

Paperless document management through Intelligent OCR and A/P Invoice Workflow Automation

Sector: AP Invoice processing for Travel & Logistics
Client: Travel division of a leading Indian Conglomerate
Deployment: On-premise (Standalone Systems)

1. Assessment & Vision Setting

Current State Analysis

The client's travel division and vendor finance operations were involved in manually checking A/P invoices, validating the Tax fields, and uploading the data to ERP.

Defined Objectives

- Intelligent recognition of defined fields and data, extraction from different file types
- Read the document and automatically extract key information
- Improve turnaround time and reduce manual errors
- Enable easy and automatic ingestion of data into the ERP system

Stakeholder Alignment

Collaborate on document management across departments—Travel Desk, Finance, and IT to align functional validation rules and streamline the data ingestion to ERP.

2. Process Reengineering

Mapped Existing Workflows

- ✓ Manual email reading, different file type comparison, and Tax mandate validation
- ✓ Spreadsheet macros used for formatting ERP upload files

Redundancy Elimination

- ✓ Automated document categorisation and data mapping
- ✓ Reduced dependency on human review except for flagged edge cases

Standardised Procedures

Documented rules for Tax validation, Employee/Vendor code association, Commodity Code checks, and invoice total matching.

3. Technology Transformation

Standalone Deployment

Secure, self-contained workflows on local infrastructure to ensure complete data confidentiality and compliance.

Smart Information Recognition

OCR to intelligently recognise text, tables, stamps, and key invoice fields (Tax IDs, invoice numbers, amounts) from scanned PDFs, images, and mixed-quality documents.

Advanced Document Parsing

Parsed structured, semi-structured, and unstructured documents, converting raw OCR output into clean, usable data aligned with the client's specific business rules.

Intelligent Document Extraction

AI-driven checks and automatic extraction of required fields based on defined validation rules and business requirements

4. Automation & Self-Service

Email Integration

Automated reading of A/P invoices or other document types from a dedicated inbox, downloading attachments, and beginning validation immediately.

Smart File Handling

- Extracted data from travel and vendor invoices
- Pulled supporting metadata from internal master files (Employee & Vendor)

Self-Driven Logic

Flagged inconsistent or missing Tax numbers and routed them to specific folders for manual intervention.

5. Data & Insights Activation

Extracted Data Ingestion

Generated ready-to-ingest outputs for upload to ERP with fields like:

- Tax ID (Vendor/Company)
- Commodity Codes
- Taxable Amounts
- Payable Amounts
- Document Types and Cost Codes

Error Logging & Audits

Used structured logs to flag errors like missing fields or unexpected formats—helping teams trace issues quickly.

6. Governance & Compliance

Role-Based Access & Security

All processes ran in secure folders with permissioned access and no cloud data flow.

Audit Trail Ready

Maintained logs of validations, flagged cases, and categorised document movement.

7. Continuous Improvement

Feedback Loop Integration

Improved extraction rules and added new Tax fields based on actual feedback over several processing cycles.

Scalability Enabled

Built with modular components allowing:

- Versioning of logic per invoice format
- Expansion to new departments without major rework

Outcome

- 80% Reduction** in manual data entry effort
- Error rates dropped by 70%** in invoice processing
- Near-instant generation** of ERP-upload-ready Excel formats
- Improved audit readiness** and VAT compliance across operations