

# Real-Time AI Use Case:

## Next Gen AI Intelligent Document Processing

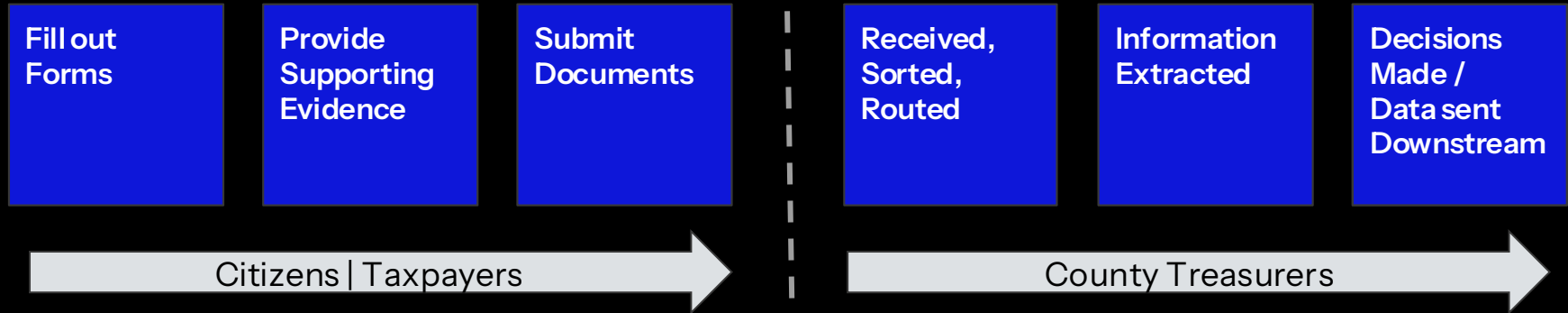
[Faster operations, Better Accuracy, Improved Taxpayer  
Experience] | May 2026

# Today's Agenda

01	The Challenge We're Facing
02	What is Next Gen AI Intelligent Document Processing (IDP)
03	Types of Documents
04	Document Processing Maturity Model
05	AI Intelligent Document Processing Example

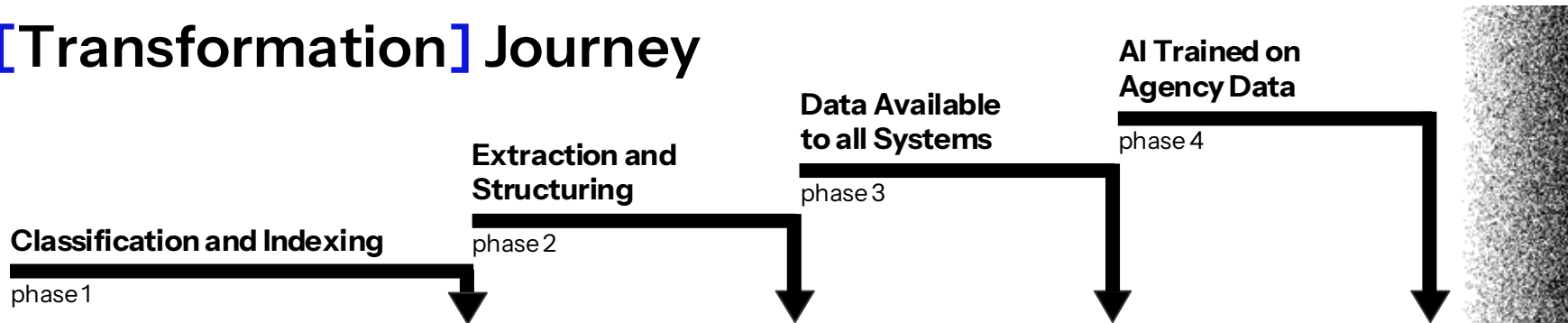
[CTAO]

# The Challenge We're Facing - Today



- High volumes of **data entry and reconciliation work**
- **Errors and rework** from miskeyed information
- **Backlogs during peak tax seasons**
- Limited time for staff to focus on taxpayers

