Transaction Fraud Monitoring & Decision Intelligence Platform

A next-generation fraud detection solution designed to empower financial institutions with AI-driven intelligence, real-time monitoring, and explainable decision-making capabilities.

The Growing Fraud Challenge: A Billion-Dollar Problem

Every day organizations process thousands of transactions where fraudsters hide among legitimate customers, exploiting high-volume environments where manual detection is impossible.

The Scale of Impact:
- $5.4 trillion lost globally to fraud annually (6% of global GDP)
- 1 in every 100 transactions contains fraudulent elements
- 73% of businesses experienced fraud in the last year

**Detection rate**: Only 56% caught before damage occurs

Traditional Methods:
Volume Overwhelm: 50,000+ daily transactions make manual review impossible
Speed Mismatch: Fraudsters execute in milliseconds; detection takes hours/days
Pattern Evolution: New fraud schemes emerge faster than rules can be written
False Positives: 95% of alerts are false, causing alert fatigue
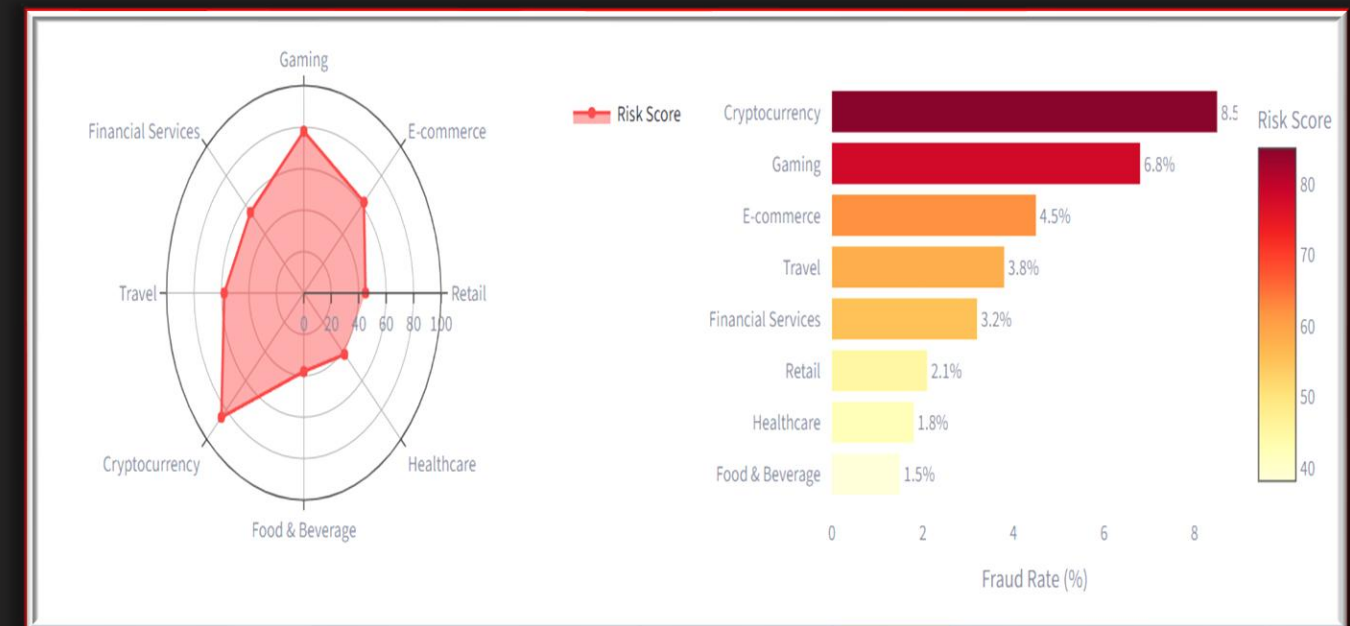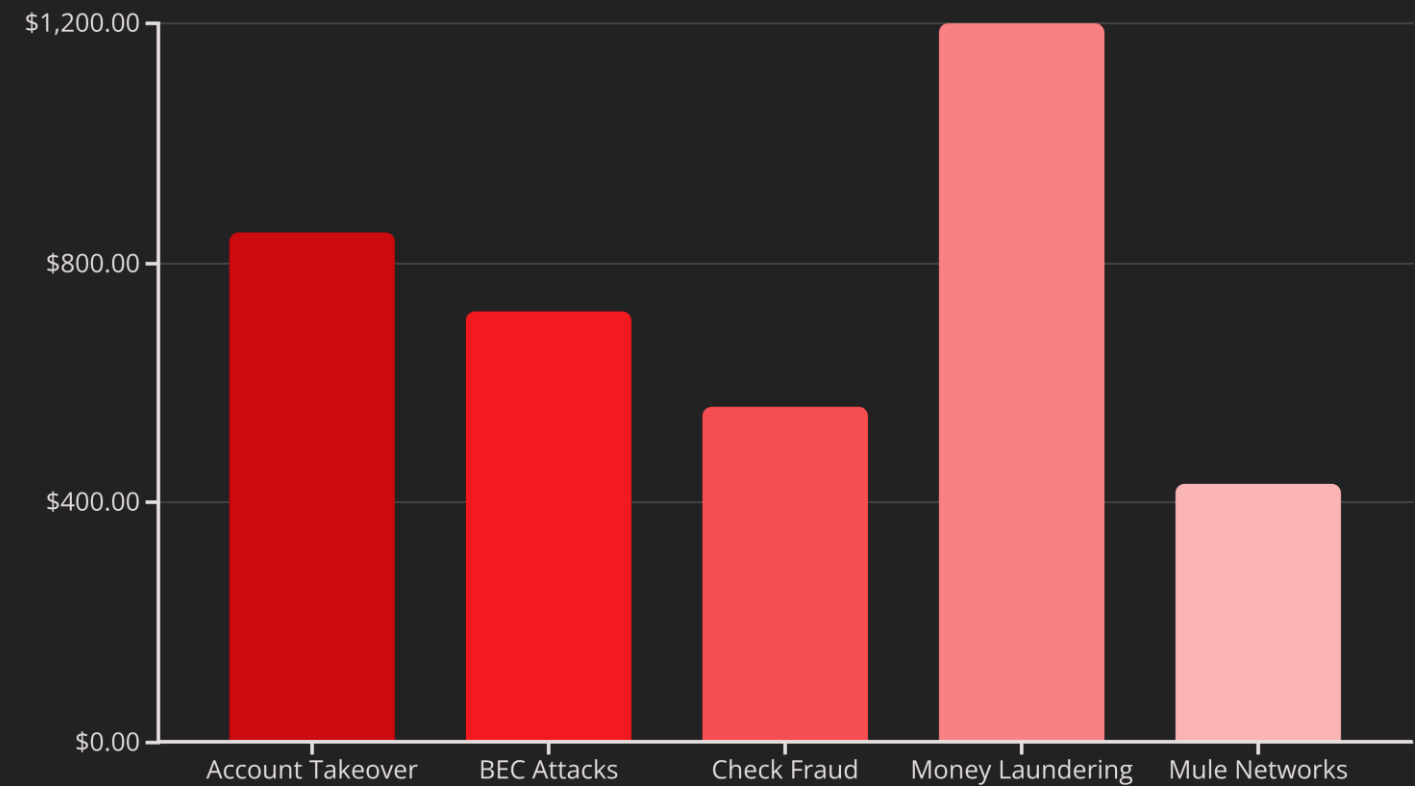
Client Pain Points: Fragmented Systems, High Costs, Poor Outcomes

