



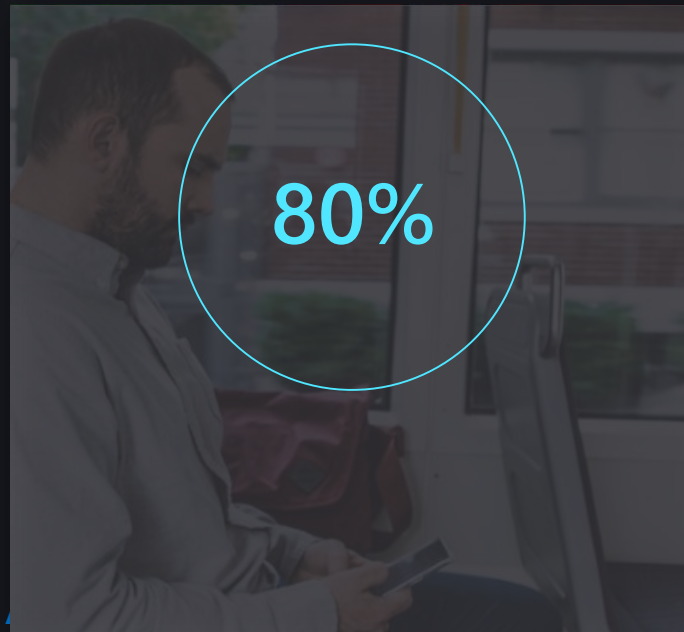
Knowledge Mining

Mohammad Afaneh
Data & Artificial Intelligence
Microsoft Qatar

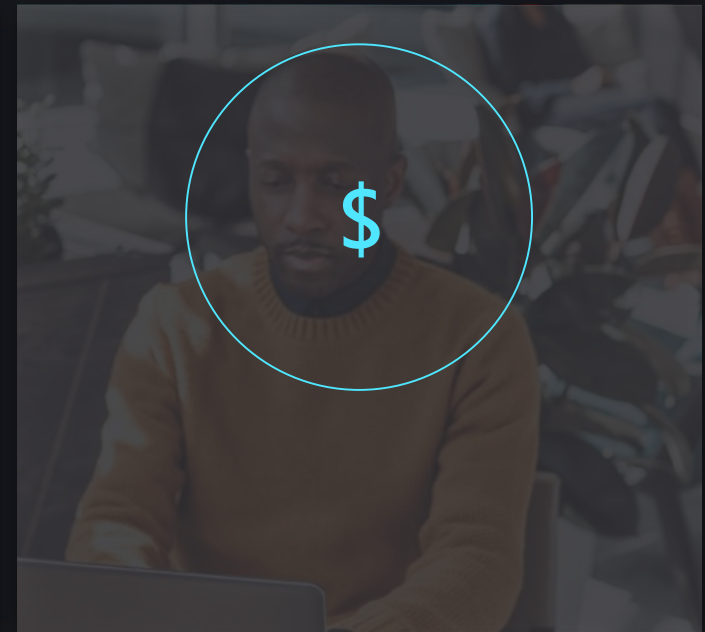
Acting on your knowledge is challenging



per day



is unstructured



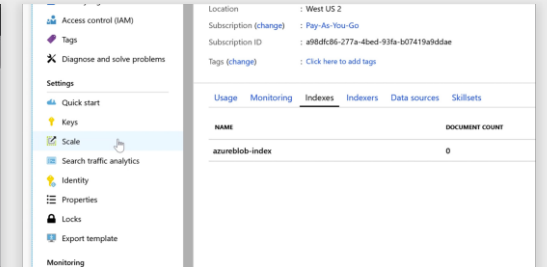
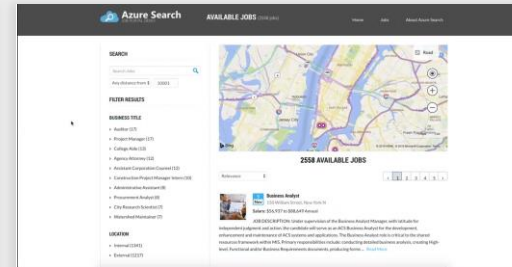
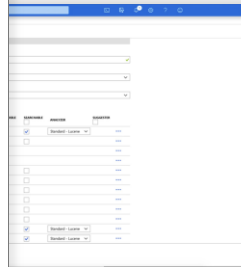
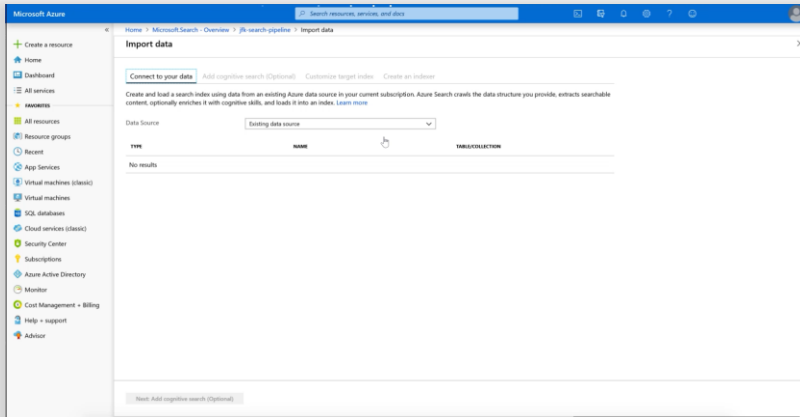
worker each year due to
information searches