# [Transformation] Journey



## Digitize

### Key Attributes

- Converting physical paper into digital files
- Docs can be stored, transmitted, and accessed faster

### Key Limitations

- Data remains trapped inside images
- Manual review still needed
- Does not actually shrink backlogs

## Store

### Key Attributes

- Centralizing documents with basic classification, indexing, and metadata
- Makes docs more “findable”

### Key Limitations

- Still document centric (not data-centric)
- Limited interoperability with downstream systems
- Search improves, decisions do not

## IDP

### Key Attributes

- Applying machine learning to classify documents, extract fields, validate data
- Unlocks data - “usable”
- Same process for backlog and day forward

### Key Limitations

- Requires training on real agency documents
- Accuracy must be governed

## Data Lake

### Key Attributes

- Centralized environment for structured data and source documents
- Normalized and made accessible across systems and teams

### Key Limitations

- Quality is inherited by upstream extraction
- Does not create intelligence on its own

## GenAI

### Key Attributes

- Applying generative and reasoning models to trusted, agency-specific data
- Summarize, reason, assist, and augment human decision making

### Key Limitations

- Amplifies upstream errors and bias
- Without IDP outputs are impressive but unreliable

# What is Next Gen AI IDP?

*IDP is technology that uses **artificial intelligence to read, understand, and extract data from documents**—then turn it into structured, usable information.*



**Read & Understand Documents of All Types**  
digital, handwritten,  
structured, unstructured






**Extract & Structure the Data**  
flag and send exceptions  
to human in the loop



**Send Trusted Data Downstream**  
for decisions, analytics,  
and outcomes

# Different Types of Documents

Structured	Semi-Structured	Unstructured
		
<p><i>We know what it is AND where it is</i></p>	<p><i>We know what it is, but NOT where it is</i></p>	<p><i>We don't know what we want OR where it is</i></p>

[CTAO]

# CTAO Specific Documents

Structured

Unstructured



County \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

File this form with the county treasurer.

**Application for the Remission of Real Property and Manufactured Home Late-Payment Penalties (R.C. 5715.39)**

Prepare instructions: Complete the front of this form and file it with the county treasurer. Attach a copy of all evidence to the form, complete the reverse and address back and sign the form. If penalties have incurred for more than one year payment, a separate application must be filed for each penalty. Please record completion date to the county treasurer of the county in which the property is located. (The county treasurer may request you to re-sign and submit here at the treasurer's office for the address of the applicant/owner(s).)

Please send Cuyahoga County applications to the following address:

Cuyahoga County Treasurer  
2076 East Ninth Street  
Cleveland, OH 44115

Owner of property \_\_\_\_\_ Parcel or I.D.# of property \_\_\_\_\_

Property for term  deed  manufactured home. For year \_\_\_\_\_  one year  two-year term

Amount of penalty \$ \_\_\_\_\_  one penalty  two penalties

Interest rates were due \_\_\_\_\_  one term and interest were paid \_\_\_\_\_  two separate times a payment plan.

Please check all the reasons the penalty should be waived and explain below:

- Tax was not paid by the date because of negligence or error of the auditor or treasurer (specify below).
- Taxpayer did not receive a tax bill or a correct tax bill and attempted to obtain one or (date).
- Tax was not timely paid because of active military, death or incapacitation of the taxpayer (attach all steps preceding the due date); but was paid within 60 days after the due date. Taxpayer must submit proof of the above.
- Tax payment was applied on or before the due date in full or in part. State amount paid on the envelope to be a valid payment for establishing the payment date.
- Taxpayer did not receive a tax bill because the mortgage lender failed to notify the auditor that the mortgage was satisfied and the bill was not sent to the taxpayer. The penalty waiver applies only to the tax bill after satisfaction of the mortgage.
- Taxpayer's failure to make timely payment of the tax was due to reasonable cause and not willful neglect (specify below).

