Microsoft Azure

Intelligent Document Processing Accelerator

Financial Services and Insurance industries

# Intelligent document processing is on the rise

Incorporating AI is a high priority for financial institutions, and adoption is challenging

Growing global demand

$4.1B is the projected size of the **global intelligent document processing market** by 2027.[1]

Prioritizing process automation

97% of organizations believe that **business process automation is crucial for digital transformation.**[2]
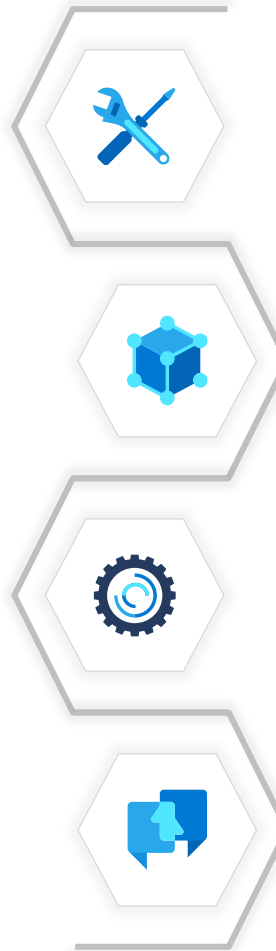
Harnessing unstructured data

3% of the 80% of **unstructured data** available to bank has been **evaluated**.[3]

Facing AI adoption difficulties

84% of banking and capital market professionals say their organizations face **more challenges adopting AI than other technologies.**[4]

1) Global Intelligent Document Processing Market Research | KBV Research, July 2021
2) 30+ Statistics that Prove Why Companies Needs to Embrace Business Automation in 2022 | imaginovation Insider, March 2022
3) Unstructured Data... | Straive, November 2021
4) 2022 banking and capital markets outlook | Deloitte 2021.

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Challenges to processing documents at scale

High volumes of structured and unstructured data require labor-intensive management

Manual document processing is time-consuming and subject to human error.	**Shifting regulatory requirements** make compliance difficult to consistently track and maintain.	**Siloed document data** prevents robust data analytics for business insights.	**Long search times with unfocused results** make information hard to find.	**Unstructured data and images are not searchable,** making this information inaccessible for analysis.	**Many organizations lack the technical expertise** required to develop custom AI solutions.

Artificial intelligence and machine learning are reported to be the
<u>most difficult technical capabilities</u> for financial institutions to acquire.*

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Automated document ingestion delivers efficiency and insights

Reduce operating costs and gain valuable analytics and insights

Eliminate costly and inefficient manual processing to quickly turn high volumes of documents into usable data.

Make information easy to search and readily available for informed decision making.

Identify business risks and opportunities by uncovering and exploring data patterns and relationships.

Protect PII by identifying and masking or redacting it.

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Transform document processing with AI-powered technology

Streamline operations and extract the most value from your data

The **Intelligent Document Processing Accelerator** enables automated document ingestion at scale.

It provides a **machine learning model** trained to accurately recognize, extract, and route content from custom document types to downstream applications for rich analysis and visual presentation of reports and insights.

Reduce costs by replacing manual document processing with automated processing at scale.

Uncover hidden insights to identify new business risks and opportunities.

Enhance search capabilities with faster, more accurate results.

Protect customer information with automated PII redaction.

Minimize accelerator deployment time using pre-built, pre-configured IP from Microsoft.

