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MINISTRY OF LAND
AND
PHYSICAL PLANNING



Kano State LAnd ADmin Enterprise System

KANO STATE LAND ADMIN ENTERPRISE SYSTEM – KLAES



LANDS MODULE



Basic/Operations User manual

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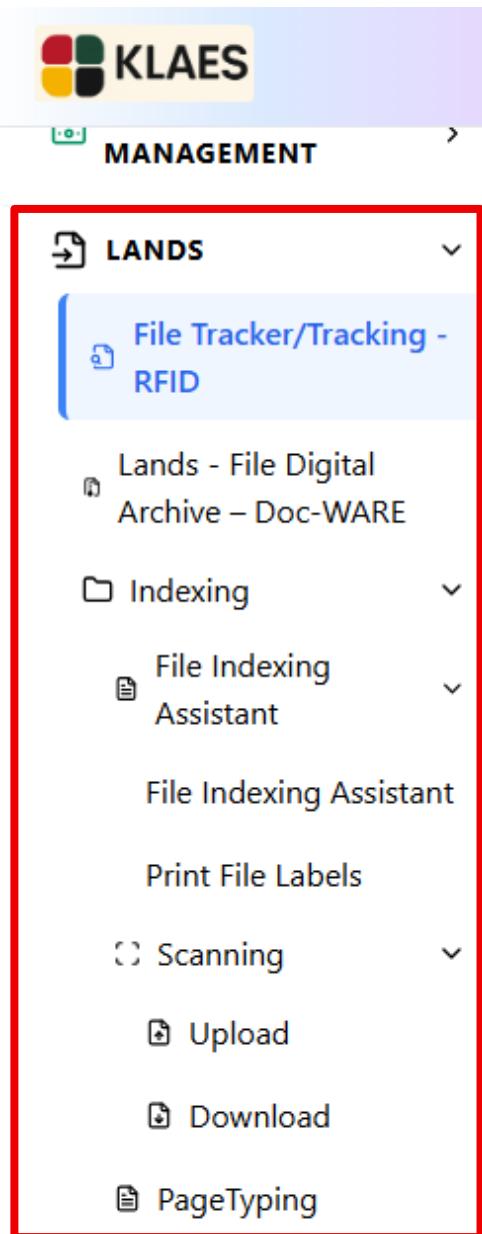
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Here's a comprehensive exposition of the Lands Module in the Kano State Land Administration Enterprise System (KLAES), with detailed breakdowns of its three core submodules—File Tracker/Tracking, File Digital Archive, and EDMS (Electronic Document Management System).

The Lands Module facilitates the physical and digital management of land files and records. It streamlines how files are located, digitized, indexed, archived, and retrieved within the Ministry and KANGIS using RFID, AI-powered document processing, and secure digital storage.

The Lands Module User Categories

The Lands Module Training Manual is designed in accordance with the User Categories as listed below;

- User (Basic):** Data entry of Instrument Reg Forms, OCR
- Operations (High-Level):** Instrument Registration
- Management (Tier 1):** First-level approval processes and digital endorsements
- Management (Tier 2):** Director-level review and approval
- Admin:** Backend configuration, user provisioning, database backup/restore, system diagnostics

KLAES – Lands Module Overview

a. File Tracker/Tracking – RFID & Normal Modes

This submodule enables **real-time tracking** of the physical movement and status of land files using both **RFID tags** and **manual (Normal) mode**.

File Tracking Table-View Tabs

- All Files
- In Process
- Pending
- On Hold
- Awaiting Approval
- Completed

Fields Displayed:

- ID
- File Number
- Current Location (e.g., Director's Desk, Planning Unit)
- Handler (Assigned Officer)
- Due Date
- Status

The screenshot shows the KLAES File Tracker interface. On the left, a sidebar menu includes sections for LANDS (File Tracker/Tracking - RFID, Indexing, Scanning, Physical Planning, Survey, Cadastral, GIS), and user information (User: admin@kangis.gov). The main content area has a header "File Tracker" and a sub-header "File Tracker". It displays a table titled "File Tracking" with columns: ID, File Number, Current Location, Handler, Due Date, Status, and Actions. The table lists five files: TRK-2023-001 (In Process), TRK-2023-002 (Pending), TRK-2023-003 (On Hold), TRK-2023-004 (Awaiting Approval), and TRK-2023-005 (Completed). A red box highlights the "File Tracking" table. To the right, a "File Details" panel is shown for TRK-2023-001, which is currently "In Process". The details include: File Numbers (MLSF Number: RES-2015-4859, KANGIS File Number: KNGP 00338, New KANGIS File Number: KNO001); an RFID Tag (RFID-00125478, last scanned: 2023-06-15 11:45 AM); and a QR Code. A red box highlights the "File Details" panel.

ID	File Number	Current Location	Handler	Due Date	Status	Actions
TRK-2023-001	RES-2015-4859	Customer Care Unit	Aisha Mohammed	2023-06-30	In Process	...
TRK-2023-002	RES-86-2244	Survey Department	Ibrahim Musa	2023-06-25	Pending	...
TRK-2023-003	COM-91-249	Legal Department	Aminu Yusuf	2023-07-05	On Hold	...
TRK-2023-004	RES-2000-1904	Director's Office	Director of Land	2023-06-15	Awaiting Approval	...
TRK-2023-005	CON-IND-2021-37	Archive	System	2023-05-30	Completed	...

Figure 1: The File Tracker Interface

Action Menu:

- **Open File** – Displays detailed information about the selected file in the left pane

📌 Left Pane (File Details View):

- File Number
- RFID Tag
- QR Code
- Current Location
- Current Holder
- Current Handler
- Date Received
- Due Date
- **File Movement History –**

Chronological record of all desks the file has passed through.

⚙️ RFID Management Features:

- **Search by RFID Tag**
- **Register New Tag**
- **Scan Tags**
- **RFID Reports**
- **Test RFID Reader**

📌 Quick Actions:

File Details
TRK-2023-001 Normal Priority

🕒

Certificate of Occupancy - Alhaji Ibrahim Dantata In Process

📁 **File Numbers**
MLSF Number: RES-2015-4859
KANGIS File Number: KNGP 00338
New KANGIS File Number: KNO001

_RFID Tag **RFID Tag**
RFID-00125478
Last scanned: 2023-06-15 11:45 AM

QR Code 
Contains file numbers and dates

📍 **Current Location**
Customer Care Unit

👤 **Current Handler**
Aisha Mohammed

📅 **Date Received**
2023-06-15

⌚ **Due Date**
2023-06-30

Movement History

- 🕒 2023-06-15 at 09:30 AM **File received and registered**
Reception • Fatima Usman
All documents verified
Manual
- 🕒 2023-06-15 at 11:45 AM **File assigned for processing**
Customer Care Unit • Aisha Mohammed
Priority set to normal