Siloed Detection Systems

Banks struggle with separate fraud systems for each attack vector—payroll reroute, BEC, account takeover, money laundering, check fraud, and mule activity—creating blind spots and coordination failures.

Alert Fatigue & False Positives

Current systems generate 50-70% false positive rates, overwhelming fraud teams with unnecessary alerts, delaying legitimate transactions, and creating significant operational inefficiency and customer friction.

Black Box Decisions

Poor explainability makes it impossible to justify decisions to regulators, customers, or internal stakeholders. Manual review processes are slow, fragmented, and expose institutions to regulatory risk.

From Vision to Value: Our Solution Logic

Vision-Driven Solution Architecture

We architect platforms that push boundaries—built for growth, adaptable to AI/ML innovation, and primed for immediate impact.

Every decision in our design framework answers real market needs: seamless integration, explainability, and audit-ready transparency.

Catalyst Advisory Philosophy

We enable banks to act decisively, selecting fintech partners that accelerate value and spark differentiation.

Our client-centric mindset is about igniting fast wins now and laying the foundation for long-term transformation.

Platform Demo: See Intelligence in Action

Experience firsthand how our platform transforms fraud detection from reactive alert management to proactive risk intelligence. The demonstration showcases real-time transaction monitoring, advanced chain analysis visualization, explainable AI decision-making, and configurable risk profiles in action.

1

Live Transaction Monitoring

Watch the system analyze incoming transactions in real-time, applying AI-powered risk signals across all fraud categories with second response times

2

Explainability Deep Dive

Review comprehensive SHAP and LIME analysis showing exactly why each decision was made, with full audit trails meeting regulatory standards

3

Configuration & Customization

See how easily the platform adapts to different risk profiles, custom rules and institution-specific requirements without requiring technical expertise
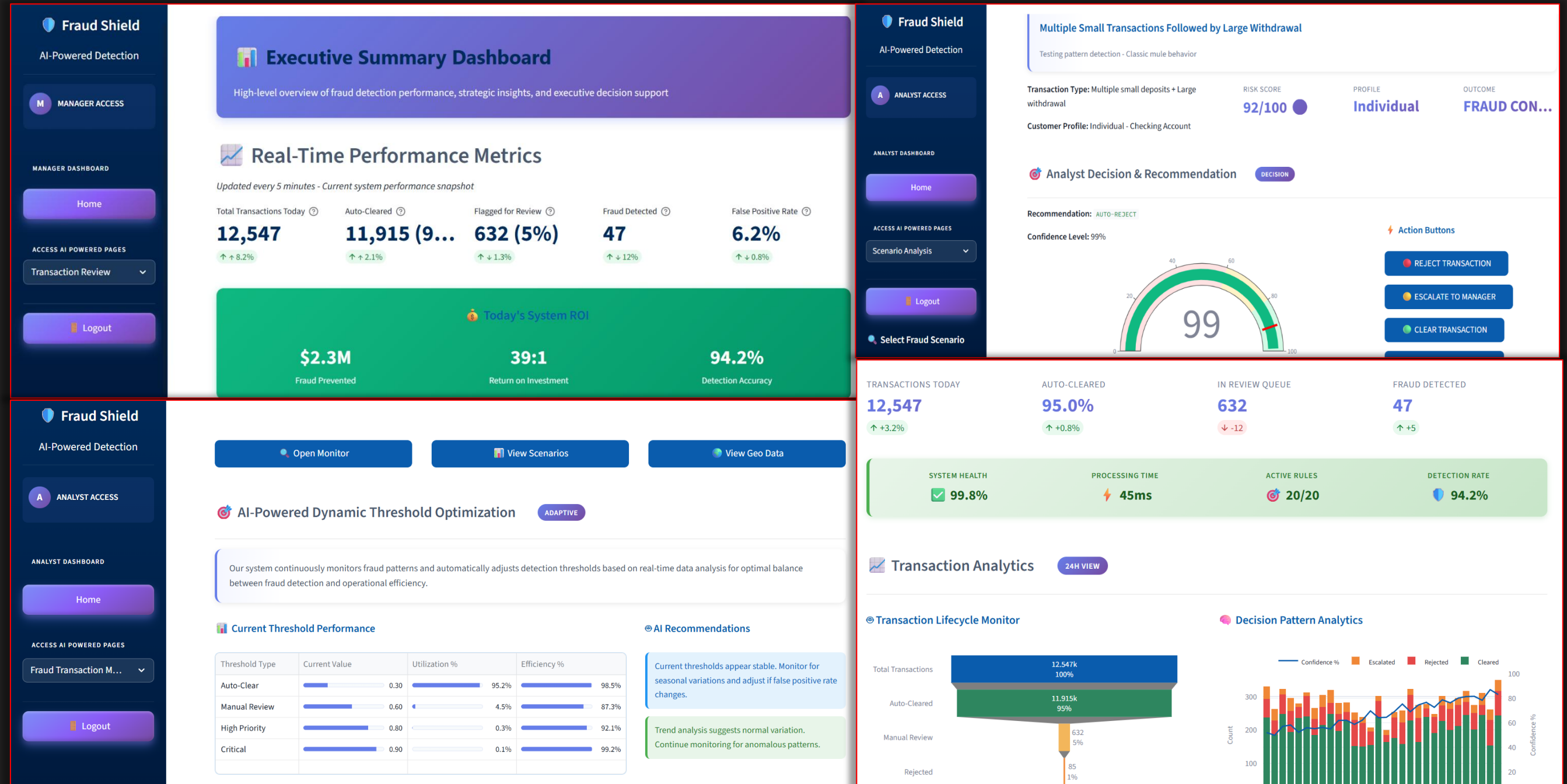
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Chain Analysis Visualization