Automate data extraction and analysis with AI

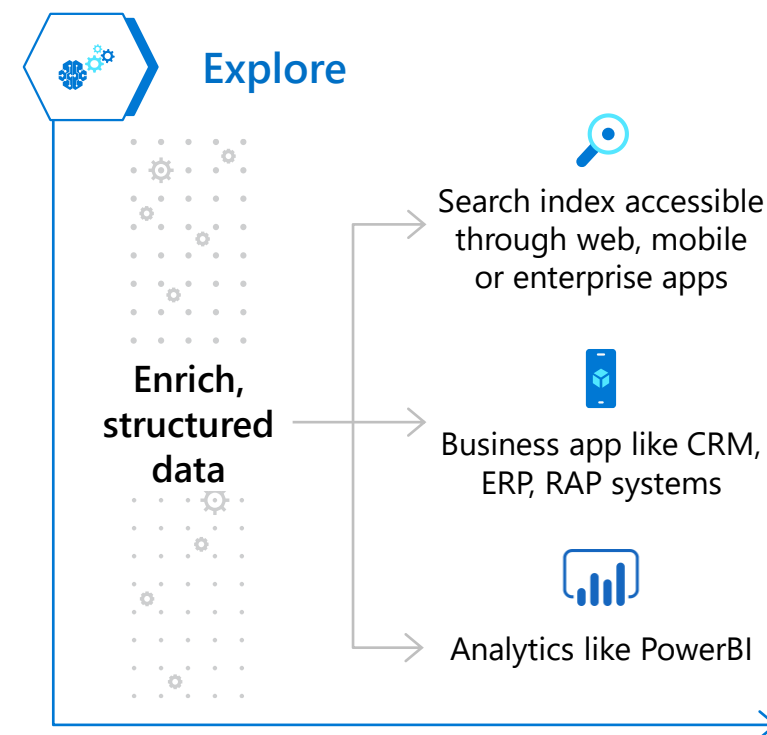## Gain faster insights from diverse content types to uncover new risks and opportunities

Step 1: Ingest content from a range of sources, using connectors to first and third-party data stores.
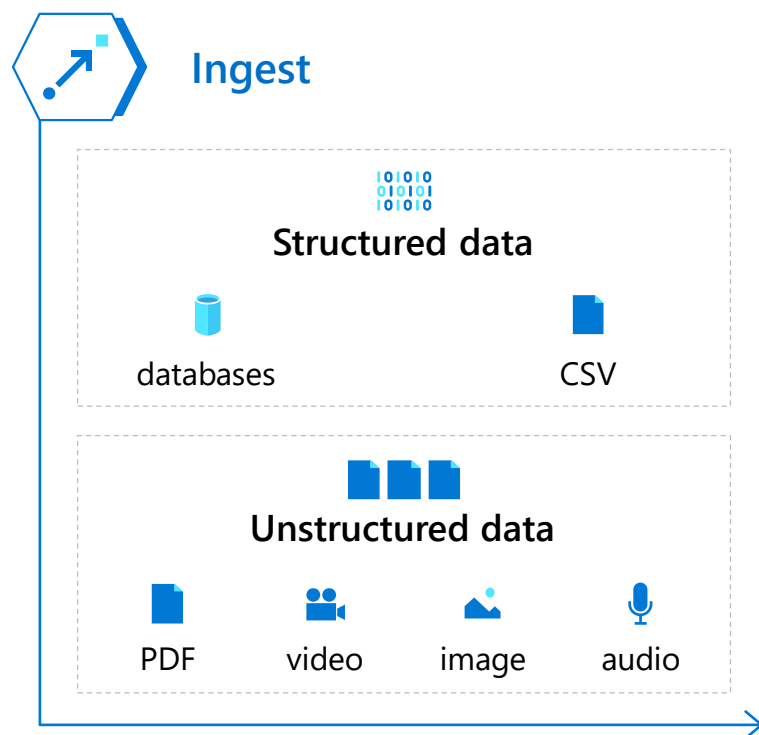
Step 2: Enrich the content with AI capabilities that let you extract information, find patterns, and deepen understanding.
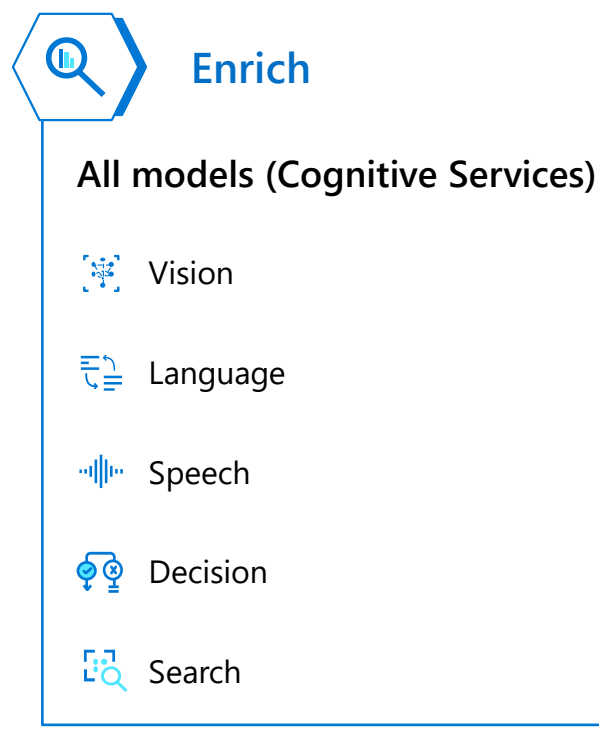
Step 3: Explore the newly indexed data via search, bots, existing business applications, and data visualizations