→ Move File 🖨️ Print

🖨️ Print Tracking Sheet

Figure 2: The RFID - File Details Pane

- **Batch Register**
- **Movement Report**
- **Overdue Files**
- **Bulk Update**

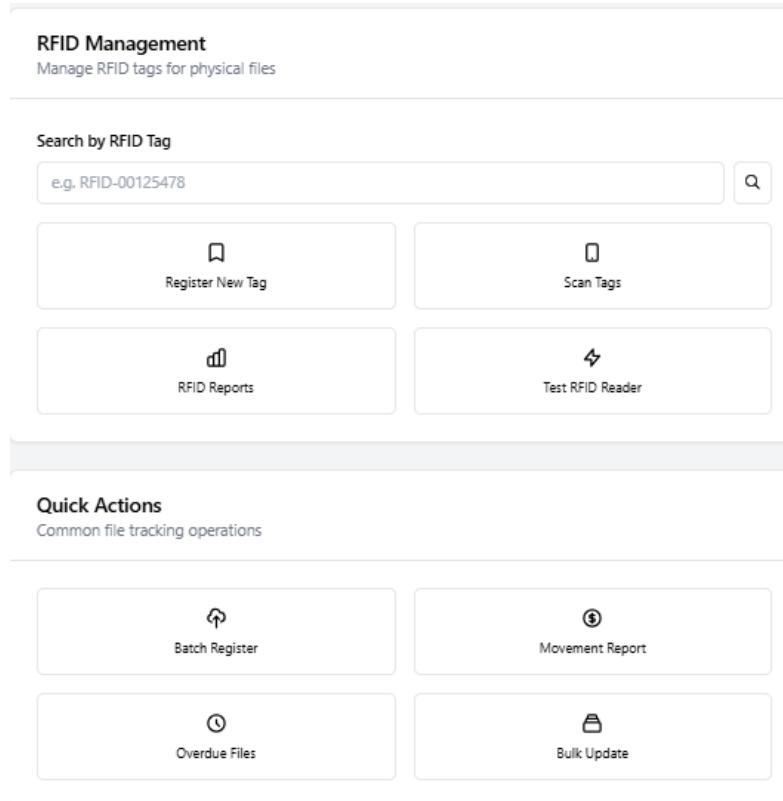


Figure 3: RFID Management Interface

Purpose:

Provides complete traceability of every file's journey, helping reduce delays, loss, or misplacement within the Ministry.

KANO STATE LAND REGISTRY

FILE TRACKING SHEET

Tracking ID: TRK-2023-001
Generated: 7/12/2025, 9:07:57 PM

File Details

Certificate of Occupancy - Alhaji Ibrahim Dantata

Status: In Process Priority: Normal

File Information		Current Location	
MLSF Number:	RES-2015-4859	Customer Care Unit	Last updated: 2023-06-16
KANGIS Number:	KNGP 00338	Aisha Mohammed	Current handler
New KANGIS:	KNO001	2023-06-15 11:45 AM	Last RFID scan
Date Received:	2023-06-15		
Due Date:	2023-06-30		

QR Code



Contains file details
MLSF: RES-2015-4859
[RFID Scan](#)

Movement History

Date & Time	Location	Handler	Action	Method
2023-06-15 09:30 AM	Reception	Fatima Usman	File received and registered	Manual
2023-06-15 11:45 AM	Customer Care Unit	Aisha Mohammed	File assigned for processing	RFID Scan
2023-06-16 02:15 PM	Legal Department	Musa Abdullahi	Legal review initiated	RFID Scan

Signature

Authorized Signature _____ Date: _____

Notes

Documents under review

KANO STATE LAND REGISTRY
File Tracking System

This tracking sheet should accompany the file at all times.
For inquiries, contact File Management Office at ext. 2145.

Figure 4: The File Tracking Sheet

b. File Digital Archive – Doc-WARE

This submodule houses the **digitally archived versions** of physical land records after scanning and indexing.

Dashboard Features:

- **Total Files Archived**
- **Recently Added Files**
- **Storage Used** (displayed in GB)

Search Interfaces:

A. Search In (keyword-based):

- Page Type
- Document Type
- File Name
- File Number

B. Search by Category (classification-based):

- Land Documents
- Land Records
- Administrative Documents

Detail View:

- Displays metadata, document preview, and status history for each archived file

File Digital Archive
Access and manage digitally archived files

Total Archived Files **1,248** Digitally archived files

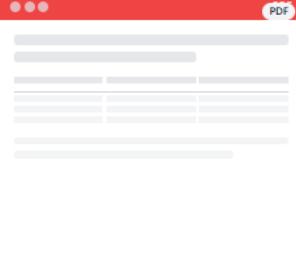
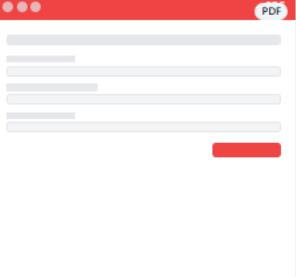
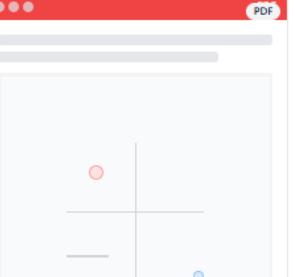
Recently Added **78** Added in the last 30 days

Storage Used **4.2 GB** Of 10 GB allocated

Search Archives
Find archived files by file number, title, or content

Search Term Search In Category

Archived Files
Recently archived digital files

 Kano Traders Association COM-91-249 1.2 MB <small>Commercial Sabon Gari</small>	 Musa Usman Bayero RES-2000-1904 3.1 MB <small>Residential Right of Occupancy</small>	 Hajiya Fatima Mohammed CON-IND-2021-37 4.5 MB <small>Industrial Deed</small>	 Nasarawa Development Plan RES-2019-746 8.7 MB <small>Residential Development Plan Nasarawa</small>
---	---	--	--