Explore interactive network graphs that reveal hidden connections between accounts, exposing coordinated fraud networks and coordinated fraud rings
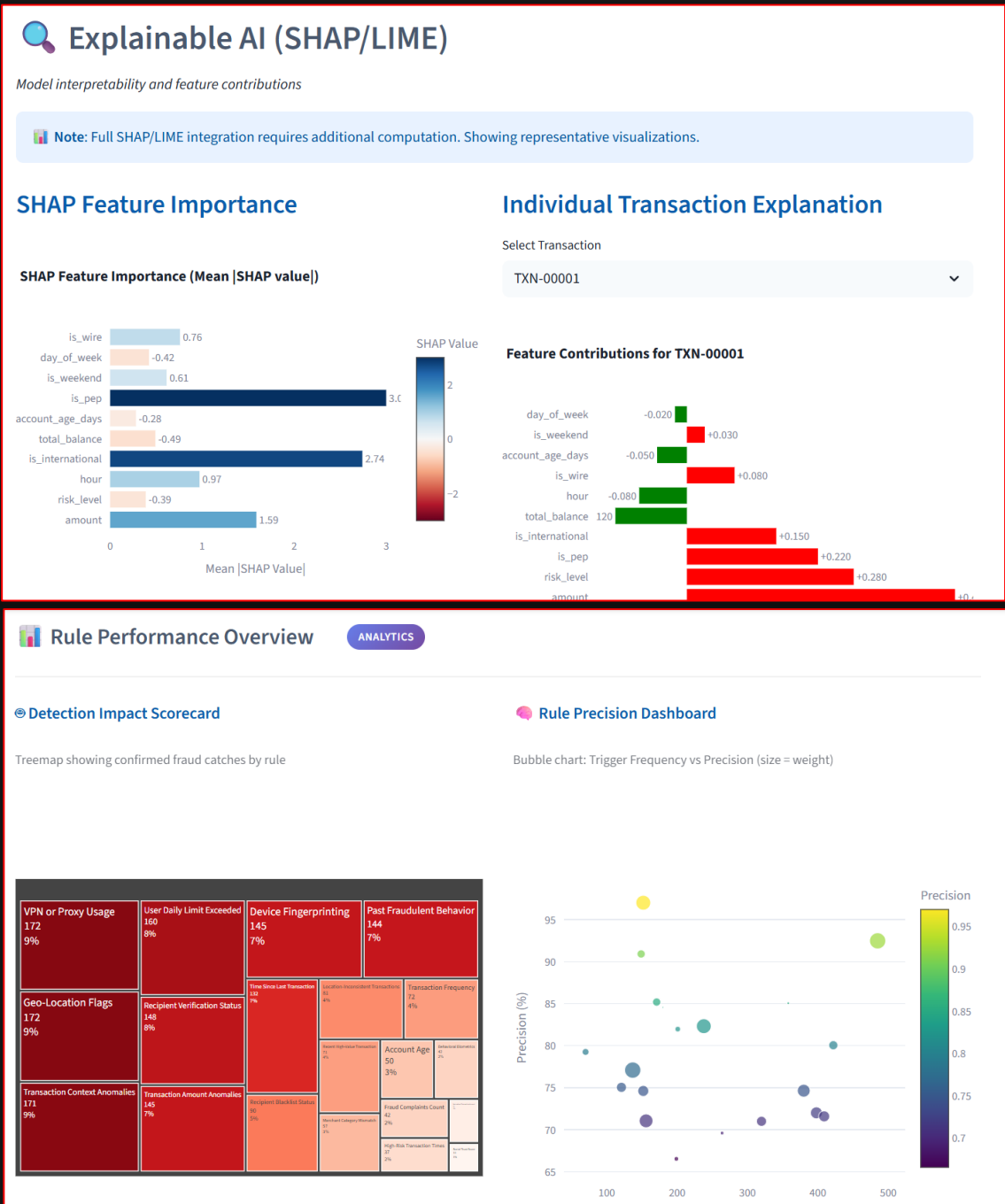
Concept to Reality: Live platform

