

Al-powered fraud prevention for faster, smarter transaction decisions.



**PCI DSS** 





















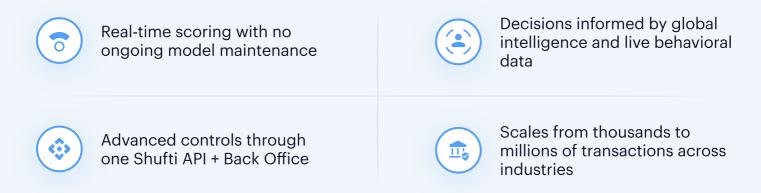
Online payments keep speeding up , and so do fraudsters. Traditional rule stacks struggle to keep pace, and teams drown in manual tuning. Shufti's answer is simple: our **Transaction Trust Screening** product delivers Al-powered fraud detection built directly into Shufti's ecosystem.

It operates through two touchpoints of our platform:

- Back Office: where your risk teams monitor, investigate, and tune strategy
- ▶ Real-time APIs: which screen every transaction before authorization to make a fast, explainable decision, before authorization costs accrue.

At its core is Shufti's globally trained AI engine. It evaluates device, network, identity, payment, and behavioral context in milliseconds, returning a transparent score, detailed explanation, signals, and a decision. As it continuously learns from live outcomes, you get enterprise-grade fraud defense without operational overhead.

# Why This Works for Shufti Customers



# Where It's Used & How It Flows (Merchant & PSP)

#### **Merchant Use (Pre-Authorization Screening)**

Start screening before you send traffic to the processor, so only trusted transactions reach the issuer.



#### **End-to-end flow**

Customer initiates checkout on your site/app.

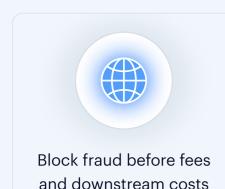
Your system sends available data to Shufti (IP, device, amount, shipping, and, if PCI-compliant, card hints such as brand/BIN).

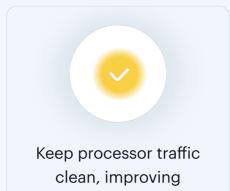
Shufti responds in real time with Approve / Decline / Manual Review / Custom Action (e.g., step-up KYC or Strong Customer Authentication routing).

You act on the decision and send a sync status update (e.g., approved, declined).

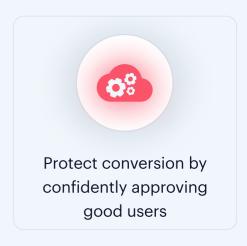
If later outcomes emerge, send async updates (e.g., chargeback, fraud\_confirmed, debt\_collection\_loss). This keeps the model current and adaptive.

#### Why Pre-Screening Matters?





authorization rates



#### **PSP / Payment Orchestrator Use**

The PSP hosts checkout, forwards transaction + payment data to Shufti, then routes authorization.

#### Payment Service Provider Cycle

PSP collects transaction and payment data (often on a hosted page).

PSP forwards to Shufti and receives a decision.

PSP proceeds or halts; sends sync updates post-authorization and async updates for late truths (e.g., chargebacks).

Even though PSPs and merchants use different identifiers (Client ID for PSPs, Seller ID for merchants), Shufti's learning and improvement process remains consistent across all transactions.



# What You Receive Per

# **Transaction**

- Score (1-100)
  - Higher = higher fraud likelihood; tuned to global and client-specific traffic patterns.
- Story (Why)

  Human-readable rationale: e.g., geo mismatch, device reputation, velocity anomalies.
- Signals
  Hundreds of evaluated attributes across five categories, geo, user, transaction, funding\_source, seller.
  - Red = risky (e.g., proxy IP, mismatched addresses)
  - Green = trustworthy (e.g., consistent identity/payment)
  - Gray = neutral/insufficient data
- Decision

Approve, Decline, Manual Review, or Custom Action (step-up KYC/OTP/SCA routing, hold-for-review, webhook to fraud ops). A Watch mode is available to observe behavior without enforcement.

Related Transactions

Links activity across ~12 months on key identifiers like email, customer name, ID, payment, phone, device ID, IP, and shipping address.

Shufti's AI engine evaluates each transaction based on five pillars:

- ▶ Geolocation: IP and geo patterns
- Payment: Amount, currency, method/brand
- Customer: Name, email and behavioral traits
- > Transaction: Pattern comparison across merchants and channels
- Merchant: Behavioral baselines for the same merchant



# Data Depth & Enrichment (Turning Raw Data into Signal)

Shufti's AI engine processes and enriches payment and contextual data into high-signal attributes that drive accurate decisions.