What is knowledge mining?

Uncover latent insights

Effortlessly Implemented

Start, Maintain and Scale.



Ingest structured and unstructured data + easily pull from Azure Data stores

Configure, no required

Rich search features, out-of-the-box

Easily scale and maintain



EFFORTLESSLY IMPLEMENTED





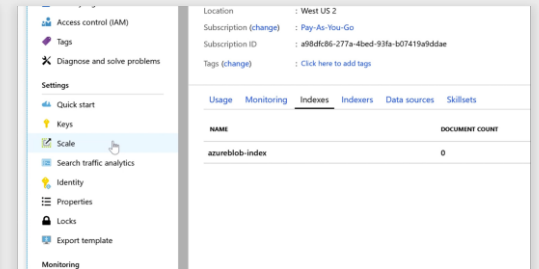
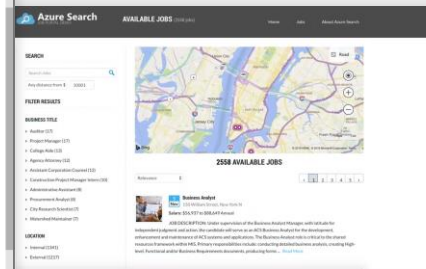
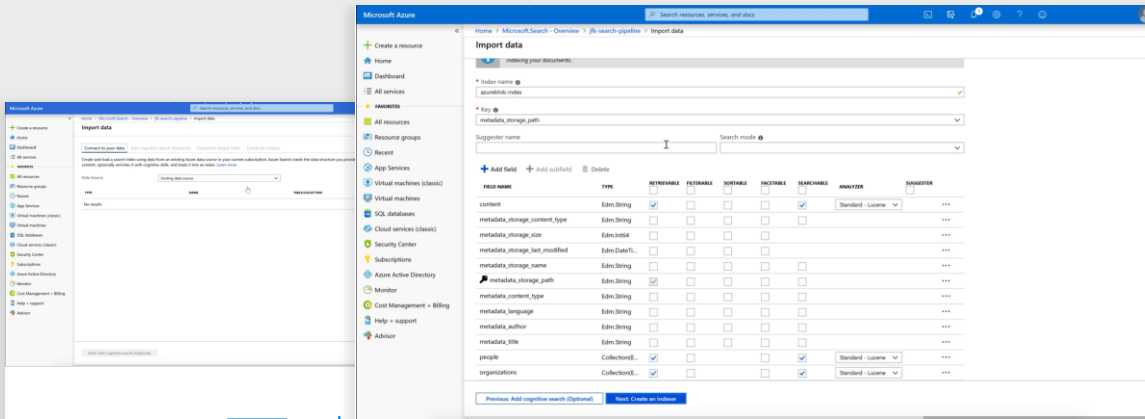
EASILY INTEGRATED




READILY CUSTOMIZABLE

Effortlessly Implemented


Start, Maintain and Scale.