Ingest

Structured data

databases   CSV

Unstructured data

PDF   video   image   audio

Enrich

All models (Cognitive Services)

- Vision
- Language
- Speech
- Decision
- Search

Explore

Enrich, structured data

Search index accessible through web, mobile or enterprise apps

Business app like CRM, ERP, RAP systems

Analytics like PowerBI

Delivery of data to multiple downstream applications

Populate new and existing ERPs, workflows, visual BI dashboards, and more

Example: Azure Cognitive Search powers a web app search engine

Standard Bank of South Africa automates due diligence

Situation

Standard Bank is Africa's largest bank by assets. When **manual due diligence in cross-border transactions** began absorbing too much of staff's time, the bank decided it needed a new way forward.

Solution

The bank partnered with Microsoft to bring an **automated, time-saving accelerator** to life. With Microsoft Azure Forms Recognizer, computer vision and API's, countless hours are set to be saved.

Impact

Now, the **registration process and document classification are instantaneous and totally automated.** A major portion of the required data are prepopulated into the banks systems ready for staff to validate.

"The instant payment registration has been the first benefit...because on the day we receive payment, it is in our system instantly.

But besides the quicker turnaround times, we have reduced the number of data elements to be captured by staff, increasing quality."

- Nico Swart
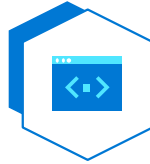Head of Intelligent Automation
CIB Standard Bank of South Africa

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Accelerate your journey to Intelligent Document Processing

Kick-off	Proof of value	Proof of concept
Learn more about the Intelligent Document Processing Accelerator and view a demo.	Optional accelerator code walk-through and prototype creation based on sample data for testing.	Proof of concept (POC) is built with support of Microsoft technical specialists and partners. MVP is scaled for deployment
30 minutes	**1-3 days**	**2-5 weeks**

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Accelerator demo walkthrough

Click here.

Quickly enable data ingestion, enrichment, and exploration

Achieve automated processing and rich knowledge mining at scale

Pre-configured automation services

Microsoft Logic Apps and Cognitive Search provide out-of-the-box service integrations to simplify and accelerate implementation.

Enable knowledge extraction wherever your data lives

With Azure Cognitive Services, Form Recognizer can be run on containers to accommodate multi-cloud and hybrid infrastructures.

Low code accelerator

The accelerator makes it easy for lines of business to deploy, test, and use these systems with minimal need for technical specialist support from IT.