# Examples Of Enrichment



#### **Email**

- Domain risk
- Age
- Breach association



#### **IP/Network**

- VPN/TOR/hosting
- Bot/recent abuse
- ISP class
- Geo accuracy



#### **Device**

- Fingerprint (via optional script)
- OS
- Plugins
- Timezone
- language
- persistent device id



#### Cards/Payments

- BIN country/brand/sub-brand
- CVC results
- Expiry windows

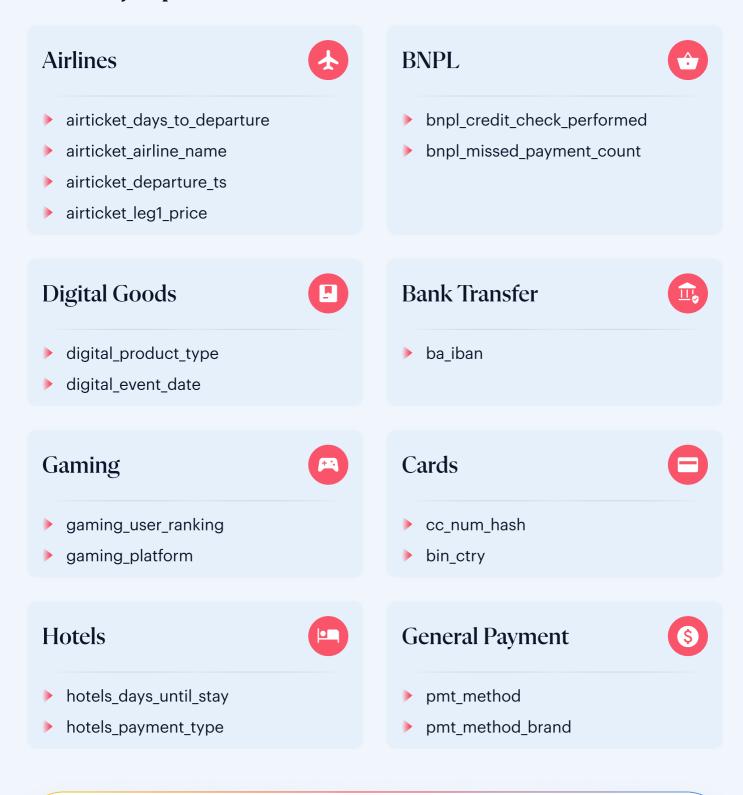


#### **Industry lenses**

- Airlines (legs, timings)
- Gaming (platform, rank)
- Hotels (length of stay)
- BNPL (missed payments)



# **Industry-Specific Data Points**



In total, Shufti supports more than 500+ predefined data points that you can use to define and refine rule logic.



# **Rules You Control**

# Authoring, Priorities & Testing

Create, simulate, and instantly publish rules directly within the Shufti Back Office, no coding required.

# **Authoring flow**







# Rule families

Velocity	e.g., 3 different cards used by the same email in 24 hours
Customer Entity	Email/phone reuse, historical approval rates
▶ Shufti's AI	Score thresholds, similar-transaction scores, engine versions
General	Shipping/billing/geo/time/device logic
Industry-specific	Airlines, gaming, hotels, digital goods
Match	Billing name vs. cardholder, postcode vs. city
Payment-method	BIN country, expiry, method, brand
Add-ons	Sanctions/PEP, device fingerprinting, PSD2 exemptions



#### **Priorities & Conflict Resolution**

1 Rules compete by action and priority. The custom actions can be made to win over generic approval/decline when needed (e.g., force step up for a narrow pattern).

# Simulation & Safety Nets

- Run rules on historical data: (total/unique hits) (Fraud hits) (Decision authority
- > Test a rule against a specific past transaction.
- Score investigation (with ≥6 months' data): Choose a score threshold and see the impact on

Decline rate Catch rate GUDR Precision

turning threshold into evidence, not guesswork.

# Custom Lists (Allow/Block/Watch)

#### Instant overrides for

- VIP emails
- Corporate IPs
- Known devices
- Mule emails.
- Compromised cards

#### **CSV** bulk-manage

- Hit rate
- Catch rate
- Simulator reports
- Accuracy
- False Positive Ratio

#### **Proactive Alerts**

Threshold Alerts

If a rule hits N transactions or X% of traffic in a window.

**Change Alerts:** 

Behavior deviates from baseline (spikes/drops), catching fast attacks (e.g., card testing), and mis-tuned logic early.



# Performance KPIs: Measuring What Matters)

- Precision (fraud hits / total hits)
- Catch Rate (blocked fraud / observed fraud)
- GUDR (good user decline rate)
- Approval/decline distribution by count & value
- Game-changer vs. Ineffectual Hits (retire noisy rules)

# **Optional Ads-on**

Sanctions & PEP Screening

Screen customer names (and addresses) against global watchlists to detect sanctioned or politically exposed persons. Results are returned instantly and can be logged for audits or follow-up actions.

