Business Requirements Document (BRD): Invoice Approval Workflow Redesign

1. Introduction and Goals

1.1 Executive Summary

This project aims to replace the current fragmented, manual, and email-based Accounts Payable (AP) workflow with a centralized, automated ingestion and smart routing system. The key focus is eliminating human bottlenecks, which currently cause significant processing delays 7–12 days and remove 2 steps approval for small amounts payments.

1.2 Business Objectives

The primary success of this project will be measured by achieving the following goals:

1. **Reduce Cycle Time:** Decrease the average invoice cycle time from **13 days to <5 days**.
2. **Increase Straight-Through Processing (STP):** Implement automated validation to ensure **over 90%** of digital invoices proceed to approval without AP intervention.
3. **Improve Data Quality:** Eliminate manual errors and rework caused by human data entry.
4. Zero untracked invoices on the process.

1.3 Scope

- In scope: All vendor invoices received via email, supplier portal, or paper/mail.
- Out of scope: supplier onboarding, legacy AP system overhaul.

2. Root Cause Analysis

2.1 Root Cause Analysis

Finding	Quantitative Evidence (Pareto)	Business Impact
Top Cause 1: Approval Delays	**80%** of the total invoice delay is caused by the Level 1 and Level 2 Approvers.	Invoices are stuck, increasing accruals risk and damaging vendor relationships.
Top Cause 2: Manual Workflow	60% of rework is caused by **Missing POs or Malformed Vendor IDs** due to manual entry.	Causes unnecessary rework and diverts the AP team's focus from exception handling.
Top Cause 3: Rigid Policy	Current policy mandates 2-level approval even for low-value transactions.	Creates an unnecessary bottleneck for low-risk payments, contributing to overall cycle time delay.

3. Requirements

3.1 Functional Requirements

ID	**Module**	Requirement Statement	**Priority**	Links to To Be Step
FR-1.0	**Ingestion**	The system **MUST** consolidate input from all channels (Email, Portal, etc.) into a single queue.	**MUST**	Invoice Received (Any Channel)
FR-1.1	**Data Extraction**	The system **MUST** perform automated data extraction (OCR/API) on all incoming digital	**MUST**	Automated Data Extraction (OCR/API)

ID	**Module**	Requirement Statement	**Priority**	Links to To Be Step
		invoices with 95% accuracy.		
FR-1.2	**Validation**	The system **MUST** automatically validate key data fields and perform a 3-Way Match (Invoice → PO → Receipt).	**MUST**	Data Valid & PO Matched?
FR-2.0	**Auto-Approval**	The system **MUST** implement smart routing logic to automatically approve and post any invoice under **$1,000** if 3-way match is successful.	**MUST**	Invoice Value < $1,000?
FR-2.1	**Escalation**	The system **MUST** automatically escalate the approval request to the approver's manager if the task remains unapproved after **48 hours**.	**MUST**	Send Reminder & Escalate Manager
FR-2.2	**Reminders**	The system **MUST** send an automated email notification to the approver 24 hours before the	**SHOULD**	Intermediate: Implicit in Wait 48 Hours

ID	**Module**	Requirement Statement	**Priority**	Links to To Be Step
		approval deadline expires.		
FR-3.0	**Exception Handling**	The system **MUST** route any invoice that fails validation (FR-1.2) to the dedicated **AP Resolution Team** queue for manual intervention.	**MUST**	Investigate & Resolve Invoice Exception

3.2 Non-functional Requirements

ID	**Category**	Requirement Statement
NFR-1.0	**Performance**	The system **MUST** process and validate 90% of all invoices within **1 hour** of receipt.
NFR-2.0	**Security**	All financial data and approval logs **MUST** be secured using AES-256 encryption.
NFR-3.0	**Visibility**	The system **MUST** provide an executive dashboard showing real-time **Invoice Cycle Time** and **Aging Buckets**.

4. Success Metrics

4.1 Success Metrics

The project will be considered successful if the following targets are met within 6 months of Go-Live:

Metric	As-Is Result	To-Be target
Average Invoice Cycle Time	13 days	< 5 days

Metric	As-Is Result	To-Be target
Manual Touch Rate	≈65%	< 20%
Rework Rate (Rejection Rate)	≈15%	< 5%

4.2 Dependencies & Risks:

- Dependency: IT to enable shared inbox or small automation tool
- Risk: approver resistance to digital approvals