Meeting the Market Demand: AI-Driven Fraud Detection

The Growing Threat

Fraud losses surged past $40 billion in 2024, with 90% of U.S. companies facing sophisticated, AI-powered fraud schemes that evolve faster than traditional defenses can handle.

Smart Detection

Our solution leverages cutting-edge AI and machine learning to identify fraud in real-time, continuously adapting to emerging threats and staying ahead of fraudsters.
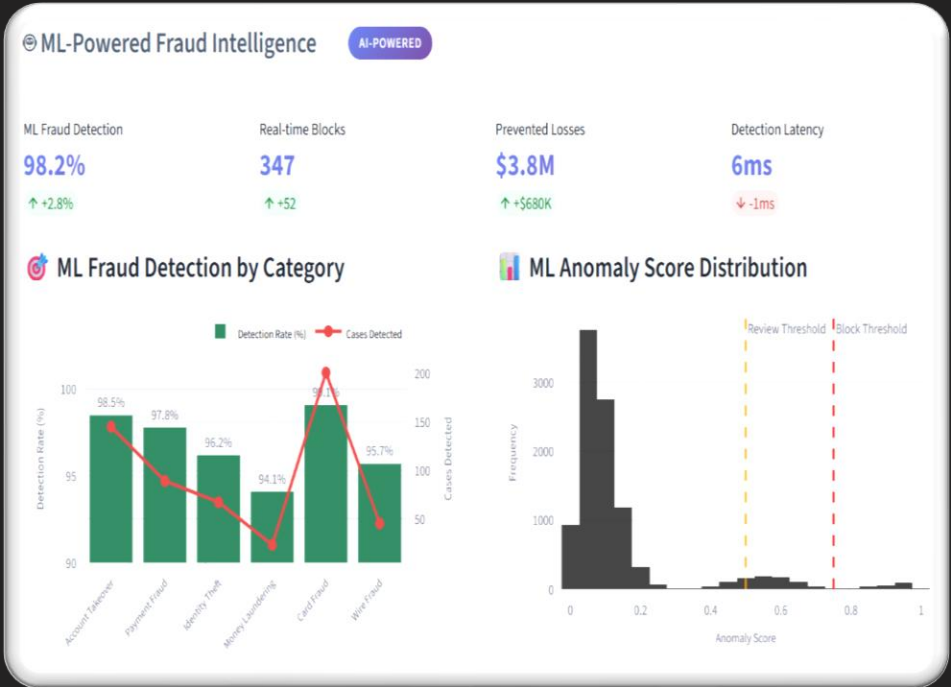
Repeatable Revenue Model

This architectural flexibility enables repeated sales across multiple industries and use cases. Each implementation can be tailored while leveraging core components, maximizing both client value and revenue potential.

Competitive Advantage

In a market demanding smarter, faster fraud defense, our AI-driven solution transforms complex risk into opportunity—empowering clients to prevent fraud proactively while optimizing operational efficiency and compliance.

AI-Driven Threat Intelligence Platform

Business Value and Opportunity

Standalone Capability
Key benefits: The platform delivers measurable financial and operational gains from day one. Prevents high-value losses saving up to $47K per fraud while reducing investigation time by 95%. With fast deployment, organizations move from lengthy advisory projects to solution-driven execution.