PSD2 exemption

Flag eligible transactions (e.g., low risk, recurring, corporate payments) to request exemptions under PSD2 and reduce Strong Customer Authentication (SCA) requirements. Helps improve conversion while staying compliant..

Device Fingerprinting

Deploy a lightweight browser script to capture advanced device information and assign a persistent device ID (device\_id). This enhances fraud detection by identifying anomalies like reused or spoofed devices.

# **Back Office Visibility**



#### Filter Dashboards

Filter dashboards by period or merchant, compare decline rates, map fraud geographically, and inspect detailed cases and approval rates.



#### **Transactions Search**

By device ID, email, descriptors, date; view transaction ID, amounts, IP country, decision, latest status.



# Reports

- Real-time overviews of approval rates, traffic trends, approvals/declines, fraud cases (only approved-then-fraud, not already-declined).
- Filters for date & merchant; 12-month retention; pin filters; email or schedule regular delivery (daily/weekly/monthly/quarterly).



# Implementation Notes

API. Validation. & Resilience

#### Required Fields & Responses

Score, decision codes (approved), trans\_id, optional device\_id, validation hints, error messages, optional liability fields.

#### Validation Feedback

Per-field ok=true/false flags to fix malformed inputs quickly (e.g., invalid IP/country/timestamps).

#### Errors & Rate Limiting

Standard 2xx/4xx/5xx; on 429 back off ~10–20s before retry.

#### Two-way Learning Loop

Uses sync and async updates to ensure continuous model freshness without extra ops burden.

#### Available via API

(For Payments and Risk Engineering) and Back Office (for operations). Adopt now, evolve later..

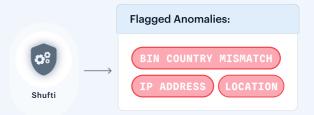


# Where You Benefit

### Fraudulent Deposit Attempts

A trader tries to deposit funds using a stolen or synthetic credit card.

**Value:** You can blocks fraud at preauthorization, reducing chargeback losses and maintaining clean processor traffic.



Shufti flags anomalies such as BIN country mismatch, risky email domain, device fingerprint inconsistencies, or IP from a VPN/proxy.

## Suspicious Withdrawal Behavior

A verified user initiates large, rapid withdrawals to a new bank account in a high-risk country.

**Value:** Prevents account takeover attempts, mule account payouts, and money laundering through trading accounts.

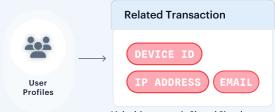


Rules combine velocity checks, device ID tracking, and AML screening.

#### **Coordinated Market Abuse**

Multiple accounts execute synchronized trades around news events, potentially manipulating FX/CFD spreads.

**Value:** Supports trade surveillance obligations, helping them detect and stop collusion or manipulative trading behavior.



Linked Accounts via Shared Signals

Shufti's "related transaction" logic links accounts through device IDs, IPs, or emails, surfacing suspicious rings.



# **Cross-Border Payment Risks**

A client in Africa or Latin America funds an account via local wallets (e.g., OVO, GCash, PayMaya).

**Value:** Safely expands into new geographies while maintaining compliance with AML directives.



Shufti enriches transaction data with IP, device, BIN country, and geolocation checks.

## Policy Abuse & Bonus Exploitation

Traders create multiple accounts to exploit sign-up bonuses or promotional credits.

**Value:** Protects marketing spend and ensures fair use of incentives.



Device fingerprinting and velocity rules detect duplicate identities across accounts.

# **High-Risk Jurisdiction Screening**

Traders create multiple accounts to exploit sign-up bonuses or promotional credits.

**Value:** Aligned with global AML obligations under ASIC, Mauritius FSC, and FATF standards.



Sanctions/PEP add-on checks combined with transaction screening rules trigger manual review.



# What It Means For Your KPIs

#### Illustrative Scenario

- A client executes a \$5,000 EUR/USD trade:
  - ▶ Account funded via card issued in Germany, but login IP is from Nigeria.
  - ▶ The device fingerprint matches a prior account flagged for fraud.
  - ▶ The email domain is linked to previous suspicious activities.
  - Shufti's AI flags multiple red signals, lowering the transaction's score below the decline threshold.
    - **Decision:** The trade is automatically declined.
- If you still processed it and it later resulted in a fraudulent withdrawal or chargeback, an async update would feed the learning loop, preventing similar abuse in future.

#### **Business Impact**

- **Higher Approval Rate** [III]
  - Fewer false declines via better signal and score investigation.
- **Faster Investigations** 45 Clear stories, signals, related-transaction linkages, focused dashboards.
- **Lower Chargebacks & Costs** Block fraud pre-authorization: clean traffic for issuer.

**Full Control** 

Rules, templates, lists, alerts, simulations—adapt posture as your business and adversaries evolve



# With Shufti, you get a secured and faster way to manage fraud risks.

Empowering your business to thrive in an increasingly digital world.



**Book a Demo** 

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