

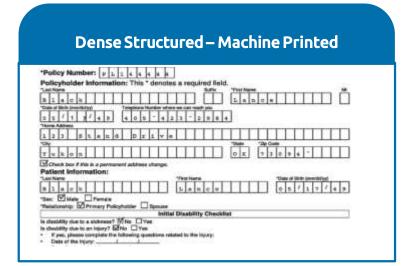
# SOGETI - CDP

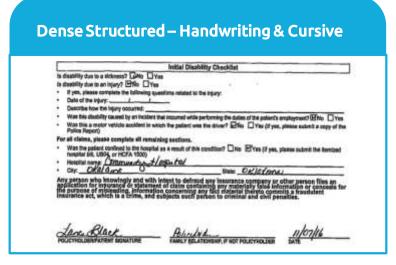
July 2020

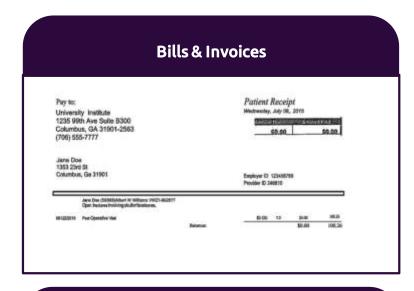


### **VARIATIONS OF FORMS/DOCUMENTS**

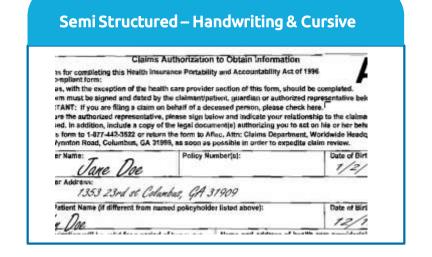


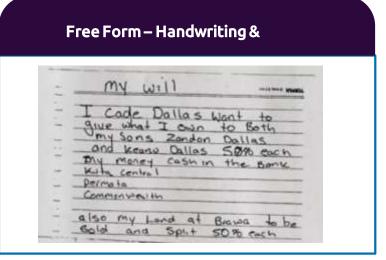






#### Semi Structured - Machine Printed Run Number: 23681 Date of Service: 05/0712015 ACCMENTED Patient Name: Jane Doe CENTER SECTION OF STREET STREET STREET, SECTION SECTIO No Jane Don Drawff III Sunbai Date Bed Millimeter Depart | 4 to 31 05 55 to Darfold Reta Pressu Patr of CareOla - commen see money seed umupho Perc Deber \*1984 10200004 WHAT IS THE PARTY OF MAN, TORCHOSTAN now, then self-th. New Yorks, Pt.-Handberger ox ff Pront, PS-fert-limity-st 6 has boat fulfer; DIFFERENCE CO.

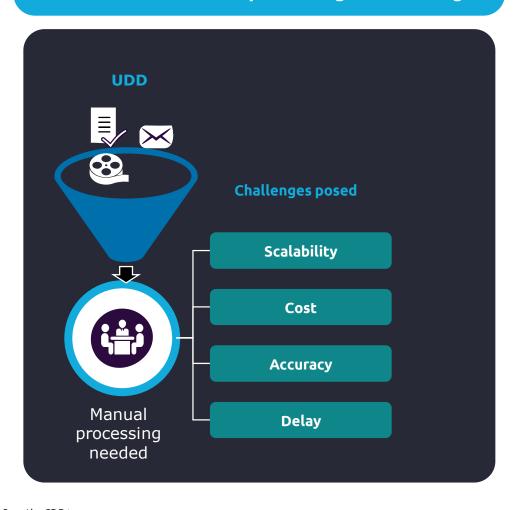




### WHAT IS CDP



#### **Unstructured Data processing is a challenge**



#### **CDP**

The Cognitive Document Processing solution can process unstructured data due to its Cognitive Capabilities caters to our Clients across Finance, Insurance, Manufacturing, Automobile - applicable to key processes like KYC, Claims, Lending, Customer Onboarding, Title processing etc.