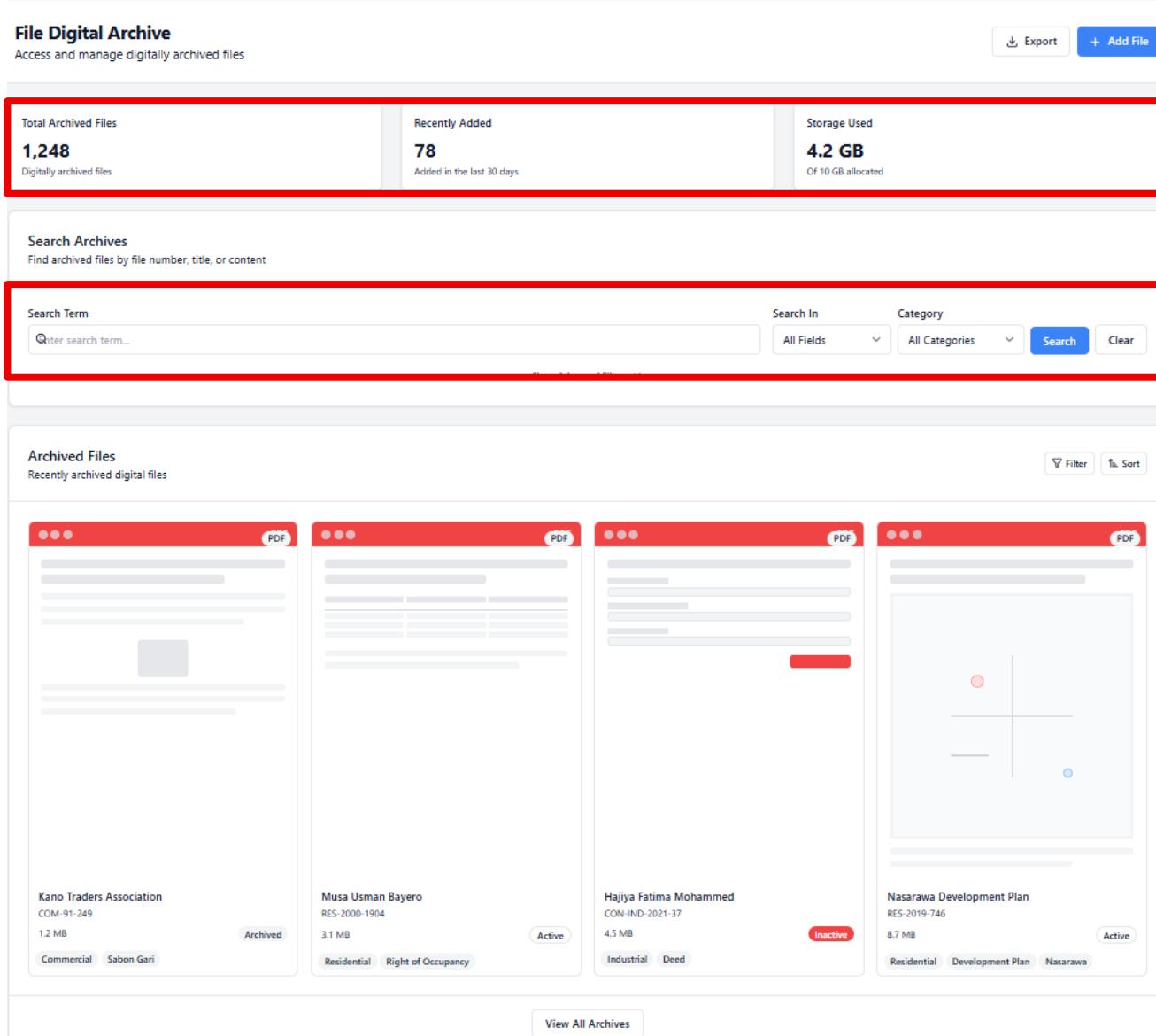


Figure 5: The File Digital Archive Interface

 **Purpose:**

Allows for secure, organized retrieval of digital records, replacing physical dependency and aiding seamless document verification or validation.

 **c. EDMS – Electronic Document Management System**

This is the **core workflow engine** that digitizes, processes, and classifies land files from paper to searchable digital archives.

 **EDMS Workflow:**

1. **Collation (manual)**

2. **Sorting (manual)**

3. **Blind Scanning (unlabeled)**

4. **Indexing (AI-based)**

5. **Scan Upload**

6. **PageTyping (classification by page type)**

i. Indexing

What is File Indexing?

File Indexing is the process of assigning a **unique digital identity** to a land file using its **File Number**, creating a dedicated folder in the system where all scanned documents and classified pages are stored and retrieved with ease.

File Indexing Assistant Dashboard:

- **Total Indexed Files**
- **Files Indexed Today**
- **Files Ready for Scanning**

File Indexing Interface Tabs:

1. **File Index** – Manual entry of new file metadata
2. **Digital Index (AI)** – AI-driven recognition and classification
3. **Indexed Files** – All processed files, with summary status and next steps

New File Index Entry Fields:

- File Number, File Title, Land Use Type, Plot Number, District, LGA
- File Properties:
 - Has CofO
 - Plot is Co-Owned / Merged / Sub-divided
 - Has Transaction
 - Problematic File

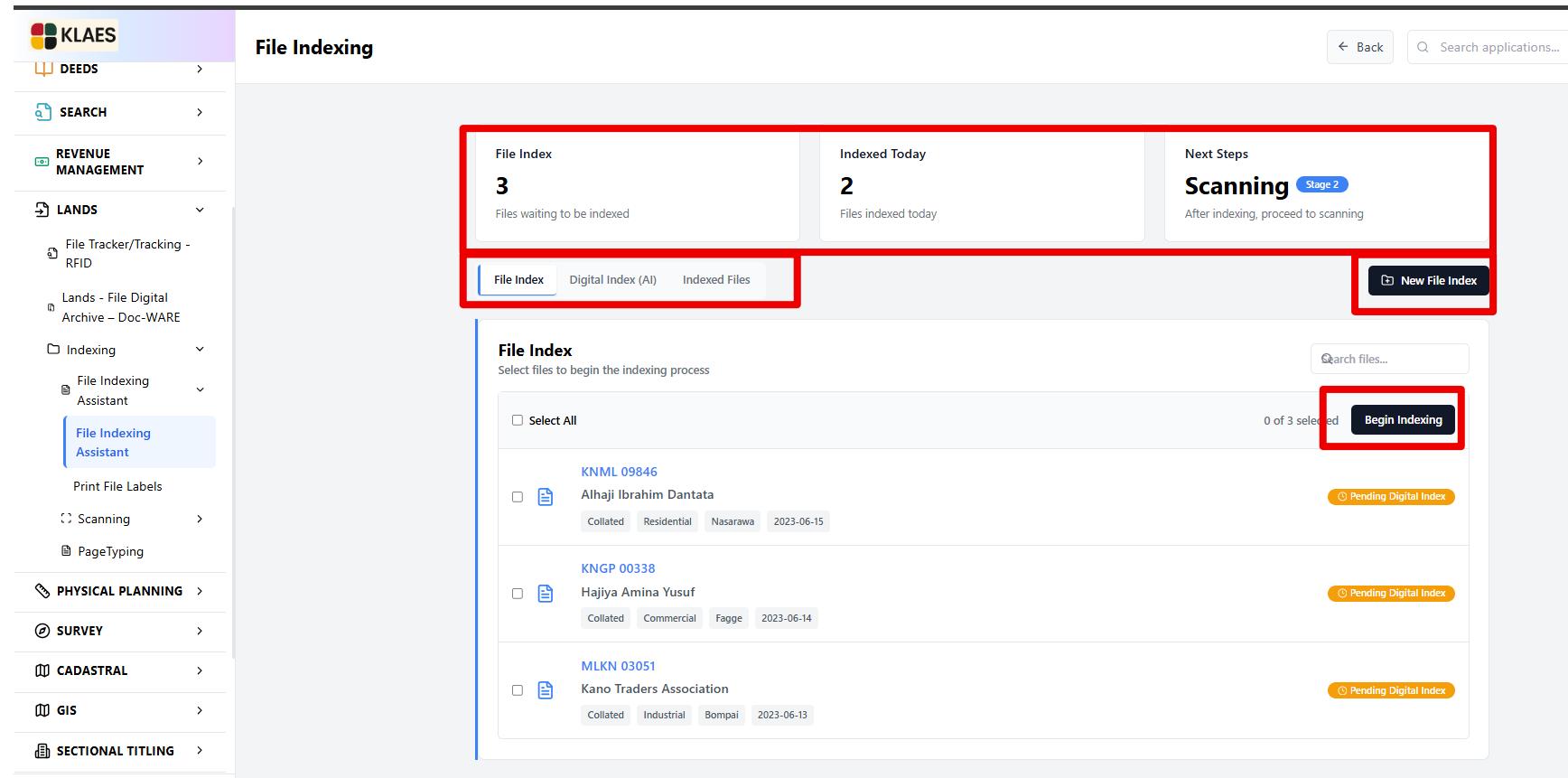


Figure 6: The File Indexing Interface

AI Indexing Process:

- Click **Start AI Indexing**
- The system scans for:
 - Documents Processed

- Average Confidence Level
- Processing Time
- Click **Confirm & Save**

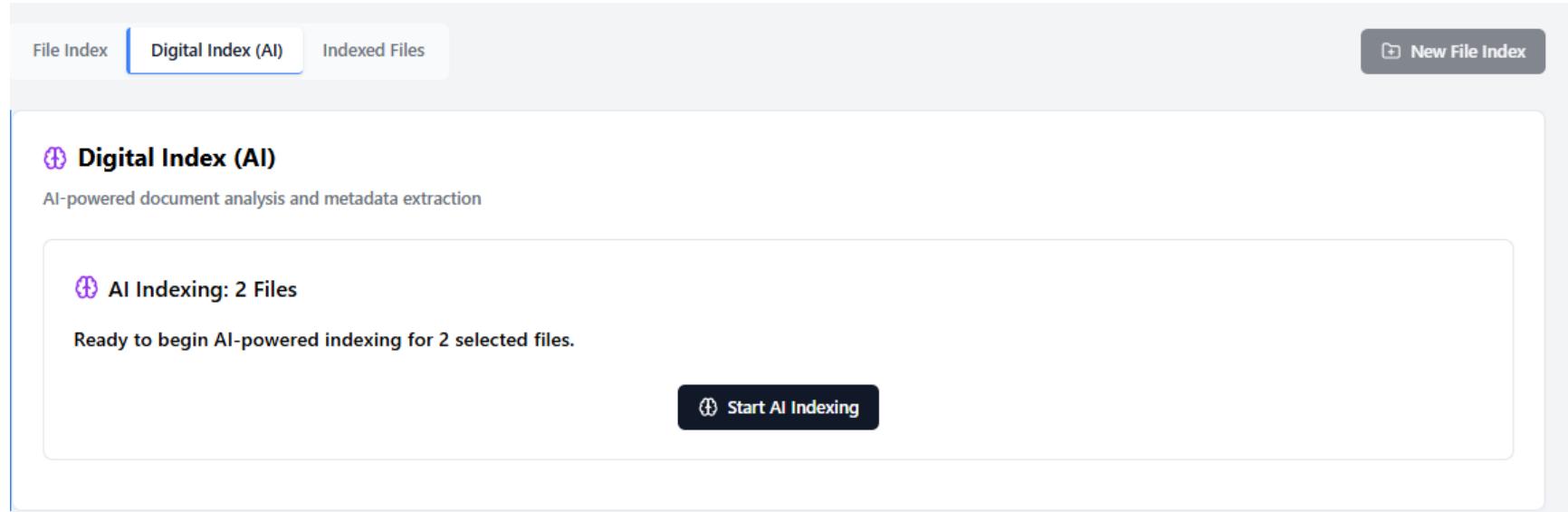


Figure 7: AI Indexing Process

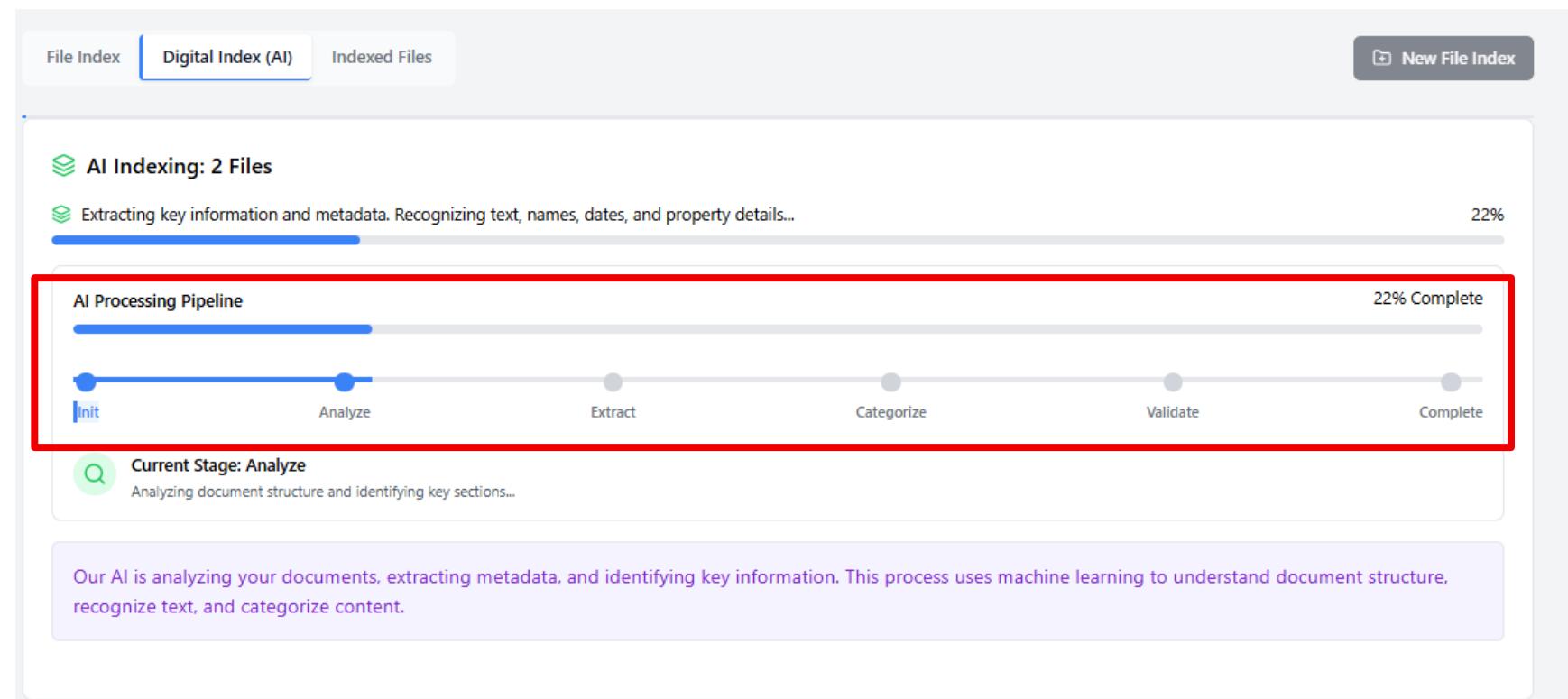


Figure 8 The Progress Bar:

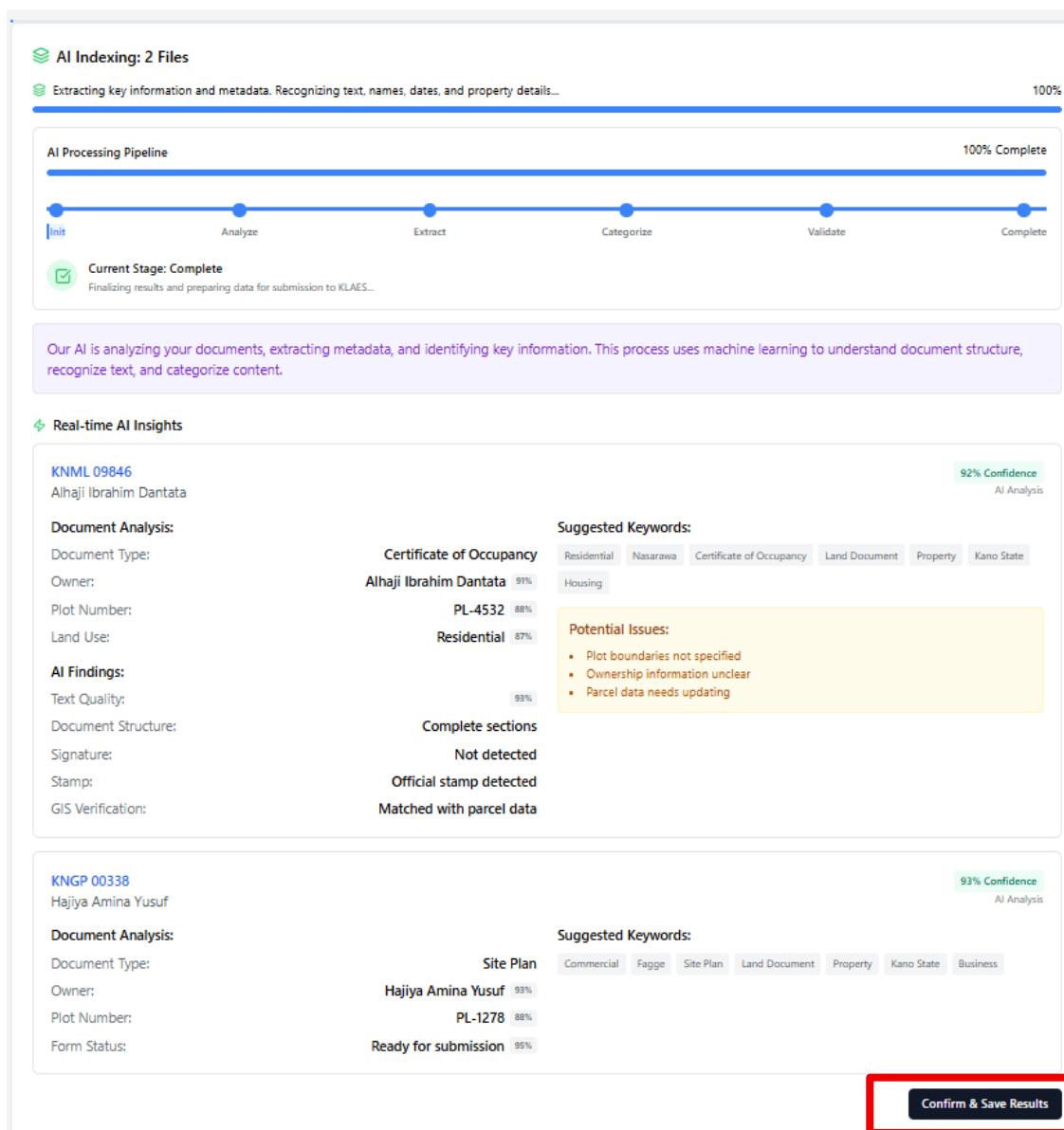


Figure 9: The Final Result after the AI assisted file Indexing

The screenshot shows a software interface titled "Indexed Files". At the top, there are three tabs: "File Index", "Digital Index (AI)", and "Indexed Files", with "Indexed Files" being the active tab. A "New File Index" button is located in the top right corner. Below the tabs, the title "Indexed Files" is displayed, followed by the subtitle "Files that have been digitally indexed". A search bar with the placeholder "Search indexed files..." is present. The main content area displays two indexed entries:

- KNML 08146**
Musa Usman Bayero
Indexed Residential Nasarawa 2023-06-12 ✓ Indexed
- MLKN 03888**
Hajiya Fatima Mohammed
Indexed & Scanned Industrial Bompai 2023-06-10 ✓ Indexed

Figure 10: the Indexed File Interface

Barcode Label Printing

- After indexing, barcoded/QR-coded labels can be printed for file tracking
- **Tabs:** Select Files (Batch mode), Label Settings, Preview & Print

Print File Labels

Generate and print labels for physical files

Available Files: 5 Files available for label printing

Selected Files: 0 Files selected for label printing

Printer Status: Ready Online

Select Files Settings Preview

Select Files for Labels

Choose files to generate and print labels

Search files...

Batch Mode

Select All

0 of 5 selected

- RES-2015-4859 Certificate of Occupancy
Certificate of Occupancy - Alhaji Ibrahim Dantata
Cabinet A-12 2023-06-15 KANGIS: KN0038 New KANGIS: KN0001 Indexed
- RES-86-2244 Site Plan
Site Plan - Hajjya Amina Yusuf
Cabinet B-05 2023-06-14 KANGIS: RES-86-2244 New KANGIS: KN0069 Indexed
- COM-91-249 Letter of Administration
Letter of Administration - Kano Traders Association
Cabinet C-08 2023-06-13 KANGIS: MLKN 03051 New KANGIS: KN0082 Indexed

Figure 11: The Print File Labels Interface

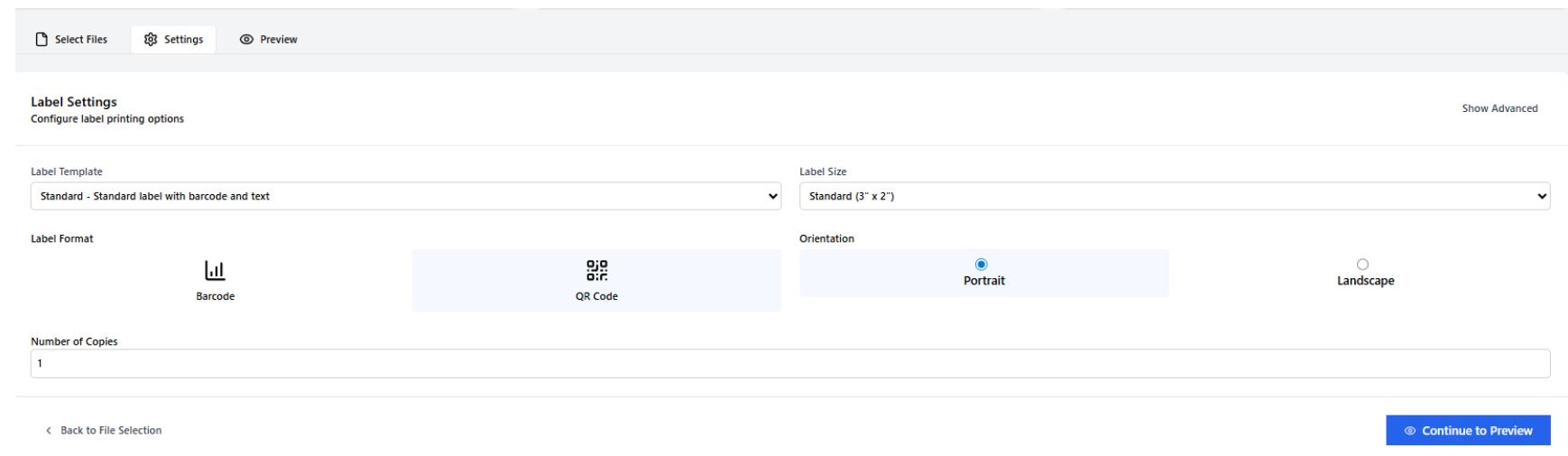


Figure 12: The Print Barcode Label Settings Interface

Preview and Print
Preview labels before printing

You have selected 1 labels to print. Please review the label previews below before printing.