Ingest structured
unstructured data + e
from Azure Data S



Quickly configure, no
coding required



Rich search features,
out-of-the-box



Easily scale and
maintain



EFFORTLESSLY
IMPLEMENTED



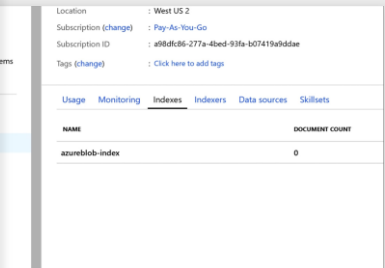
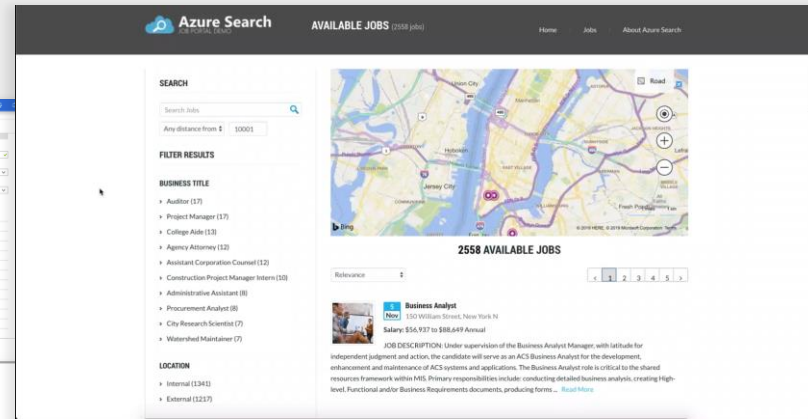
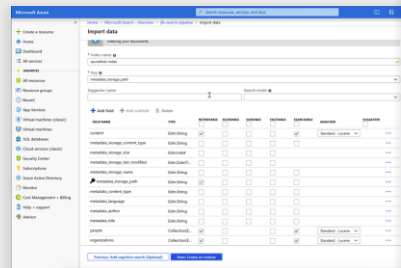
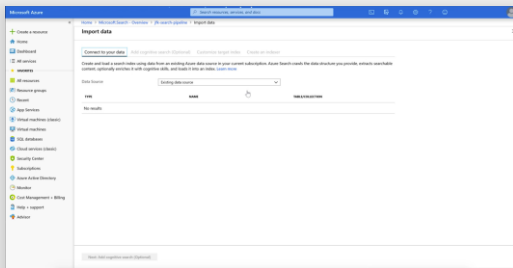
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Rich search features, out-of-the-box



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EFFORTLESSLY IMPLEMENTED



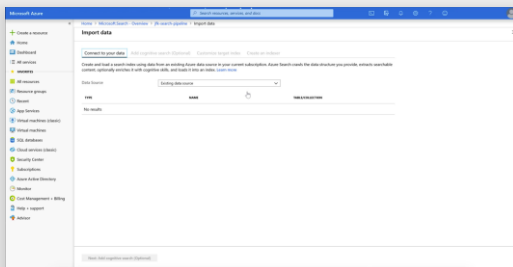
EASILY INTEGRATED



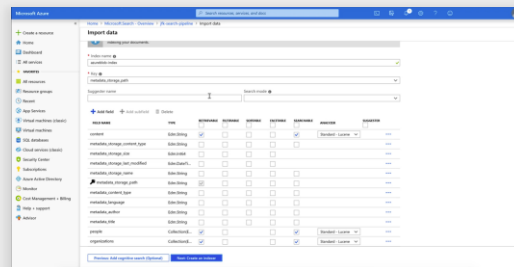
READILY CUSTOMIZABLE

Effortlessly Implemented

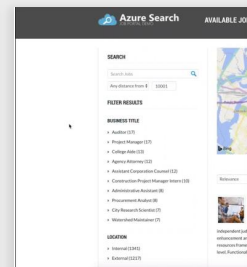
Start, Maintain and Scale.



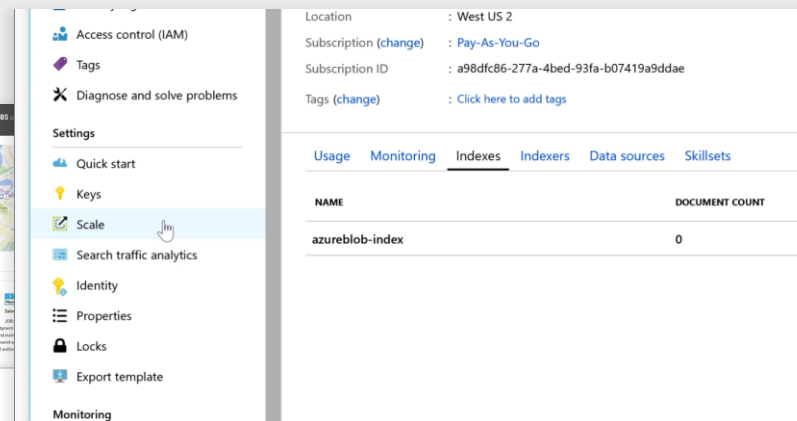
Ingest structured and unstructured data + easily pull from Azure Data stores



