

## # Agentic Accounting Flow (End-to-End)

## 0) High-level modules 1) Omnichannel Intake: WhatsApp + Email capture (PDF/JPG/PNG/Doc) 2) Doc Classifier: invoice / quotation / bill / receipt / credit note / delivery order / SO/PO 3) AI Extraction + OCR: key fields + line items using OCR + LLM + rules 4) Validation & Enrichment: vendor/customer master, tax rules (SST/GST/VAT), FX, duplicates 5) Posting Engine (Double-entry): Journals to the right ledgers + subledgers (AR/AP) 6) Reconciliation: bank feed match; outstanding AP/AR aging 7) Exceptions Desk: route low-confidence/edge cases to a human queue 8) Reporting & Exports: Excel/CSV logs, dashboards, monthly TB/PL/BS, audit trail

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## 1) Intake & Trigger **\*\*WhatsApp\*\*** – user sends document; webhook saves it and logs intake. **\*\*Email\*\*** – monitor “Accounting Intake” label for attachments.

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## 2) Document Classification Uses LLM + heuristics to classify (invoice, quotation, bill, etc.). Confidence < 0.75 routes to review.

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## 3) AI Extraction (Key Fields + Line Items) Outputs structured JSON with: - Payment Term, Vendor/Customer info - Totals (subtotal, tax, shipping, total) - Line items with GL hint - Extraction confidence

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## 4) Validation & Enrichment Cross-check vendor registry, recalc totals, infer missing tax, detect duplicates, compute FX conversion, and store normalized values.

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## 5) Posting Engine (Double-entry) Implements accounting logic: - Supplier invoice → Dr Expense/Asset + Dr Input Tax / Cr AP - Customer invoice → Dr AR / Cr Sales + Cr Output Tax - Utilities → Dr Utilities / Cr AP

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## 6) Reconciliation & Lifecycle Bank feed matching and allocation of payments to invoices, partial settlements, and AR/AP aging reports.

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## 7) Exceptions Desk (Human-in-loop) Flags low-confidence or inconsistent documents for review. User can approve or correct extracted values through chat interface.

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## 8) Reporting & Data Exports All processed data logged to Excel/CSV, producing TB, P&L, Balance Sheet, and SST reports.

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## Data Schemas (Excel-friendly) ### Documents.csv id | doc\_type | doc\_number | vendor\_customer\_id | issue\_date | due\_date | currency | subtotal | tax\_rate | total

### JournalEntries.csv je\_id | date | doc\_id | account | debit | credit | memo | fx\_rate | base\_amount

### Vendors.csv / Customers.csv id | name | reg\_no | phone | email | address | currency | status

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## Orchestration (n8n / Agentive Hub) Trigger nodes for WhatsApp/Email → OCR → LLM  
Extraction → Validation → Posting → Reporting. Routes exceptions to human review with  
WhatsApp prompts.

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## Security & Compliance Minimal PII retention, encrypted credentials, tamper-evident audit logs,  
immutable Excel exports.