Certificate of Occupancy
Cabinet A-12
KANGIS: KNGP 00338

Print Summary

Labels:

Copies per label:

Total labels to print:

Template:

Size:

Format:

[!\[\]\(e7cf99a695198f48d7c53d4da8381241_img.jpg\) Export as PDF](#) [!\[\]\(e5a359aa1551ceabbcdb871468972be8_img.jpg\) Save as Template](#) [!\[\]\(3a26514f09d25d9ea80a03ce71134d37_img.jpg\) Import Template](#)

Figure 13: The Barcode Label Print Interface

ii. Scanning

Dashboard Metrics:

- Files Scanned Today
- Pending Files (indexed but not scanned)
- Files Ready for Next Step (PageTyping)

Interface Tabs:

1. Upload Files

- Select file from local system or drag & drop
- Click “Start Upload”

2. Uploaded Files

- Review already uploaded documents before PageTyping

Document Upload

Upload scanned documents to their digital folders

Today's Uploads

1

Batches uploaded today

Pending Page Typing

3

Documents waiting for page typing

Next Steps

Page Typing Stage 3

After uploading, proceed to page typing

[Upload Documents](#) [Uploaded Documents](#)

Document Upload

Upload scanned documents to their digital folders

Select Indexed File [Select File](#)

Upload Scanned Documents

Drag and drop scanned documents here
or click to browse files on your computer

[Browse Files](#)

