



# Mailroom Processing **with Scan2x**

## 1. Use Case Overview



### Goal

To streamline the handling of incoming mail by automatically categorising and routing documents based on their content. This includes both physical mail—scanned via USB-connected scanners, multifunctional devices, or bulk scanning with separator sheets—and electronic mail—PDFs from email inboxes or FTP folders. Once categorised, Scan2x applies appropriate extraction methods, integrates with third-party systems if needed, and decides the next step in the document’s journey.

## 2. Key Capabilities



### Document Ingestion

- Physical Mail: Paper documents scanned through a USB scanner or multifunctional device.
- Digital Mail: Incoming PDFs and attachments automatically retrieved from email mailboxes or FTP folders.
- Separator Sheets: Used to distinguish the contents of one envelope from another, optionally providing a first level of classification.

**Tip:** Print on colored paper for quick identification and laminate for reuse.



### Categorisation and Classification

- **Templating Methods:** Identify known layouts (e.g., forms, standard letters) via fixed or semi-fixed templates.
- **Advanced AI:** Dynamically analyse the content to classify diverse or complex document sets.



### Data Enhancement via Third-Party Integrations

- Use extracted information to call external databases or APIs.
- Automatically enrich document metadata (e.g., retrieve customer records from a CRM or validate reference numbers with an ERP).



### Decision-Making and Routing

- Based on classification results and any data retrieved from external systems, Scan2x directs documents to the correct department, workflow, or archive location.

#### Example outcomes might include:

- Emailing documents to specific teams.
- Uploading them to a document repository.
- Triggering automated approvals or further processing in downstream applications.

## 3. Stakeholders and Interests



### Mailroom Operators

- Streamline daily tasks of receiving, opening, and scanning physical mail.
- Automatically separate document sets with minimal manual intervention (using separator sheets).



### Department Heads / Process Owners

- Receive correctly classified documents, reducing processing time.
- Gain confidence that important mail reaches the correct workflow promptly.



### IT / System Administrators

- Set up and manage integrations with third-party systems.
- Ensure consistent, secure document ingestion from multiple sources (USB, MFP, email, FTP).



### Compliance / Audit Teams

- Benefit from clear audit trails of incoming mail classification and distribution.
- Reduce risk of misdirected or lost documents.

## 4. Triggers



### Physical Mail Arrival

- Mailroom staff scan incoming envelopes in batches.
- Separator sheets placed between different items in a batch, optionally indicating an initial classification (e.g., “Invoices,” “Contracts”).



### Digital Mail Arrival

- PDFs or images are automatically pulled from configured email inboxes or FTP folders at defined intervals.



### Scheduled Jobs

- Scan2x automatically checks for new content in monitored locations (e.g., nightly or hourly).

## 5. Main Success Scenario

### Document Capture

- Physical documents are loaded into a scanner with separator sheets distinguishing each envelope’s contents.
- Alternatively, digital PDFs flow in from email or FTP.
- Scan2x ingests all incoming pages in a single job or through separate queued tasks.

### Optional Data Enhancement

- Scan2x uses extracted data (e.g., reference numbers, client IDs) to query a CRM or ERP.
- Additional details returned (like customer details or invoice status) become part of the document’s metadata.

### Confirmation and Logging

- Operators see a real-time status (e.g., “Batch Processed Successfully”).
- Audit logs record the classification, data enhancement, and routing actions for each batch.

1

2

### Classification

- **Templating:** Known formats (e.g., standardised letters, forms) are matched against existing templates in Scan2x.
- **AI Analysis:** Less-structured documents are classified through advanced content recognition—identifying keywords, layout patterns, or other text cues.
- **Separator Sheet Detection:** Where used, the separator sheets signal breaks between sets, speeding up classification.

4

### Decision and Routing

- Based on classification and any enriched information, Scan2x applies business rules to determine the next step.

### Documents might be:

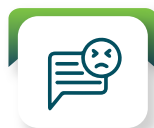
- **Sent to a Department:** For action or review.
- **Archived:** Directly stored in a document repository.
- **Passed to Another Workflow:** Triggering subsequent processing steps (e.g., approval, payment, or further AI analysis).

## 6. Alternative Flows and Exceptions



### Unrecognised Format

- **Trigger:** A document doesn't match any existing template or AI confidence is low.
- **Action:** Document is flagged for manual review; staff train or refine the system to improve future recognition.



### Poor Scan Quality / Missing Information

- **Trigger:** Documents are partially illegible or incomplete.
- **Action:** Scan2x flags them for intervention; operators may re-scan or contact the sender for clarification.



### Third-Party Integration Failure

- **Trigger:** Network or API issues prevent data enrichment.
- **Action:** The system queues retries and, if unsuccessful, notifies staff to handle manually.

## 7. Postconditions



### Successful Classification

- All incoming mail (physical or digital) is automatically sorted, tagged, and ready for the relevant workflow or department.
- The system updates its audit logs for traceability.



### Data Consistency

- If integration occurs, the enriched metadata is attached to the documents, ensuring a complete, consistent data record across systems.



### Streamlined Mailroom Operations

- Reduced manual handling and immediate routing of mail items.
- Clear visibility into pending tasks, ensuring timely action and minimal document misplacement.

## 8. Benefits and Outcomes



### Efficiency Gains

- Automated separation with separator sheets cuts manual sorting time.
- Instant classification prevents bottlenecks and backlogs in busy mailrooms.



### Scalability

- Handles high volumes of incoming mail, whether from a single USB scanner or multiple email/FTP sources.



### Versatile, Adaptive Technology

- Supports both template-driven classification and advanced AI approaches, catering to structured and unstructured documents alike.



### Enhanced Data Quality

- Integration with third-party systems ensures enriched, accurate metadata that can guide further decision-making.





### Robust Audit Trail

- Full visibility into document origins, classifications, and final destinations, aiding compliance and record-keeping.

## Use Case Summary

By deploying Scan2x for mailroom operations, organisations transform the way they handle incoming mail—be it physical paper or digital documents. The combination of separator sheets, intelligent classification (via templating or AI), and powerful integration capabilities ensures that all mail is swiftly routed to the right workflow. This not only saves time but also improves accuracy, enabling a more responsive and transparent mail management process.



 **Avantech Ltd** [avantechsoftware.com](https://avantechsoftware.com)  
 +356 2148 8800 | +44 780-9757598  
 [software@avantechsoftware.com](mailto:software@avantechsoftware.com)  
 **in** Avantech Ltd |  [@Avantechsoftware](https://www.youtube.com/@Avantechsoftware)