Quickly configure, no coding required



Rich search out-of-



Easily scale and maintain



EFFORTLESSLY IMPLEMENTED



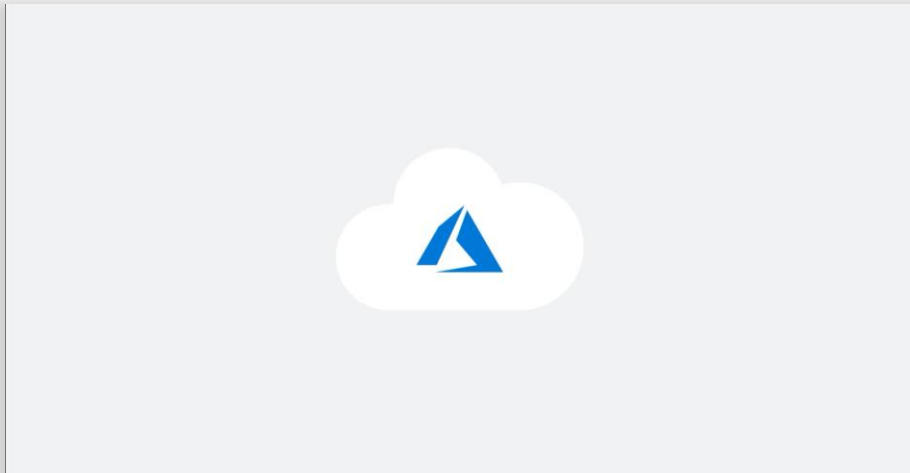
EASILY INTEGRATED



READILY CUSTOMIZABLE

Easily Integrated

With just one-click enable pre-built cognitive skills and extract more knowledge from your data.



Vision

OCR, Image analysis, Tag extraction



Language

Phrase extraction, Language detection, Sentiment analysis, Entity recognition



Orchestration

Text manipulation, Custom skills, Knowledge store



EFFORTLESSLY
IMPLEMENTED



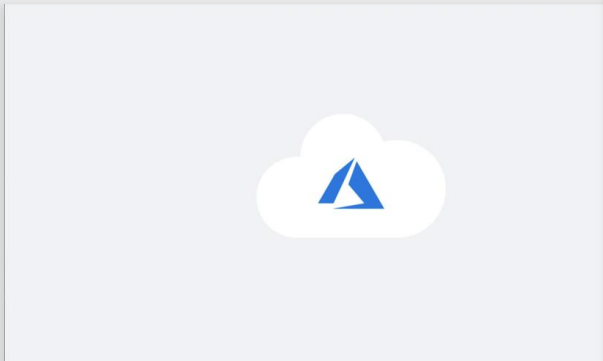
EASILY
INTEGRATED



READILY
CUSTOMIZABLE

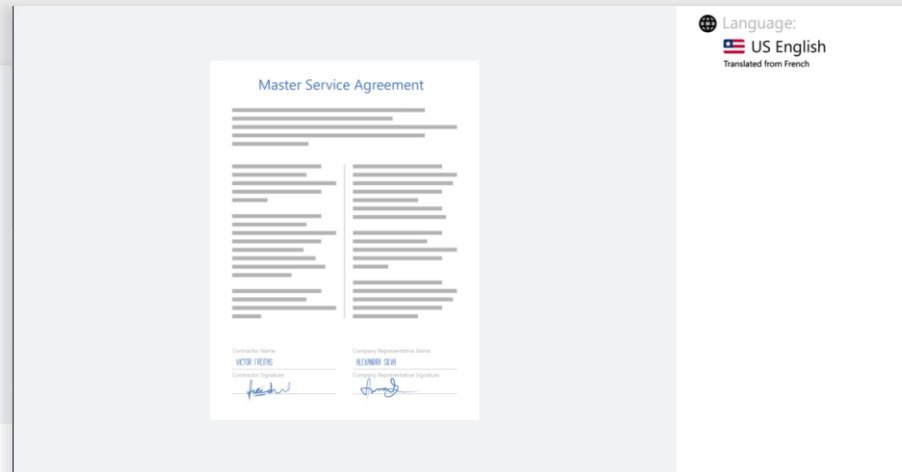
Easily Integrated

With just one-click enable pre-built cognitive skills and extract more knowledge from your data.



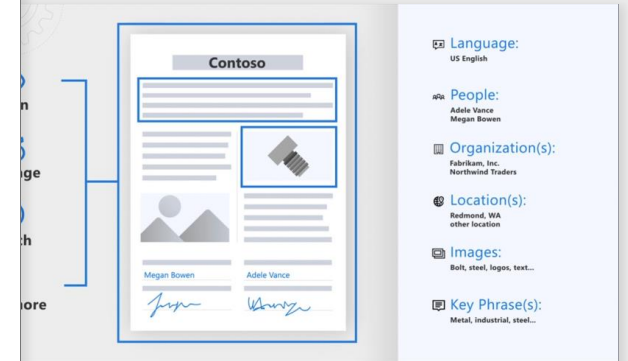
Vision

OCR, Image analysis, Tag extraction



Language

Key phrase extraction, Language detection, Sentiment analysis, Entity recognition