Taxpayer statement (use additional pages if necessary): \_\_\_\_\_

Print name and address below: \_\_\_\_\_

I declare under penalties of perjury that the report is true, correct and complete.

Name \_\_\_\_\_ Residence telephone \_\_\_\_\_

Address \_\_\_\_\_ County/zip/phone number \_\_\_\_\_ Date \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_ E-mail address \_\_\_\_\_



# Turning CTAO Documents Into Data - Live Example



# Supplemental



# Point and Click -> Create Layout

The screenshot displays the (h[s]) application interface. The top navigation bar includes the (h[s]) logo, a notification bell, and a user profile for Trevor. The left sidebar contains navigation options: Tasks, Submissions, Flows, Library (selected), Storage, Reporting, Users, and Administration. The main content area shows the configuration for a layout titled 'OH CTA Remission Real Property Tax' (ID: 45a5e515-ea51-4969-9950-705ac43ec292), updated at 7:53 AM. The 'Layout Variations' tab is active, showing a table with one variation. Below the table is a '+New Layout Variation' button.

Library / Layouts / Updated at 7:53 AM

## OH CTA Remission Real Property Tax

45a5e515-ea51-4969-9950-705ac43ec292

Layout Variations Fields and Customizations Version History

### Summary

STATUS	TYPE	LANGUAGE	LAST COMMITTED VERSION	LAST COMMITTED DATE	TAGS
Not Live	Structured	English	CTA OH Tax R2	05/09/26, 07:53 AM	None

### Configuration

TASK RESTRICTIONS

None

### Layout Variations

1 variation

OH CTA Remission Real Property Tax	ACTIVE FIELDS 58	PAGES 2		
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+New Layout Variation

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# Highlight Field - Give Name - Specify Data Type (Date, Address, CheckBox, etc.)

**Application for the Remission of Real Property and Manufactured Home Late-Payment Penalties (R.C. 5715.39)**

**Taxpayer Instructions:** Complete the front of this form and file it with the county treasurer. Attach a copy of all evidence to the form, complete the name and address block and sign the form. If penalties have accrued for more than one late payment, a separate application must be filed for each penalty. Please send completed forms to the county treasurer of the county in which the property is located. (The county treasurer may insert his or her name and address here or the taxpayer may obtain the address at [ohcountytreasurers.org](http://ohcountytreasurers.org).)

Please send Cuyahoga County applications to the following address:  
 Cuyahoga County Treasurer  
 2079 East Ninth Street  
 Cleveland OH 44115

Owner of property: \_\_\_\_\_ Parcel or ID # of property: \_\_\_\_\_  
 Property tax type:  Real  **Generic Text**  Tax year: \_\_\_\_\_  First half  Second half  
 Amount of penalty \$ \_\_\_\_\_  5% penalty  10% penalty  
 Date taxes were due: \_\_\_\_\_ Date taxes and interest were paid: \_\_\_\_\_ Date entered into a payment plan: \_\_\_\_\_

**Please check all the reasons the penalty should be remitted and explain below.**

- Tax was not paid by due date because of negligence or error of the auditor or treasurer (explain below): \_\_\_\_\_
- Taxpayer did not receive a tax bill or a correct tax bill and attempted to obtain one on (date): \_\_\_\_\_
- Tax was not timely paid because of serious injury, death or hospitalization of the taxpayer (within 90 days preceding the due date), but was paid within 90 days after the due date. Taxpayer must submit proof of the above: \_\_\_\_\_
- Tax payment was mailed on or before due date (submit evidence of timely mailing). A private meter postmark on the envelope is not a valid postmark for establishing the payment date.
- Taxpayer did not receive a tax bill because the mortgage lender failed to notify the auditor that the mortgage was satisfied and the bill was not sent to the taxpayer. The penalty waiver applies only to the first tax bill after satisfaction of the mortgage.
- Taxpayer's failure to make timely payment of the tax was due to reasonable cause and not willful neglect (explain below): \_\_\_\_\_

Taxpayer statement (see additional pages if necessary): \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Print name and address below** I declare under penalties of perjury that this report is true, correct and complete.