Managed Monetization Models
Proactively shields from regulatory and reputational damage by ensuring full AML and compliance adherence. Prevents $1.2M+ in potential fines, blocks sophisticated frauds averaging $100K–$200K per attack, and maintains a 100% auditable trail for every investigation. Beyond protection, our scalable SaaS and enterprise licensing model enables recurring revenue through continuous access, system upgrades, and support—turning risk mitigation into a sustainable business advantage.

Assessment & Advisory Expansion
Effortlessly scale to manage 50k+ daily transactions with real-time response under 2ms, enabling enterprise-grade performance. With 13 pre-configured fraud patterns and self-learning AI, protection evolves continuously without manual updates. Each deployment not only enhances client defense but uncovers operational inefficiencies, fueling new consulting opportunities.

Client Benefits: Transform Fraud Detection Effectiveness

Banks implementing our platform experience dramatic improvements in fraud detection accuracy, operational efficiency and risk management effectiveness within the first day of deployment.

The combination of AI-driven intelligence, comprehensive coverage, and explainable decision-making creates a new standard for fraud prevention excellence.

85%
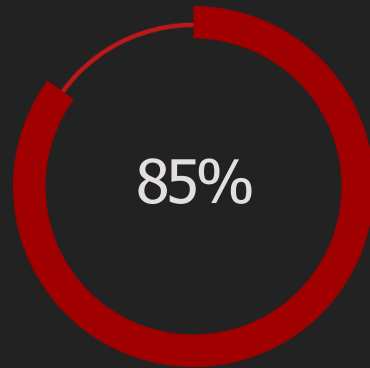
Reduction in False Positives
Cut alert fatigue and operational productivity

92%
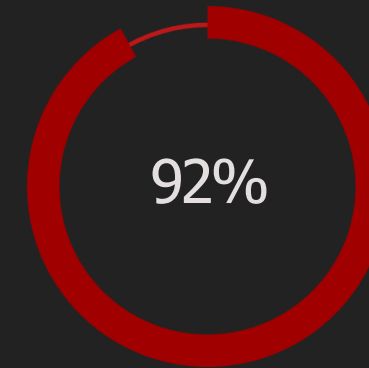
Fraud Detection Rate
Catch threats missed across other solutions

500ms
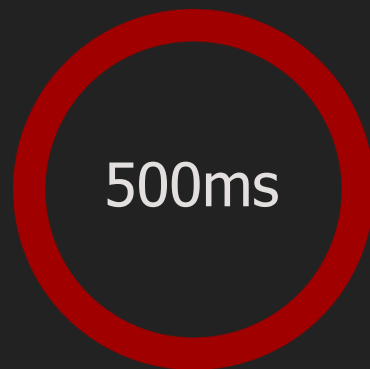
Average Response Time
Real-time decisions without friction

100%

Audit Trail Coverage
Complete explainability for every decision

Advanced Fraud Protection

Dormant Account Surge Protection

AI detects unusual large transfers from inactive accounts

- Advanced behavioral analytics identify transfers exceeding account-level baselines and trigger automated risk scoring.
- Recipient verification logic validates ownership and cross-checks historical trust factors.
- Suspicious events auto-escalate for review or immediate block before fund settlement.

Test-and-Drain Prevention

Blocks Large Withdrawal after detecting probe patterns

- Sequence-aware algorithms detect micro-transaction bursts that precede major withdrawals.
- Velocity and progression tracking flag unusual accumulation behavior.
- Automated hold policies pause withdrawals pending secondary authentication.

Payroll Redirect Shield

Prevents fraudsters from redirecting legitimate payroll deposits.

- Authenticates changes to employee direct deposit information.
- Flags changes made from unusual IP addresses or devices.
- Requires multi-factor authentication for sensitive payroll modifications.
- Compares new banking details against known fraud patterns.

Money Mule Network Detector

Identifies individuals involved in laundering illicit funds.

- Analyzes transaction patterns for frequent, small deposits followed by large transfers.
- Maps recipient networks to uncover connections to known fraud rings.
- Monitors accounts for sudden changes in activity inconsistent with historical behavior.
- Uses geospatial analysis to detect mule activity across different regions.

Micro-Deposit Interceptor

Blocks fraudulent account verification attempts using small deposits.