Orchestration

Text manipulation, Custom skills, Knowledge store



EFFORTLESSLY
IMPLEMENTED




EASILY
INTEGRATED




READILY
CUSTOMIZABLE

Easily Integrated

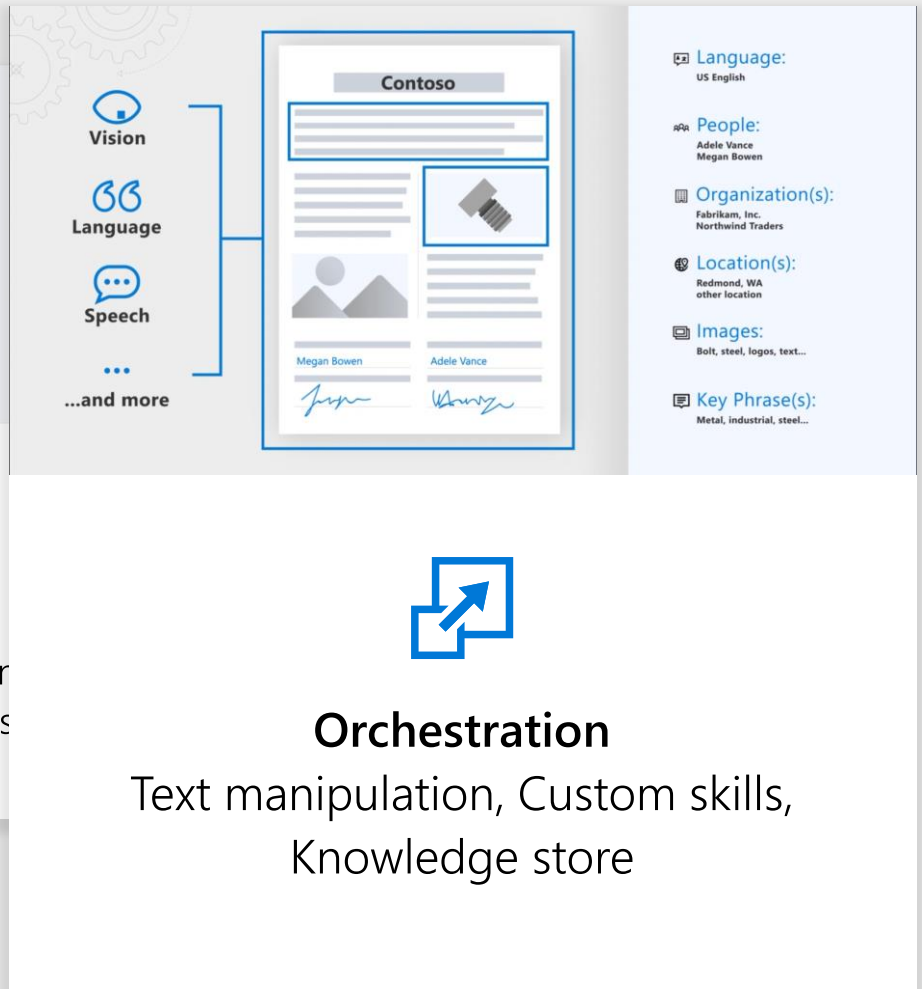
With just one-click enable pre-built cognitive skills and extract more knowledge from your data.



Vision
OCR, Image analysis, Tag extraction



Language
Key phrase extraction, Language detection, Sentiment analysis, Speech recognition



Orchestration
Text manipulation, Custom skills, Knowledge store

Language: US English

People: Adele Vance, Megan Bowen

Organization(s): Fabrikam, Inc., Northwind Traders

Location(s): Redmond, WA, other location

Images: Bolt, steel, logos, text...

Key Phrase(s): Metal, industrial, steel...