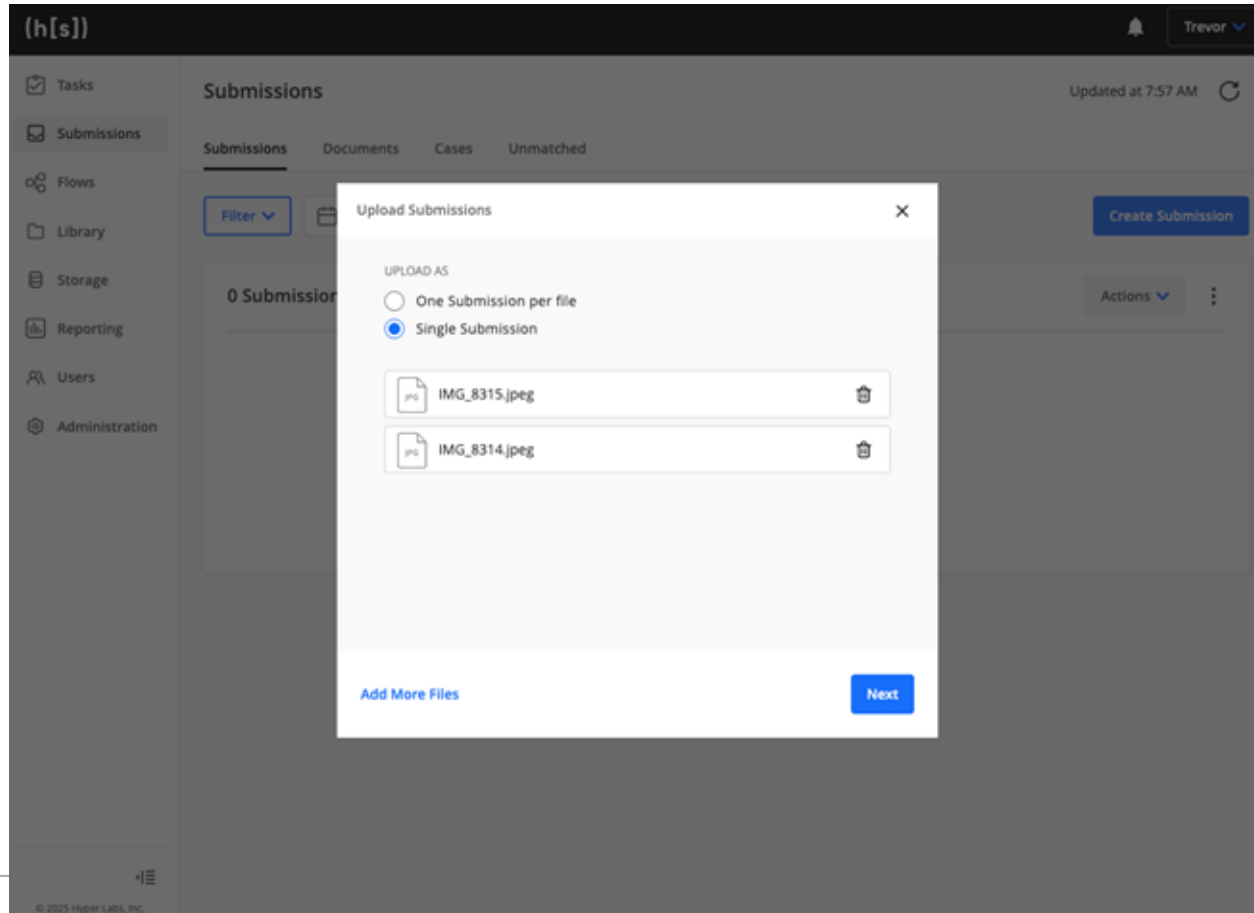
Name: \_\_\_\_\_ Taxpayer signature: \_\_\_\_\_  
 Address: \_\_\_\_\_ Daytime phone number: \_\_\_\_\_ Date: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP: \_\_\_\_\_ E-mail address: \_\_\_\_\_

