

Invoice Recorder Automation

This n8n workflow automates the **end-to-end processing of invoice emails**, including attachment extraction, AI-powered invoice data parsing, structured record storage, and automatic finance notification emails. Focused on business automation, AI-powered document processing, and finance workflow optimization.

It is designed to eliminate manual invoice handling by converting raw supplier emails and PDF attachments into **structured financial records** stored directly in Google Sheets — while simultaneously generating clean, formatted **summary emails** for finance teams.

A. Key Features

1) Automated Invoice Email Intake

- Reads incoming Gmail messages
- Filters invoice-related emails
- Detects PDF attachments automatically

2) PDF Invoice Text Extraction

- Extracts raw text from invoice attachments
- Captures invoice metadata such as creation date

3) AI-Based Invoice Data Parsing

- Extracts:
 - Invoice number
 - Supplier name
 - Invoice date & due dates
 - Line items
 - Currency and total amount
- Uses structured JSON extraction for high accuracy

4) Line Item Normalization

- Converts invoice items into readable structured formats
- Generates cost breakdown tables automatically

5) Automated Finance Email Generation

- Builds professional HTML invoice summary emails
- Sends formatted breakdown directly to finance team
- Generates plain-text copy for logging and storage

6) Centralized Invoice Database

- Automatically stores invoice records in Google Sheets
- Maintains searchable invoice history
- Prevents duplicate entries using email ID matching

B. System Architecture Overview

This automation connects multiple business tools into one streamlined workflow:

- **n8n Automation Engine** — Process orchestration
- **Gmail API** — Invoice email ingestion and notifications
- **PDF Extraction Engine** — Attachment text processing
- **OpenRouter LLM** — AI invoice data extraction
- **Google Sheets** — Financial record storage
- **HTML Email Builder** — Finance-ready invoice summaries

C. Typical Use Cases

- Accounts payable automation
- Finance inbox processing
- Vendor invoice management
- Expense tracking workflows
- Small business accounting automation
- Paperless finance operations

D. Requirements

To deploy this workflow successfully:

- n8n instance (self-hosted or cloud)
- Gmail OAuth credentials
- Google Sheets OAuth credentials
- OpenRouter API key
- Google Spreadsheet template for invoice storage

E. Keywords

#InvoiceAutomation	#ExpenseManagement
#AccountsPayable	#AccountingAutomation
#FinanceAutomation	#PaperlessFinance

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