

# do same for below story in fullfledged research

Explainable AI

Reason Cards for every AI action, legal transparency, confidence scores

Here is a full, research-driven and implementation-ready user story for **Explainable AI** in compliance systems—focused on "Reason Cards" for every AI action, legal transparency, and confidence scores. This design integrates SME needs, audit and regulatory drivers (like the EU AI Act), and the latest RegTech best practices. [1] [2] [3] [4]

## Explainable AI - Full-Fledged User Story & Research

#### **Title**

Traceable, Explainable AI for All Compliance Actions

# **Description**

As a compliance officer, auditor, or business decision-maker, I want every AI-driven screening, classification, or license recommendation in the system to be accompanied by a clear, plain-language Reason Card, legal-context explanation, and confidence score—so that I have the transparency, trust, and auditability required for regulatory signoff, operational confidence, and customer assurance.

## **360-Degree Functional Requirements**

#### 1. Reason Cards for Every Al Action

- Each Al-driven alert/block/recommendation comes with a "Reason Card" summarizing decision logic (e.g., "Blocked because customer name 91% match to OFAC SDN; same street as flagged entity"), factors considered, and Al confidence score.
- Reason Cards are available in-side UI (order, partner, product, case), API calls, and exported audit trails.
- Every blocking or suspicious action triggers a legal justification section—listing statute, rule, or policy referenced by AI (e.g., "EU Dual Use Reg. 2023, Art. 12").

## 2. Legal and Regulatory Transparency

- For each alert or classification, traceable "explain" button shows full decision breakdown, including:
  - Data used (source, latest update)
  - Model weights or threshold settings (if not trade secret/confidential)
  - Match context (e.g., fuzzy match algorithm, news/event scores)
  - Human review/escalation state, if overridden. [2] [1]
- Supports language localization for cross-jurisdiction audits; terminology connects back to regulatory text.

## 3. Al Confidence Score & Thresholds

- Each decision or recommendation carries a probabilistic or confidence score (e.g., 88% chance of sanction risk).
- Platform admins can adjust thresholds (e.g., "require manual review below 90%," "autorelease above 98%").
- All threshold changes are logged and annotated for auditing and "why did this get blocked then but not now?" forensics.

## 4. Feedback Loop and Human-in-the-Loop

- End users and admins can flag or correct "Reason Cards" (e.g., "name match was a false positive, update profile"), feeding back into model training and reducing future "alert fatigue".
- Each human intervention is itself logged with reason, evidence, and follow-up review.

## 5. Proactive Audit & Self-Assessment

- The platform pre-generates narrative audit packs explaining all AI decision paths, grouped by product, partner, jurisdiction, and time range—ready for export to regulators, customers, or board review.
- Explains changes in AI outcomes as data, rules, or model versions evolve (i.e., "this was flagged last month because the ruleset changed on July 1st") with impact summary.

## 6. Legal/Compliance Calibration and Teach Mode

• During onboarding, a calibration wizard invites users to review and "teach" the system using past cases, so Reason Cards quickly reach high legal credibility for the user's unique business context. [3] [1]

## 7. Cost and Access Control

 Access to full Reason Cards, model version histories, and corrections is role- and eventbased; system logs who queried or exported reason/audit explanations for legal chain-ofcustody.

# **Acceptance Criteria**

- Every Al block, alert, recommendation, or auto-clear in the compliance workflow comes with a clear, plain-English Reason Card and confidence score.
- All reason explanations support quick "drill-down" to underlying data, logic, and citations.
- 100% of compliance actions can be reconstructed after the fact for audit and legal defense.
- Human/corrective feedback is logged and visible, with improvements tracked over time ("X% reduction in false alerts, Y% faster reviews").
- "Audit Pack" narrative exports available at audit, partner, or regulator request.

## **Innovator Distinction**

- Most legacy RegTech and GRC AI platforms lack true explainability: they use simple keyword triggers or "black box" scores. Emerging solutions (like Aspect Compliance) are praised for this feature, but few offer deep calibration, customizable legal references, or embedded feedback loops for SMEs. [4] [2] [3]
- By making explainability native—for every user, every action, at every price tier—you build regulatory trust and SME acceleration without the "AI premium" barrier.

## Subtasks & QA

- Build Reason Card generation engine (UI, API, logs).
- Integrate legal references and plain-language model interpretations.
- Engineer UI and API for feedback loop and threshold management.
- Test with real-world compliance teams: legal review, regulator scenario simulation, continuous improvement reporting.

This advanced approach future-proofs your platform for evolving regulations (AI Act, GDPR AI mandates, etc.), maximizes user trust, and puts you ahead of competitors slow to deliver high-quality, affordable explainable AI. [1] [2] [3] [4]



- 1. <a href="https://www.ijraset.com/best-journal/the-integration-of-design-software-pvelite-autocad-caesar-ii-in-pressure-vessel-and-piping-engineering">https://www.ijraset.com/best-journal/the-integration-of-design-software-pvelite-autocad-caesar-ii-in-pressure-vessel-and-piping-engineering</a>
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