EFFORTLESSLY
IMPLEMENTED



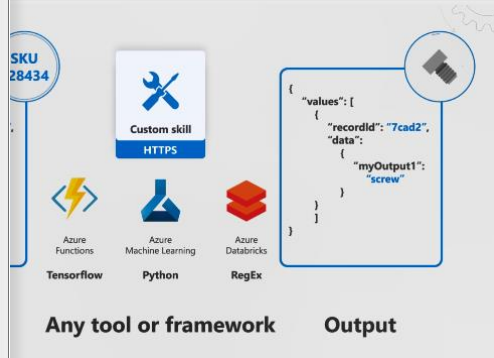
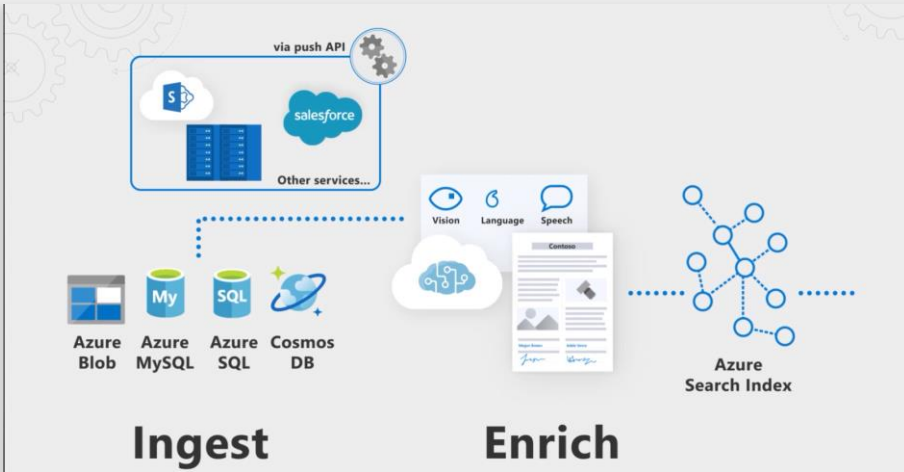
EASILY
INTEGRATED



READILY
CUSTOMIZABLE

Readily Customizable

Optimize your search experience by integrating your own data to create custom models and classifiers that feed into Cognitive Search.




IOIOIO
OIOIOI
IOIOIO

Your Data



Create custom models and classifiers



Extend to your specific industry and business



EFFORTLESSLY IMPLEMENTED



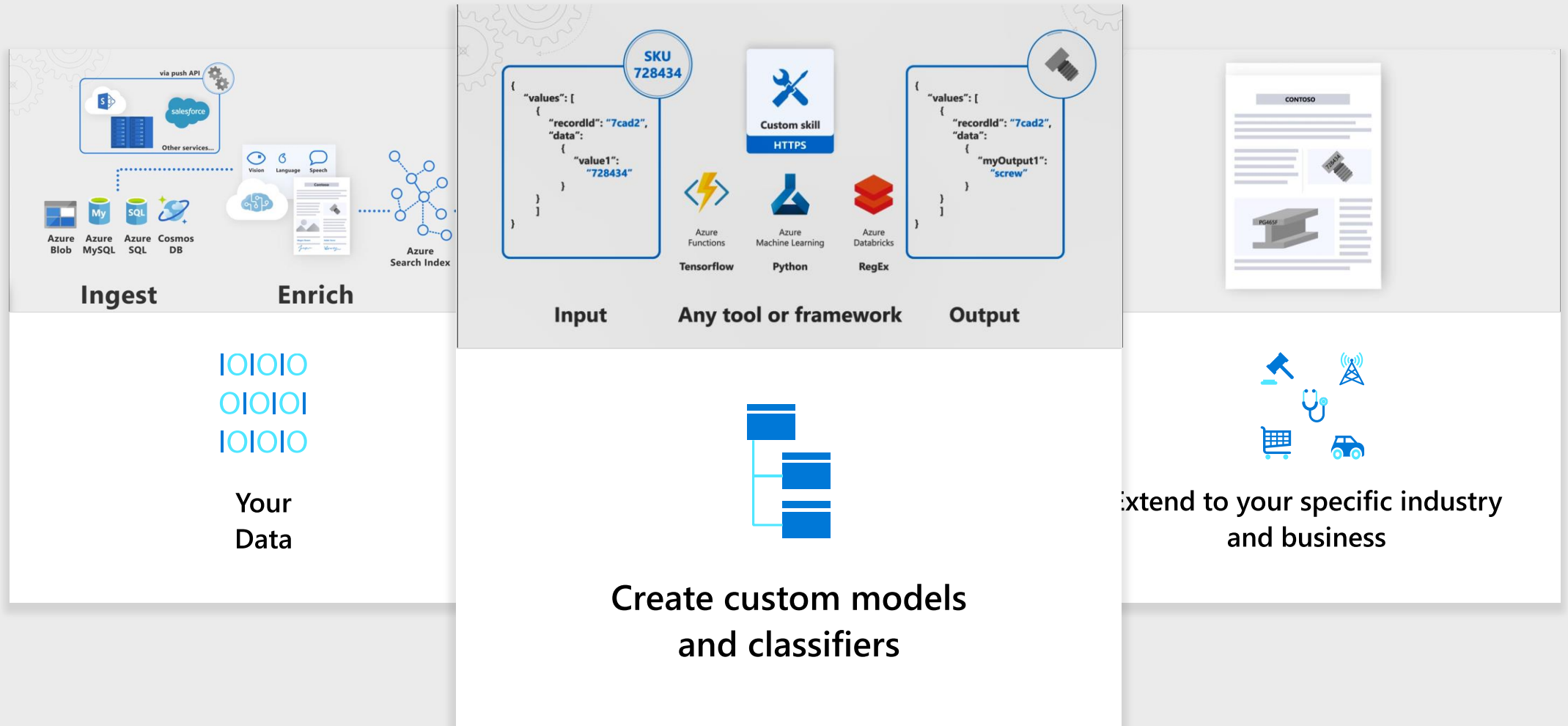
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IMPLEMENTED