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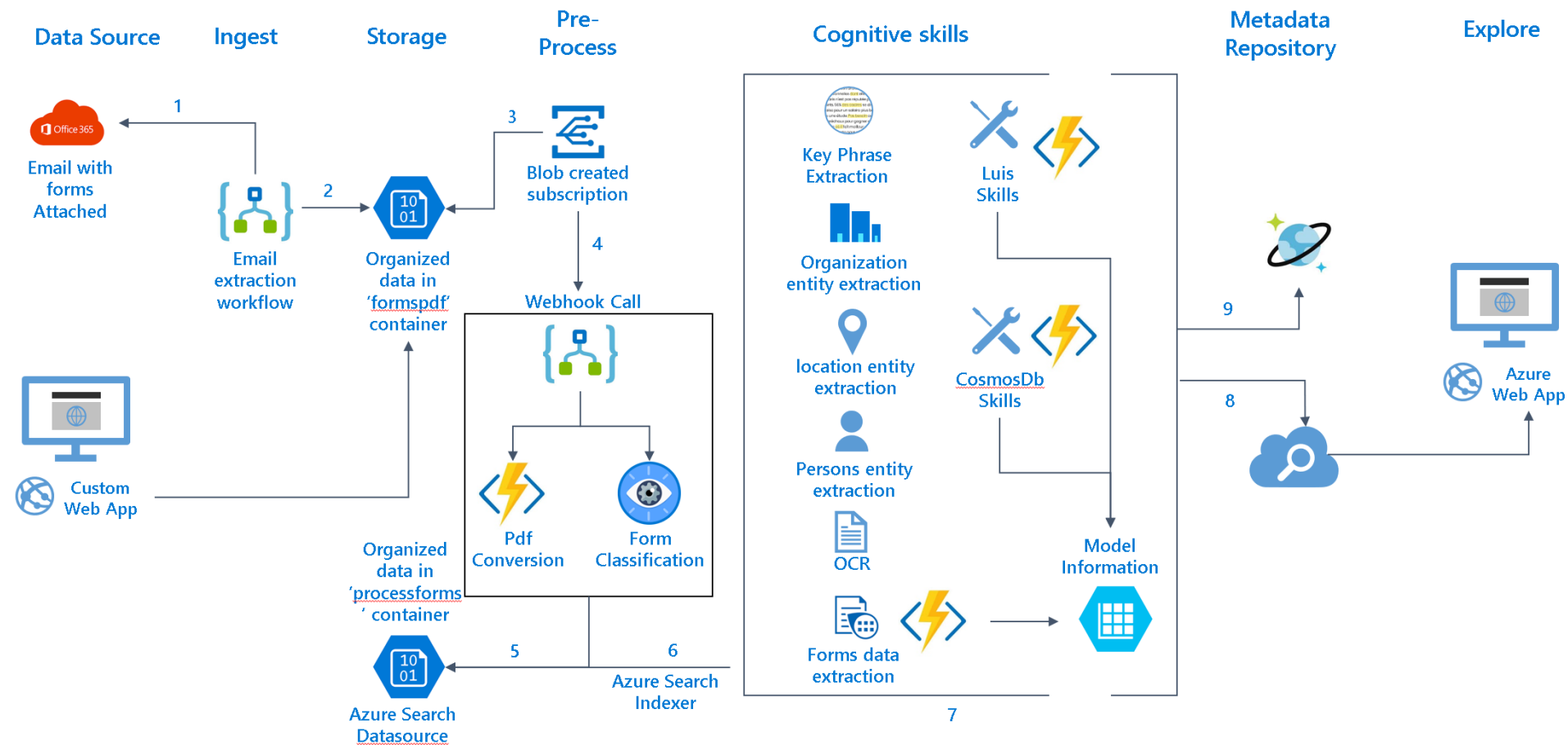**Enhance search capabilities** with faster, more accurate results.

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Reference architecture

Data Source · **Ingest** · **Storage** · **Pre-Process** · **Cognitive skills** · **Metadata Repository** · **Explore**

- Email with forms Attached — Office 365
- 1 → Email extraction workflow
- 2 → Organized data in 'formspdf' container
- 3 → Blob created subscription
- 4 → Webhook Call
- Pdf Conversion / Form Classification
- Custom Web App
- Organized data in 'processforms' container
- Azure Search Datasource
- 5 → 6 → Azure Search Indexer
- Key Phrase Extraction
- Organization entity extraction
- location entity extraction
- Persons entity extraction
- OCR
- Forms data extraction
- Luis Skills
- CosmosDb Skills
- Model Information
- 7
- 9
- 8
- Azure Web App

Delivery of data to multiple downstream applications

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Next steps to Intelligent Document Processing POC

Prepare	Plan	Deploy
Confirm that the required Microsoft services are infosec approved to ensure compliance and security.	Define your business and technical requirements by testing the accelerator with a sample of your data and document your plan for Proof of Concept (POC).	Run and validate the POC accelerator with select data and make a plan to deploy at scale.
TBD	2-5 days	4-6 weeks

Thank you