Fishbone Analysis

Fishbone Diagram

Status: Draft v1.0

Last Updated: Oct 15, 2025
Based on: 2025 January - September Invoice Data Analysis

1. **Problem Statement:**

   - **Slow Approval:** 13-day average cycle time in Stages 1 & 2

   - **Impact:** 2.22% SLA compliance and 14.12% rework rate

2. **Fishbone Draft:**

   a. **Method**

      - M1: Network loops for simple errors

      - M2: Approver lookup done manually from outdated list

   b. **People**

      - Pe1: Approvers lack accountability/priority

      - Pe2: AP Staff wastes time on manual follow-up

   c. **Input**

      - I1: No centralized intake

      - I2: Vendor sends incomplete documents

   d. **Measurement**

      - Me1: No penalty for slowness

      - Me2: Reliance on isolated Excel tracking

   e. **System**

      - S1: Tolerance for using unverified email/WA channels

      - S2: ERP system does not interface with email for approvals

CATEGORIZED CAUSES TABLE

POLICY

- **Cause:** Policy requires printing/physical handling
- **Evidence:** 15% of invoices physically printed (sample audit)
- **Impact:** Medium │ **Fix Ease:** High

METHOD

1. **Network loops for simple errors**

   - *Evidence:* 14.12% rework rate, repetitive corrections
   - *Impact:* High │ *Fix Ease:* Medium

2. **Approver lookup done manually from outdated list**

   - *Evidence:* 12% wrong approver assignments (data analysis)
   - *Impact:* Medium │ *Fix Ease:* High

PEOPLE

1. **Approvers lack accountability/priority**

   - *Evidence:* 0% have approval SLAs in performance reviews
   - *Impact:* High │ *Fix Ease:* Medium

2. **AP Staff wastes time on manual follow-up**

   - *Evidence:* 30% of AP time spent chasing (time study)
   - *Impact:* Medium │ *Fix Ease:* High

INPUT

1. **No centralized intake**

   - *Evidence:* 6+ submission channels (Email, Portal, WA, Paper)
   - *Impact:* High │ *Fix Ease:* Low

2. **Vendor sends incomplete documents**

   - *Evidence:* 45.57% of rework from incomplete submissions
   - *Impact:* High │ *Fix Ease:* Medium

MEASUREMENT

1. **No penalty for slowness**

   - *Evidence:* 0 consequences for late approvals in 2024
   - *Impact:* Low │ *Fix Ease:* High

2. **Reliance on isolated Excel tracking**

   - *Evidence:* "Shadow IT" Excel file, not integrated
   - *Impact:* Medium │ *Fix Ease:* Medium

SYSTEM

1. **Tolerance for using unverified email/WA channels**

   - *Evidence:* Policy allows informal channels, no enforcement
   - *Impact:* Medium │ *Fix Ease:* High

2. **ERP system does not interface with email for approvals**

   - *Evidence:* 100% manual email approvals, no API integration
   - *Impact:* High │ *Fix Ease:* Low

PRIORITIZATION MATRIX

Priority	Cause	Why It Matters
Quick Win	AP Staff wastes time on manual follow-up	Frees 30% of AP capacity immediately
Quick Win	Manual approver lookup	Reduces 12% error rate in assignments
Phase 2	ERP-Email interface gap	Core system fix, requires IT investment
Phase 2	No centralized intake	Eliminates 45.57% of rework sources
Quick Win	Tolerance for unverified channels	Easy policy enforcement

The Final Fishbone

SLOW APPROVAL (13-Day Delay in Stages 1 & 2)
|
├──── POLICY
| └── Policy requires printing/physical handling
|
├──── METHOD
| ├── Rework loops for simple errors
| └── Manual approver lookup from outdated list
|
├──── PEOPLE
| ├── Approvers lack accountability/priority
| └── AP Staff wastes time on manual follow-up
|
├──── INPUT
| ├── No centralized intake (6+ channels)
| └── Vendor sends incomplete documents
|
├──── MEASUREMENT
| ├── No penalty for slowness
| └── Reliance on isolated Excel tracking
|
└──── SYSTEM
├── Tolerance for unverified email/WA channels
└── ERP system does not interface with email for approvals