# List of All Fields

The screenshot shows the (h[s]) application interface. The top navigation bar includes the (h[s]) logo, a notification bell, and the user name 'Trevor'. The left sidebar contains navigation items: Tasks, Submissions, Flows, Library (selected), Storage, Reporting, Users, and Administration. The main content area is titled 'Library / Layouts / OH CTA Remission Real Property Tax' and is updated at 7:56 AM. Below the title, there are tabs for 'Layout Variations', 'Fields and Customizations' (selected), and 'Version History'. The 'Fields and Customizations' section is titled 'Tr Fields and Field Customizations' and includes a search bar for fields. A table lists the fields with columns for Name, Data Type, Output Name, Supervision, and Required. The table shows 10 fields, including '10% Penalty', '5% Penalty', 'City', and various 'CTI - BoR' decision fields.

Fields	Name	Data Type	Output Name	Supervision	Required
All fields					
CUSTOMIZATIONS (0)					
	10% Penalty	Checkbox	--	Default	No
	5% Penalty	Checkbox	--	Default	No
	City	Generic Text	--	Default	No
	CTI - BoR decision date	Generic Text	--	Default	No
	CTI - BoR Decision Deny	Checkbox	--	Default	No
	CTI - BoR Decision Grant	Checkbox	--	Default	No
	CTI - BoR Decision Mailed on Date	Generic Text	--	Default	No
	CTI - BoR Decision Reason	Generic Text	--	Default	No

# Upload Phone Images



# Processing Submissions - Activity Log Shows Progress

The screenshot displays the h[s] Submissions interface. The top navigation bar includes the h[s] logo, a user profile for Trevor, and a timestamp 'Updated at 8:06 AM'. The left sidebar contains navigation options: Tasks, Submissions (selected), Flows, Library, Storage, Reporting, Users, and Administration. The main content area is titled 'Submissions' and has tabs for Submissions, Documents, Cases, and Unmatched. A 'Back to Submissions' link is present. The selected submission is 'Submission 2448', which is in a 'Processing' status. It shows a 'Process by Sunday, May 10 at 8:05 AM EDT' deadline and a 'Submitted on Saturday, May 9 at 8:05 AM EDT' timestamp. The 'DOCUMENTS' section indicates 1 document with 2 pages and 0 unmatched pages. Below this, a table lists the document: '5436' with layout variation 'OH CTA Remission Real Property Tax' and 2 pages in 'Processing' status. The 'Unmatched Pages (0)' section shows 'No results found.' The 'Activity Log' section is highlighted with a blue box and contains the following data:

Block	Status	User	Start Time	End Time	Total Time (Seconds)
Machine Classification Block	Processing	-	05/09/26 08:06am	--	-
Machine Collation Block	Complete	-	05/09/26 08:06am	05/09/26 08:06am	0
Submission Initialization Block	Complete	-	05/09/26 08:06am	05/09/26 08:06am	6

# Hyperscience Picked Up Name Correctly - Normalized

The screenshot displays the hyperscience application interface. On the left is a navigation sidebar with options: Tasks, Submissions, Flows, Library, Storage, Reporting, Users, and Administration. The main area shows a document titled "Document 5436" with a "View JSON Output" button and an "Actions" menu. Below the document title, it indicates "LAYOUT VARIATION: OH CTA Remission Real Property Tax".

The document is a scanned form titled "Application for the Remission of Real Property and Manufactured Home Late-Payment Penalties (R.C. 5715.39)". The form includes fields for County, Case No., and Applicant Name. The applicant name is "M. THOMAS". The form also includes checkboxes for "Real" and "Manufactured home" property types, and a section for "Please check all the reasons the penalty should be remitted and explain below." with several checkboxes and handwritten notes.

