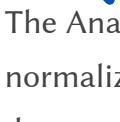# ⚠️ Initial Incident

An incident is ingested. It's often a vague symptom (e.g., "slow response"). Traditional manual triage is slow, error-prone, and leads to costly "triage cycles."

Raw Alert: "ID#98765: Users report 'Payment Failure: Error 503' during checkout."
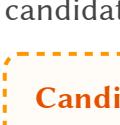
🔍 Phase 1: Semantic Distillation (Analyzer Agent)

The Analyzer Agent tackles "Incident Semantic Heterogeneity." It uses TF-IDF and LLMs to normalize terminology and extract key phrases, aligning the raw text with team functional documents.

Semantic-Aligned Output:

- **Location: Checkout Flow**
- **Symptom: Payment Failure, Error 503 (Service Unavailable)**
- **Capability: API Gateway Diagnostics**

🔗 Phase 2: Candidate Generation (Decider Agent)

The Decider Agent uses a two-pronged approach: 1) Matching against historical incidents (TF-IDF), and 2) Matching against team functional documents (LLM) to find the best candidates.

Candidate Teams (Top 3):

1. **Team-PaymentGW (Historical Match)**
2. **Team-BillingDB (Document Match)**
3. **Team-Frontend (Historical Match)**

👥 Phase 3: Collaborative Triage & Negotiation

The system activates Team Manager Agents for the 3 candidates to simulate an expert consultation, handling decentralized domain knowledge.

📍 Team Information Enrichment (TIE)

Each agent automatically generates and executes queries against its team-specific monitoring databases (logs, metrics). An LLM then summarizes the findings.
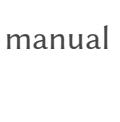
- **Frontend Agent: "Queried UI logs. No errors found. Request was successfully sent to payment-api."**
- **PaymentGW Agent: "Queried API logs. Detected 1,500 503 errors. Reason: Timeout connecting to BillingDB cluster."**
- **BillingDB Agent: "Queried DB metrics. Confirmed: 14:29 CPU spiked to 100% due to a batch job."**

☑️ Voting & Consensus

All agents share their enriched information. Based on the new evidence (the 100% CPU), they vote. A majority consensus is reached, concluding the triage.

Vote Result: 3 / 3 votes for **Team-BillingDB**

👤 Final Assignment

The incident is automatically and accurately assigned to the root cause team without manual intervention or re-assignment hops, drastically reducing Time to Engage (TTE).

Responsible Team: Team-BillingDB