- Detects high volumes of micro-deposits to newly created or suspicious accounts.
- Identifies patterns of rapid deposit and withdrawal, indicating account testing.
- Analyzes the origin and destination of micro-deposits for unusual correlations.
- Automated rules block accounts participating in micro-deposit fraud at scale.

Transaction Chain Analyzer

Uncovers complex fraudulent schemes by tracing transaction paths.

- Visualizes money flows across multiple accounts and institutions.
- Identifies circular transactions or sudden diversions from normal patterns.
- Pinpoints central nodes in fraud networks for targeted intervention.
- Applies graph analytics to detect hidden relationships and suspicious clusters.

Advanced Fraud Protection

Account Takeover Fortress

Instant lockdown for SIM Swaps and compromised credentials

- Adaptive authentication models detect login velocity and geo-anomalies across devices.
- Real-time credential reuse detection flags breaches before fraudulent access occurs.
- Step-up verification and multi-factor enforcement neutralize unauthorized login attempts.

Duplicate Check Eliminator

Catches duplicate check deposits for multiple accounts or banks

- Identity graph analytics correlate PII patterns to spot fabricated profiles and mismatched KYC data.
- Cross-channel data matching and velocity controls highlight unnatural identity reuse.
- AI-based link analysis uncovers clusters of synthetic entities tied to fraud rings.

Vendor Fraud Gatekeeper

Cooling period for all beneficiary changes with payment blocks

- Session behavior monitoring detects deviations from typical user patterns post-login.
- Risk-scored email/IP analysis identifies spoofed communication sources.
- Transaction-level policy rules auto-block unauthorized fund movements triggered after phishing access.

Geographic Risk Controller

Real-time blocking of payments to sanctioned or high-risk jurisdictions

- Real-time transaction scoring combines device fingerprints and merchant reputation data.
- Geo-behavioral profiling flags impossible spending locations or unseen devices.
- Adaptive limit rules auto-reduce risk exposure for high-fraud channels and regions.

Account Manipulation and Bulk Payment Guardian

Stops mass beneficiary schemes before insider fraud escalates

- Access analytics track role-based permissions and flag abnormal privilege use.
- Audit trail reconciliation detects unauthorized data exports or configuration changes.
- Automated alerts notify compliance teams when insider activity breaches policy thresholds.

Money Laundering & Round-the-Clock Sentinel

AI adjustments to risk thresholds 3x higher during non-business hours

- Network analysis maps multi-hop fund flows to identify layered and integrated transactions.
- Risk scoring combines beneficiary linkage and jurisdiction exposure for AML compliance.

Platform Highlights: Intelligence That Delivers Results

Real-Time Risk Scoring

Dynamic risk assessment with multi-dimensional scoring algorithms that evaluate transactions across behavioral, contextual, and network indicators simultaneously.

Regulatory Compliance

Built-in audit trails, compliance reporting, and documentation capabilities ensure alignment with regulatory requirements with complete decision transparency

Advanced Chain Analytics

Visualize complex fraud networks with interactive graph analytics, identifying mule accounts and coordinated attack patterns across 24-hour transaction windows.

Comprehensive Explainability

AI built-in explainability charts using LIME and SHAP ML methodologies provide complete transparency into model decisions for regulatory, doctrine, and stakeholder use.

Flexible Configuration

Adapt to your institution's risk appetite with configurable detection profiles, custom rule sets, and adjustable thresholds that balance security with user experience.

Partner With Us to Transform Fraud Detection

This platform represents a strategic opportunity delivering unprecedented value. By combining sophisticated AI technology with financial expertise, we can transform how institutions detect, prevent, and respond to fraud.

Schedule Your Deep Dive

Let's discuss how this platform fits your client engagement strategy and explore customization opportunities for specific bank requirements

Pilot Program Opportunity

Deploy with a select client bank to demonstrate immediate impact and build compelling case studies for broader rollout across your client base

Strategic Partnership Discussion

Explore licensing models, revenue sharing structures, and long-term collaboration frameworks that align with growth objectives

Contact: Ready to transform fraud detection for your clients? Let's schedule a detailed technical review and business discussion to move forward together