



Suhas Bhairav

AI Freight Invoice Auditing Discrepancy Flow

**Practical, stepwise automation guide for
operations leaders**

Automate line-item checks and flag discrepancies
with auditable, human-reviewed controls.

Suhas Bhairav

suhasbhairav.com

AI Freight Invoice Flow

This guide outlines an AI-powered workflow to read line-item invoices, compare base rates to market indexes, and flag dubious fuel surcharges. It covers what to automate, what to keep human-reviewed, and the data/tools needed.

Key move Pilot with one carrier for 2 weeks, measure impact.

PRACTICAL CHECKLIST

- 01** Define scope: specify carriers, invoice types, and surcharge categories included in the pilot.
- 02** Automate OCR extraction, base-rate mapping, and fuel-surcharge checks with human review for flagged exceptions.
- 03** Data & tools: ERP exports, market indexes, API access, versioned indexes, and explainable AI components.
- 04** Thresholds: auto-approve minor variances; escalate large or unusual discrepancies to owners.
- 05** Ownership: assign data steward, model owner, and operations reviewer; document escalation paths.
- 06** Measurement: track accuracy, auto-disposition rate, time-to-resolution, and cost impact.
- 07** Security & compliance: enforce access controls, data retention, and supplier data privacy.

Suhas Bhairav AI Resource

Automate line-item checks and flag discrepancies with auditable, human-reviewed controls.

Data & Automation Map

Identify data sources, ensure data quality, and define automated steps from ingestion to flagging. Include clear handoffs to humans for exceptions.

Key move Ensure index data refresh cadence aligns with billing cycles.

PRACTICAL CHECKLIST

- 01** Ingest invoices: OCR or ERP exports to capture line items, costs, taxes, surcharges.
- 02** Normalize line items: standardize currency, units, carrier codes, and descriptions.
- 03** Base-rate lookup: map line-item fees to market rate indexes via API.
- 04** Fuel surcharge checks: compare claimed surcharges to benchmark prices; flag anomalies.
- 05** Discrepancy scoring: compute delta, variance, and confidence scores for flags.
- 06** Review queue: route flagged items to owners with context and history.
- 07** Data retention: maintain versioned indexes and audit trails for compliance.

Suhas Bhairav AI Resource

Automate line-item checks and flag discrepancies with auditable, human-reviewed controls.

Adoption, Metrics & Ownership

Plan adoption in weekly increments with governance and approvals. Define metrics that demonstrate value and guide ownership.

Key move Document ownership and escalation paths upfront.

PRACTICAL CHECKLIST

- 01** Week 1–2: finalize scope, assign owners, define success metrics.
- 02** Week 2–3: build data ingestion and OCR pipeline; validate first 50 invoices.
- 03** Week 3–4: connect market indexes and base-rate mapping; run pilot on 3 carriers.
- 04** Week 4–5: implement auto-disposition for low-risk variances; escalate high-risk.
- 05** Week 5–6: establish dashboards, audit logs, review cadence, and change control.
- 06** Week 6–7: run parallel run against manual results; adjust thresholds.
- 07** Risks & guardrails: data quality, index drift, false positives, supplier data changes; document approvals and access controls.

Suhas Bhairav AI Resource

Automate line-item checks and flag discrepancies with auditable, human-reviewed controls.

ABOUT THE CREATOR

Suhas Bhairav

I build AI systems that combine distributed architecture, retrieval, knowledge graphs, security, and practical workflow design. My focus is AI that can be used repeatedly by real teams: understandable, reliable, and grounded in the work people already do.

EXPERTISE

- Principal systems architecture and applied AI engineering
- Production-grade AI systems, agentic workflows, RAG, and knowledge graphs
- Full-stack workflow applications across AWS, Google Cloud, Azure, on-premise, and hybrid environments
- Practical AI implementation patterns for automotive, manufacturing, finance, logistics, cybersecurity, sales, and customer operations
- Security, governance, observability, approvals, and failure-mode thinking for operational AI systems

WEBSITE

suhasbhairav.com

EMAIL

suhasbhairav@gmail.com