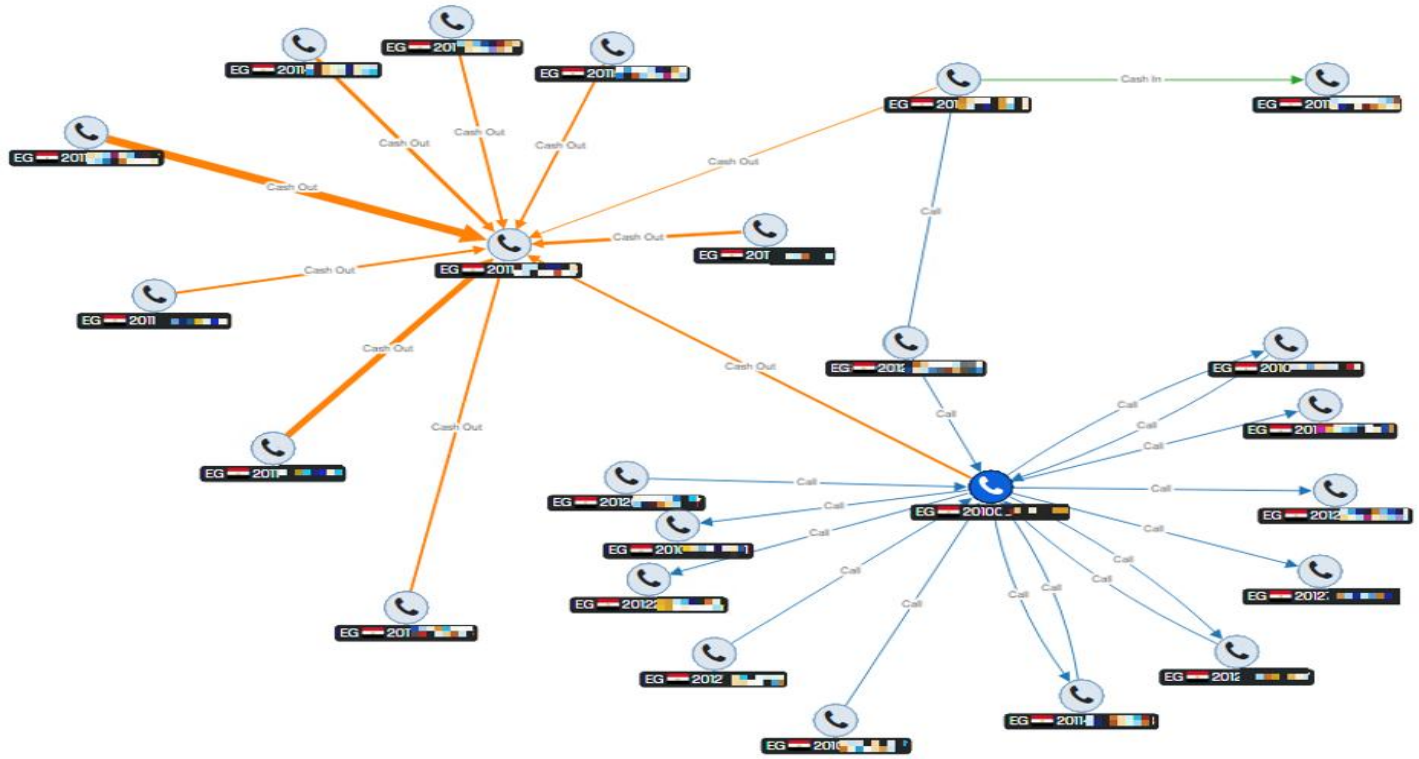
Group Matching

Identifies coordinated or peer-group patterns across multiple entities.

Graphical Link Chain: investigate the network, not only the event

PRODUCT IN ACTION

GLC supports telecom and FinTech relationships, including multi-depth exploration and common-link investigation.



Search flexibly

Start from a dial, wallet, National ID or other configured entity.

Expand by depth

Follow relationships across multiple degrees and a selected time window.

Reveal shared assets

Identify common people, devices and transaction relationships.

Preserve the investigation

Filter, refine and save the graph around suspicious activity.