On the right side of the interface, there is a "58 fields" panel with a search bar and a "View All" dropdown. The fields are listed in a table:

Field Name	Value
Top Form County	Transcription processing...
Top Case Number	Transcription processing...
Date Received By Treasurer	Transcription processing...
Date Received by Auditor	Transcription processing...
Owner of Property	TIM THOMAS
Normalized	TIM THOMAS
Raw	Tim Thomas
Identified by	Machine
Transcribed by	Machine
Data Type	Generic Text
<a href="#">Show more</a>	
Parcel or Property ID #	Transcription processing...
Property Type Read	Transcription processing...
Prop Type Mfg'd Home	Transcription processing...
Tax Year	Transcription processing...
Tax Year First Half	Transcription processing...
Tax Year second half	Transcription processing...
Penalty Amount	Transcription processing...
5% Penalty	Transcription processing...
10% Penalty	Transcription processing...
Date Taxes Were Due	Transcription processing...
Date Taxes and Interest Were Paid	Transcription processing...

# Checkboxes, Signatures, Dates, etc.

(h[s])
Trevor

- Tasks
- Submissions
- Flows
- Library
- Storage
- Reporting
- Users
- Administration

Submissions table > Submission 2448 > Document 5436
View JSON Output Actions

Document 5436

LAYOUT VARIATION: OH CTA Remission Real Property Tax

← 2 → of 2
100%

CTI-Penalty Accrued bc of negl of county officer	Transcription processing	>
CTI - taxpayer failed to receive bill	Transcription processing	>
CTI-taxpayer failed to receive tax date of request	Transcription processing	>
CTI - tax not paid due to serious injury	Transcription processing	>
CTI - tax was not timely paid due to death date	Transcription processing	>
CTI - Date of hospitalization or death	Transcription processing	>
CTI-taxpayer demonstrated that timely pmt was mailed	Transcription processing	>
CTI - taxpayer has not made late pmt for the last 3 years	Transcription processing	>
CTI - Treasurer Comments	Transcription processing	>
CTI - Signature of treasurer	Transcription processing	>
CTI - Recommend Grant	Transcription processing	>
Normalized	TRUE	
Raw	True	
Identified by	Machine	
Transcribed by	Machine	
Data Type	Checkbox	
<a href="#">Show more</a>		
CTI - Recommend Deny	Transcription processing	>
CTI - Date of signature	Transcription processing	>
CTI - County Auditor Sig Date	Transcription processing	>
CTI - Decision of county auditor grant	Transcription processing	>
CTI - Decision of county auditor deny	Transcription processing	>

(h[s])

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# Machine was not confident, Human in the Loop (Supervision)

(h[s]) Transcription

← Back

Amount of penalty \$ 2,000.00  5% penalty  10% penalty

Date taxes were due 6/16/25 Date taxes and interest were paid N/A Date entered into a payment plan 7/15/25

Please check all the reasons the penalty should be remitted and explain below.

- Tax was not paid by due date because of negligence or error of the auditor or treasurer (explain below).
- Taxpayer did not receive a tax bill or a correct tax bill and attempted to obtain one on (date) \_\_\_\_\_
- Tax was not timely paid because of serious injury, death or hospitalization of the taxpayer (within 60 days preceding the due date), but was paid within 60 days after the due date. Taxpayer must submit proof of the above.
- Tax payment was mailed on or before due date (submit evidence of timely mailing). A private meter postmark on the envelope is not a valid postmark for establishing the payment date.
- Taxpayer did not receive a tax bill because the mortgage lender failed to notify the auditor that the mortgage was satisfied and the bill was not sent to the taxpayer. The penalty waiver applies only to the first tax bill after satisfaction of the mortgage.
- Taxpayer's failure to make timely payment of the tax was due to reasonable cause and not willful neglect (explain below).

Taxpayer statement (use additional pages if necessary): I did not receive my SNAP Benefits so I didnt have tax money

Print name and address below

Taxpayer Statement

I DID NOT RECIEVE MY SNAD ROMELLE AND HERE TAX MONEY IS 2015 CON

1 of 1 locations

Mark illegible Submit