EASILY
INTEGRATED

READILY
CUSTOMIZABLE

IOIOIO
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Your
Data

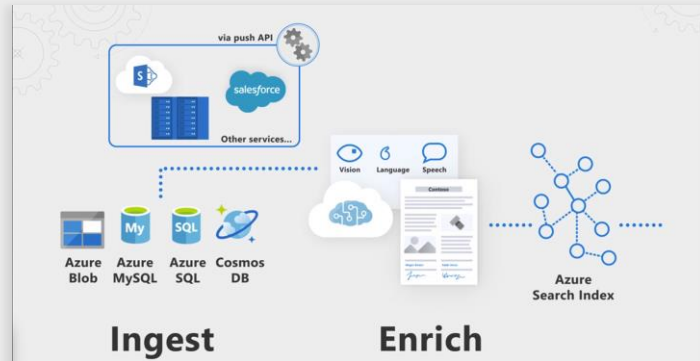
Input Any tool or framework Output

Create custom models
and classifiers

Extend to your specific industry
and business

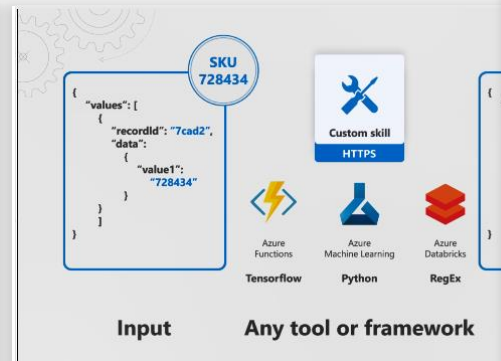
Readily Customizable

Optimize your search experience by integrating your own data to create custom models and classifiers that feed into Cognitive Search.



IOIOIO
OIOIOI
IOIOIO

Your Data



Create custom models and classifiers



Extend to your specific industry and business



EFFORTLESSLY IMPLEMENTED



EASILY INTEGRATED



READILY CUSTOMIZABLE



Knowledge Mining

With Form Recognizer

Form Recognizer

Start with any type of form



Quickly **extract text, tables and key value pairs** with simple REST API calls

Chevron

Company Name: Chevron
 Report Period: Q1 2023
 Report Type: Quarterly Report

Category	Item	Value	Unit
Production	Crude Oil	1,200,000	Barrels
	Refined Petroleum	800,000	Barrels
	Natural Gas	500,000,000	Cubic Feet
	Chemicals	150,000	Barrels
	Other Products	100,000	Barrels
	Production Costs	1,500,000,000	Dollars
	Production Revenue	2,400,000,000	Dollars
	Production Profit	900,000,000	Dollars
	Production Margin	37.5%	%
	Production Efficiency	95%	%
Sales	Crude Oil	1,200,000	Barrels
	Refined Petroleum	800,000	Barrels
	Natural Gas	500,000,000	Cubic Feet
	Chemicals	150,000	Barrels
	Other Products	100,000	Barrels
Financials	Revenue	2,400,000,000	Dollars
	Expenses	1,500,000,000	Dollars
	Profit	900,000,000	Dollars
	Margin	37.5%	%
	Efficiency	95%	%

Report Generated: 2023-01-15
 Report ID: CHEV-Q1-2023-001

Chevron

Company Name: Chevron
 Report Period: Q1 2023
 Report Type: Quarterly Report

Category	Item	Value	Unit
Production	Crude Oil	1,200,000	Barrels
	Refined Petroleum	800,000	Barrels
	Natural Gas	500,000,000	Cubic Feet
	Chemicals	150,000	Barrels
	Other Products	100,000	Barrels
	Production Costs	1,500,000,000	Dollars
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Sales	Crude Oil	1,200,000	Barrels
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	Natural Gas	500,000,000	Cubic Feet
	Chemicals	150,000	Barrels
	Other Products	100,000	Barrels
Financials	Revenue	2,400,000,000	Dollars
	Expenses	1,500,000,000	Dollars
	Profit	900,000,000	Dollars
	Margin	37.5%	%
	Efficiency	95%	%