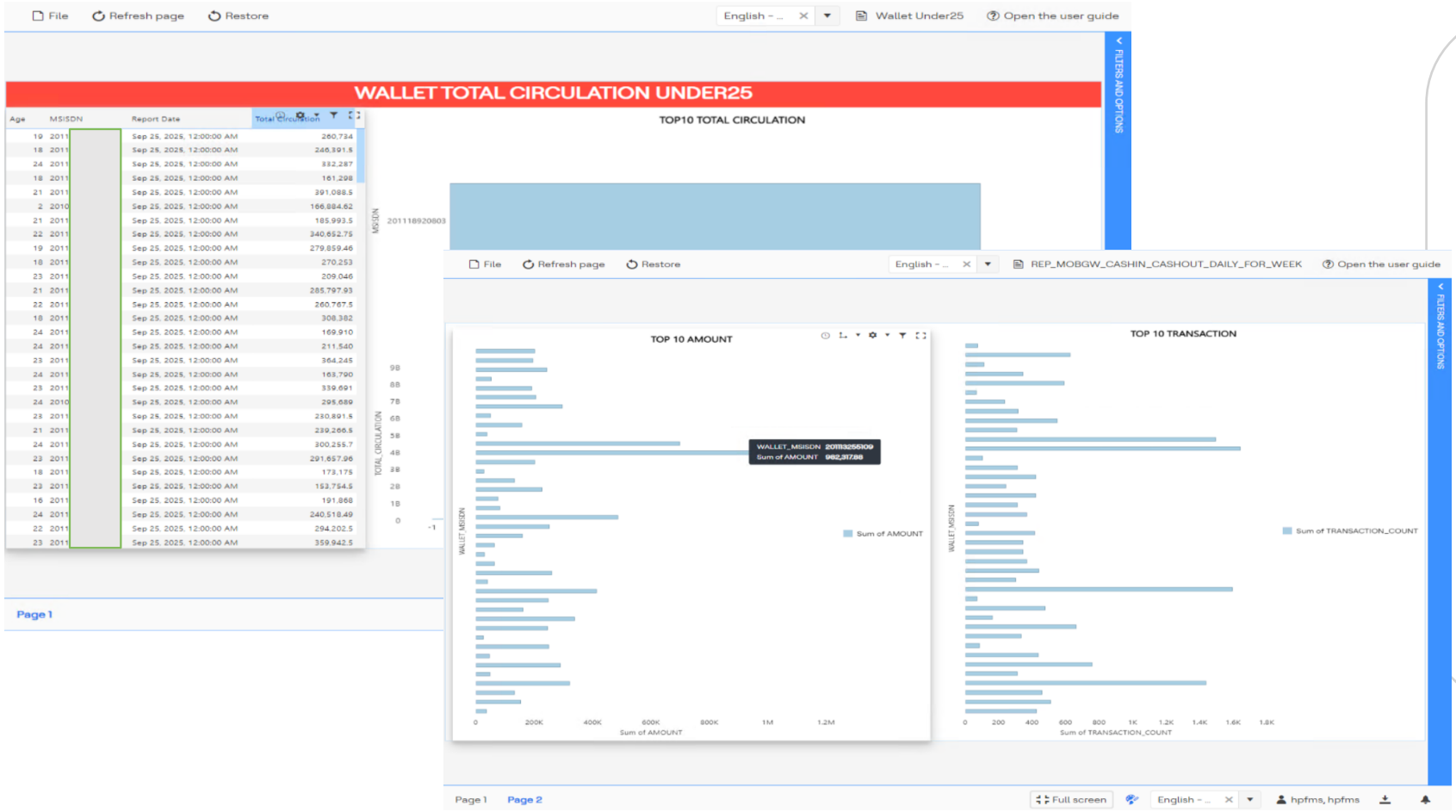
Bulk search correlation

Correlate heterogenous list of entities (Users vs dealer)

AML & CFT intelligence: move from monitoring to actionable investigation

PRODUCT IN ACTION

Dynamic reports highlight unusual transaction volumes, frequencies, wallet relationships and other compliance risk indicators.



Dynamic reporting

Interactive dashboards expose suspicious volumes, frequencies and entity relationships.

Case context

Investigators can move from aggregated indicators into customer and transaction detail.

National ID screening

The solution description includes real-time screening with access to the related customer profile.

Compliance monitoring

Dashboards support timely investigation and AML/CFT operational oversight.

Business outcomes: turning fraud intelligence into action



The installation was completed as an operating capability, not only a software deployment

OPERATIONAL READINESS

Technology, controls, analyst workflows and governance were brought together before transition to operation.

Environments

Production and Test environments, plus the defined recovery setup.

Controls

Rules, evidence, thresholds, response logic and reference lists.

Analytics

GLC, trends, anomaly detection, behavior matching and scoring.

Operations

Health monitoring, data-arrival controls and integration visibility.

People

Analyst and administrator training covering cases, rules, reports and system administration.

Acceptance

Integration testing, user acceptance and agreed delivery documentation.

Outcome: a dedicated FinTech fraud platform ready to ingest, decide, investigate and continuously improve.
Fully integrated with Telco solution

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Thank You