Please select an indexed file first

Figure 14: The Scanned Files Upload Interface

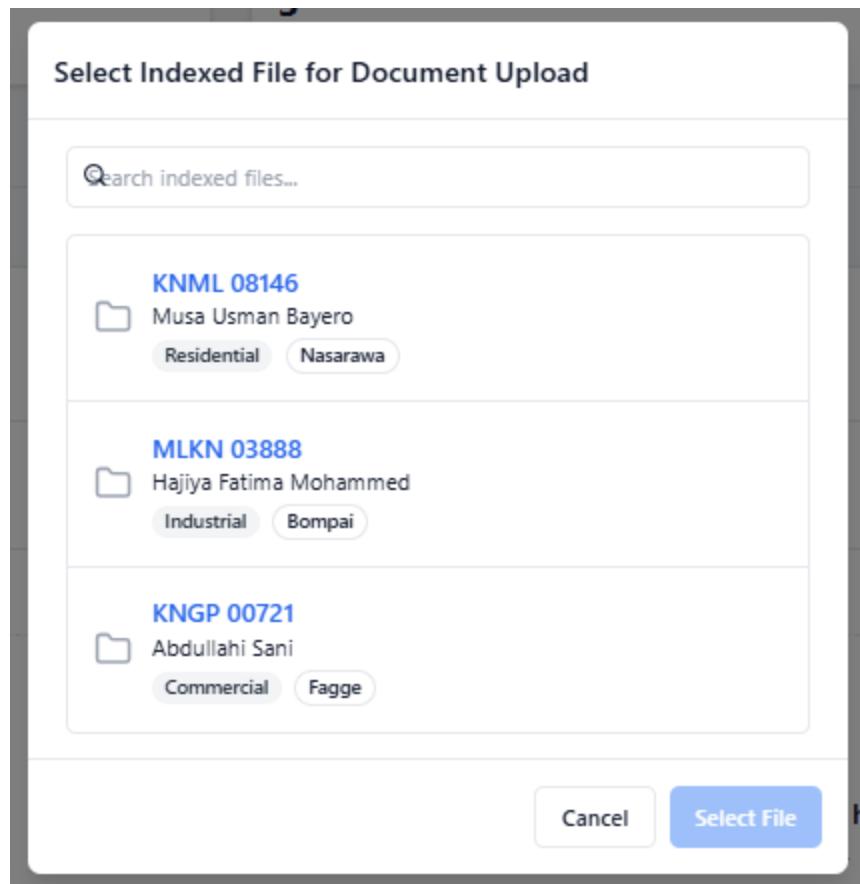


Figure 15: Select an Indexed File

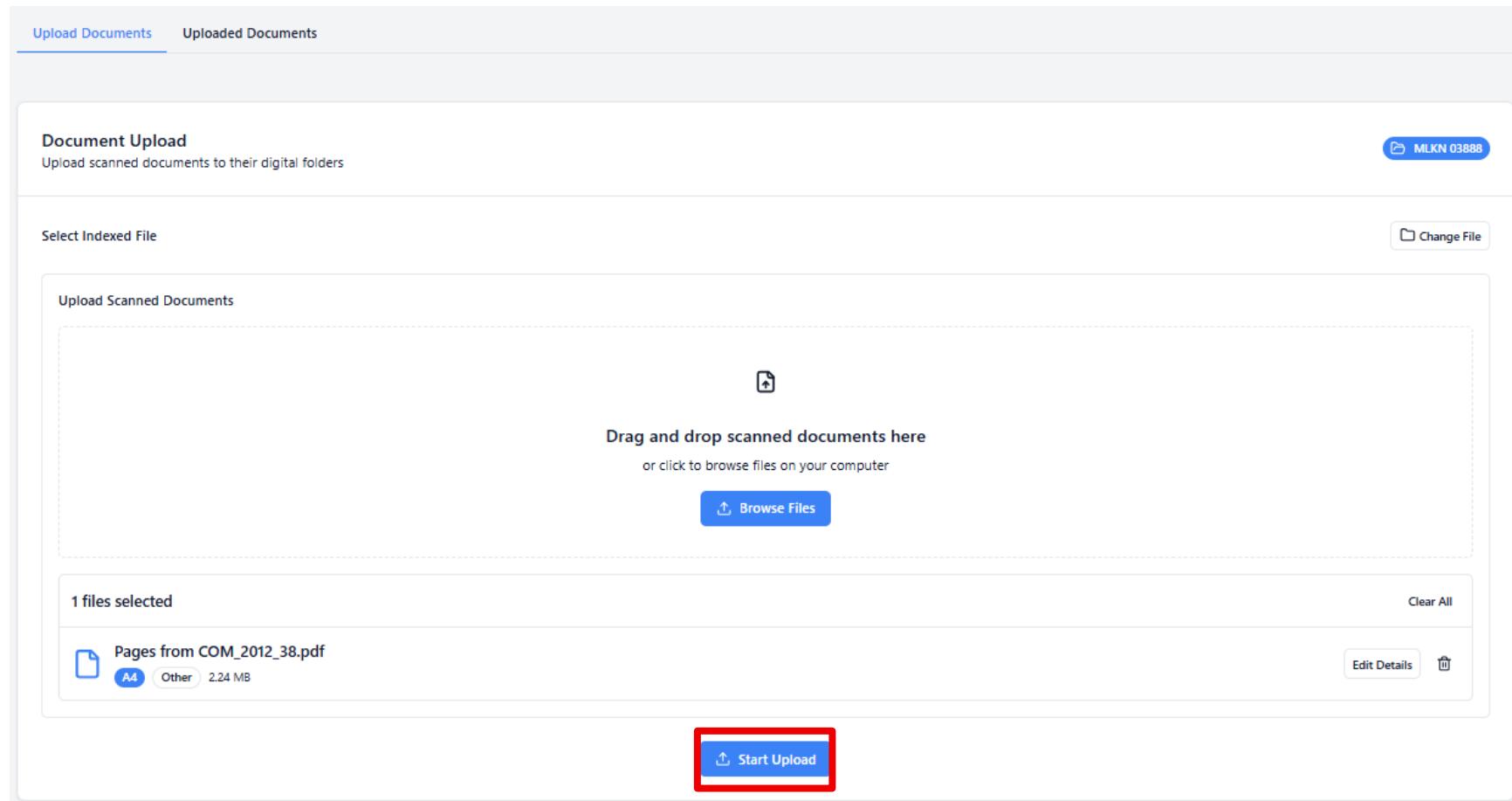


Figure 16: The Interface after the File before Upload

The screenshot shows a user interface for document upload. At the top, there are two tabs: "Upload Documents" (highlighted in blue) and "Uploaded Documents". Below the tabs, a section titled "Document Upload" with the sub-instruction "Upload scanned documents to their digital folders" is visible. A blue button labeled "MLKN 03888" with a folder icon is located in the top right corner. In the middle, a "Select Indexed File" input field has a "Change File" button next to it. A large central box is titled "Upload Scanned Documents" and contains a list of uploaded files. It shows "1 files selected": "Pages from COM_2012_38.pdf" (A4, Other, 2.24 MB). To the right of this list are "Edit Details" and "Delete" buttons. A green success message box at the bottom left of this area contains the text "Upload Complete! Files have been successfully uploaded and organized by paper size." A red rectangular box highlights this success message. At the bottom of the main box are two buttons: "Upload More" and "View Uploaded Files".

Figure 17: The Interface after the File has been Uploaded

Upload Documents Uploaded Documents

Uploaded Documents
Documents uploaded and ready for page typing

Filter by Size: All Sizes Search files... Folder View

Document ID	Uploader	Date	Pages	Size
MLKN 03888	Hajjya Fatima Mohammed	7/12/2025	1 document	A4
KNML 09846	Alhaji Ibrahim Dantata	2023-06-18	3 documents	A4, A5

Preview Start Page Typing Start Page Typing

Preview Start Page Typing Start Page Typing

Upload More Proceed to Page Typing →

Figure 18: The Files ready for PageTyping

Purpose:

Ensures digital capture of indexed files, forming the backbone of the archive.

iii. PageTyping

This process involves **assigning labels and structure** to each scanned page based on its type and content.

 **Dashboard Status:**

- Pending PageTyping
- In Progress
- Completed

- Typing

 **Tabs & Workflow:**

- Click **Start PageTyping** for any pending file
- Choose **Batch or Single Mode**
- For each page:
 - Select **Page Type**
 - Choose **Page Subtype**
 - Serial Number is auto-generated
 - Page Code is created
 - Click **Process Page**
- Once all pages are typed:
 - Click **Submit as a Batch**

Page Typing

Categorize and digitize file content

Pending Page Typing 4 Files waiting for page typing	In Progress 1 Files currently being typed	Completed 2 Files completed typing
--	--	---

[Pending Page Typing](#) [In Progress](#) [Completed](#) [Typing](#)

Files Pending Page Typing
Select a file to begin typing its content

KNML 34591 Alhaji Ibrahim Dantata 5 pages 2023-06-15	<input checked="" type="checkbox"/> Start Page Typing
KNGP 00892 Hajiyah Amina Yusuf 3 pages 2023-06-14	<input checked="" type="checkbox"/> Start Page Typing
KNML 42786 Kano Traders Association 2 pages 2023-06-13	<input checked="" type="checkbox"/> Start Page Typing
KNML 09846 Example 3 pages 2023-06-18	<input checked="" type="checkbox"/> Start Page Typing

Figure 19: The PageTyping Interface

KNML 34591 - Alhaji Ibrahim Dantata
Select a page to type or categorize

Batch Mode [Cancel](#)

File Pages

KNML 34591 KNML 34591

 Page 1 KNML 34591-01 Cover	 Page 2 KNML 34591-02 Content	 Page 3 KNML 34591-03 Content	 Page 4 KNML 34591-04 Content
 Page 5 KNML 34591-05 Content			