Report Generated: 2023-01-15
 Report ID: CHEV-Q1-2023-002

Chevron

Company Name: Chevron
 Report Period: Q1 2023
 Report Type: Quarterly Report

Category	Item	Value	Unit
Production	Crude Oil	1,200,000	Barrels
	Refined Petroleum	800,000	Barrels
	Natural Gas	500,000,000	Cubic Feet
	Chemicals	150,000	Barrels
	Other Products	100,000	Barrels
	Production Costs	1,500,000,000	Dollars
	Production Revenue	2,400,000,000	Dollars
	Production Profit	900,000,000	Dollars
	Production Margin	37.5%	%
	Production Efficiency	95%	%
Sales	Crude Oil	1,200,000	Barrels
	Refined Petroleum	800,000	Barrels
	Natural Gas	500,000,000	Cubic Feet
	Chemicals	150,000	Barrels
	Other Products	100,000	Barrels
Financials	Revenue	2,400,000,000	Dollars
	Expenses	1,500,000,000	Dollars
	Profit	900,000,000	Dollars
	Margin	37.5%	%
	Efficiency	95%	%

Report Generated: 2023-01-15
 Report ID: CHEV-Q1-2023-003

Chevron

Company Name: Chevron
 Report Period: Q1 2023
 Report Type: Quarterly Report

Category	Item	Value	Unit
Production	Crude Oil	1,200,000	Barrels
	Refined Petroleum	800,000	Barrels
	Natural Gas	500,000,000	Cubic Feet
	Chemicals	150,000	Barrels
	Other Products	100,000	Barrels
	Production Costs	1,500,000,000	Dollars
	Production Revenue	2,400,000,000	Dollars
	Production Profit	900,000,000	Dollars
	Production Margin	37.5%	%
	Production Efficiency	95%	%
Sales	Crude Oil	1,200,000	Barrels
	Refined Petroleum	800,000	Barrels
	Natural Gas	500,000,000	Cubic Feet
	Chemicals	150,000	Barrels
	Other Products	100,000	Barrels
Financials	Revenue	2,400,000,000	Dollars
	Expenses	1,500,000,000	Dollars
	Profit	900,000,000	Dollars
	Margin	37.5%	%
	Efficiency	95%	%

Report Generated: 2023-01-15
 Report ID: CHEV-Q1-2023-004

Chevron

Company Name: Chevron
 Report Period: Q1 2023
 Report Type: Quarterly Report

Category	Item	Value	Unit
Production	Crude Oil	1,200,000	Barrels
	Refined Petroleum	800,000	Barrels
	Natural Gas	500,000,000	Cubic Feet
	Chemicals	150,000	Barrels
	Other Products	100,000	Barrels
	Production Costs	1,500,000,000	Dollars
	Production Revenue	2,400,000,000	Dollars
	Production Profit	900,000,000	Dollars
	Production Margin	37.5%	%
	Production Efficiency	95%	%
Sales	Crude Oil	1,200,000	Barrels
	Refined Petroleum	800,000	Barrels
	Natural Gas	500,000,000	Cubic Feet
	Chemicals	150,000	Barrels
	Other Products	100,000	Barrels
Financials	Revenue	2,400,000,000	Dollars
	Expenses	1,500,000,000	Dollars
	Profit	900,000,000	Dollars
	Margin	37.5%	%
	Efficiency	95%	%

Report Generated: 2023-01-15
 Report ID: CHEV-Q1-2023-005

The Form Recognizer difference



Quickly and accurately
extract text and
structure without code



Stay confident with a
secure and private
foundation



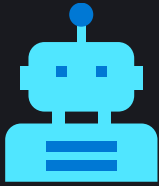
Flexibility to apply
anywhere from the
cloud to the edge



Customize
to your
forms

Quickly extract text, keys, and tables from your documents

Core Scenarios



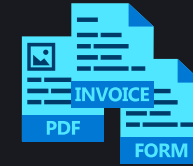
Robotic process automation

"My company manually enters data from documents into structured schema, or hires 3rd party companies to processing forms, and the cost per page is prohibitive."



Intelligent search indexes

"My company manually reads thousands of forms (invoices, tax forms, etc.) to find important information like PO amounts, totals on tax forms, etc."



Industry-specific applications

"My company has industry-specific documents like drilling reports or medical reports, that our teams need to analyze for a variety of purposes like internal benchmarking and patient processing."

Demo

<https://art-explorer.azurewebsites.net/search>