Figure 20: The Files to be PageTyped

KNML 34591 - Alhaji Ibrahim Dantata
Select pages to type in batch mode

Exit Batch Mode Cancel

File Pages

Batch Progress 0% KNML 34591

Pages typed: 0 Total pages: 5

Page 1 KNML 34591-01 Cover

Page 2 KNML 34591-02 Content

Page 3 KNML 34591-03 Content

Page 4 KNML 34591-04 Content

Page 5 KNML 34591-05 Content

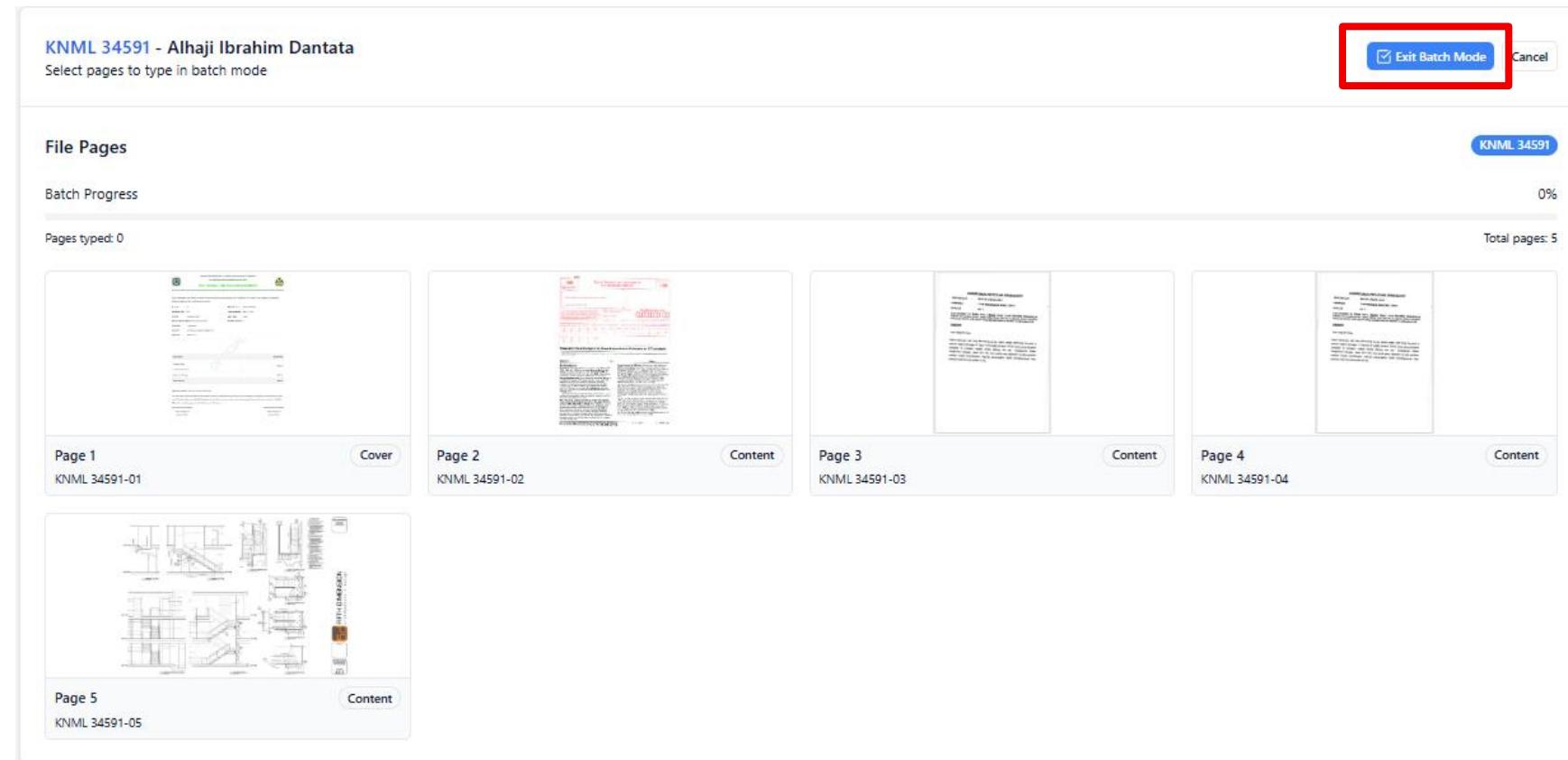


Figure 21: Batch Mode Activated

KNML 34591 - Alhaji Ibrahim Dantata

Categorizing Page 1 [Back to Folder](#)

Categorize Page 1 [KNML 34591](#)

Document Preview - Page 1

SEARCH 100% 🔍 ⌂



Page Type
File Cover (FC)

Page Subtype
New File Cover (NFC)

Serial Number
01
Two-digit serial number (e.g., 01, 02, etc.)

Page Code Preview
KNML 34591- FC- NFC- 01

This code will be assigned to the page for easy identification and retrieval.

Add to Batch

Figure 22: PageTyping Page

KNML 34591 - Alhaji Ibrahim Dantata
Select pages to type in batch mode

Exit Batch Mode Cancel

File Pages

Batch Progress 100%

Pages typed: 5 Total pages: 5

KNML 34591

Page 1
KNML 34591-01
KNML 34591- FC- NFC- 01

Page 2
KNML 34591-02
KNML 34591- FC- NFC- 02

Page 3
KNML 34591-03
KNML 34591- FC- NFC- 03

Page 4
KNML 34591-04
KNML 34591- FC- NFC- 04

Page 5
KNML 34591-05
KNML 34591- FC- NFC- 05

Submit All Pages as Batch

Figure 23: The Final Stage before PageTyping

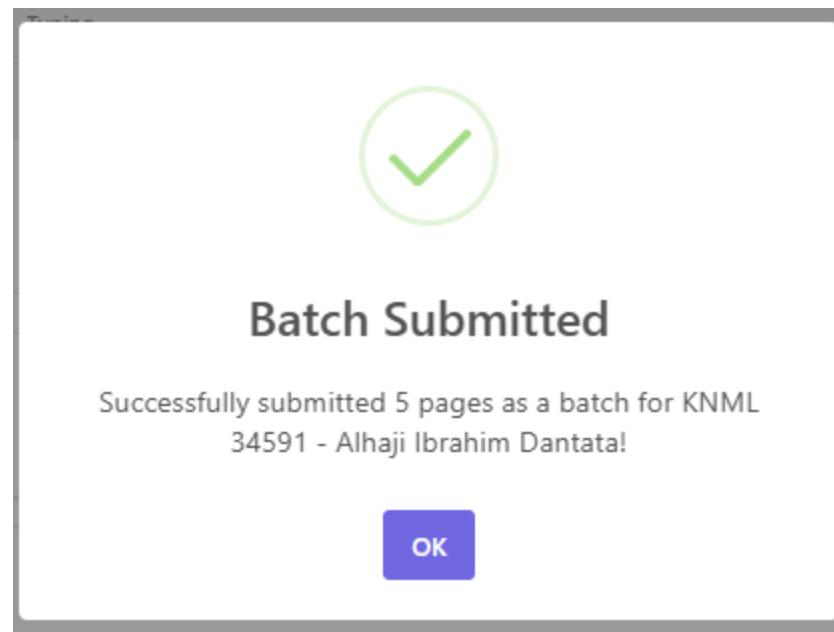


Figure 24: The File PageTyping Prompt

A screenshot of a user interface for managing files. At the top, there is a navigation bar with tabs: "Pending Page Typing", "In Progress", "Completed" (which is underlined in blue), and "Typing". Below the navigation bar, there is a section titled "Completed Files" with the sub-instruction "Files that have been fully typed". To the right of this title is a search bar with the placeholder text "Search files...". There are two entries listed under "Completed Files":

- KNGP 01478**
Musa Usman Bayero
4 pages 2023-06-12
Status: Completed ↓
- KNML 37925**
Hajiya Fatima Mohammed
6 pages 2023-06-10
Status: Completed ↓

Figure 25: Completed Files

Completed Files
Files that have been fully typed

Search files...

KNGP 01478
Musa Usman Bayero
4 pages 2023-06-12

Completed ↑

Processed Pages

 Page 1 KNGP 01478-1-1-01 New File Cover	 Page 2 KNGP 01478-5-5-02 Certificate of Occupancy	 Page 3 KNGP 01478-9-25-03 Survey Plan
 Page 4 KNGP 01478-4-8-04 Acknowledgment Letter		

KNML 37925
Hajiya Fatima Mohammed
6 pages 2023-06-10

Completed ↓

Figure 26: Completed Files Content View

Purpose:

Assigns intelligent metadata to scanned pages, enabling advanced search and categorization of every file in the digital archive.

End Result: Digitally Archived, Fully Searchable & Trackable File

Once a file has passed through **Indexing → Scanning → PageTyping**, it becomes:

- Digitally stored
- RFID/QR enabled
- Fully text-searchable
- Classification-aware
- Ready for reporting, retrieval, and cross-referencing in any workflow