#### **Uses Human like Recognition**

- Capable of analyzing structured and unstructured Documents
- Identification of the scanned and handwritten text using OCR/ICR

#### **Uses Human like Reasoning**

Key phrase extraction, topic modeling, document Classification Name and extraction using NLP/DL, relationship establishment using graph theory

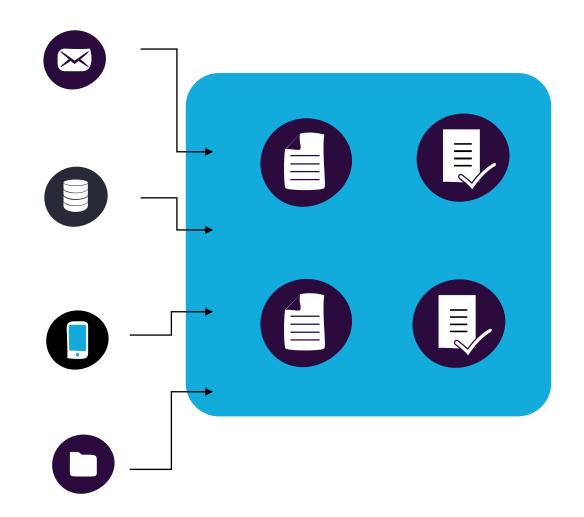
#### Learns with human assistance

Continuous learning by feedback loop



#### **DATA INGESTION**

With variety of data ingestion integration, CDP is equipped to process documents from various sources





#### **CLASSIFICATION AND CATEGORIZATION**

Deep Learning Models to recognize the documents and classify the documents into different categories.

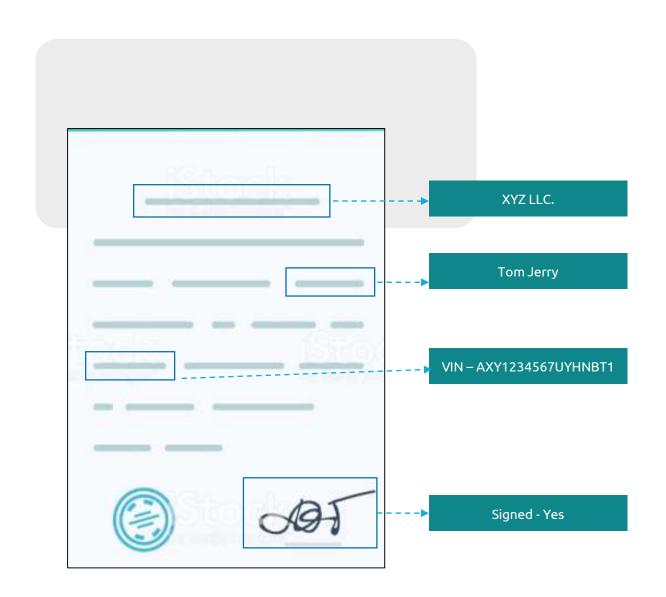




#### **EXTRACTION**

Deep Learning Models to extract relevant information from the categorized documents.

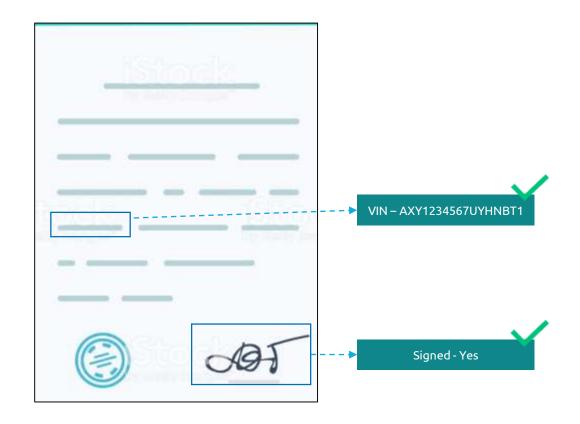
- Key Value Field Data
- Handwritten text
- Check box and radio buttons





#### **VALIDATION**

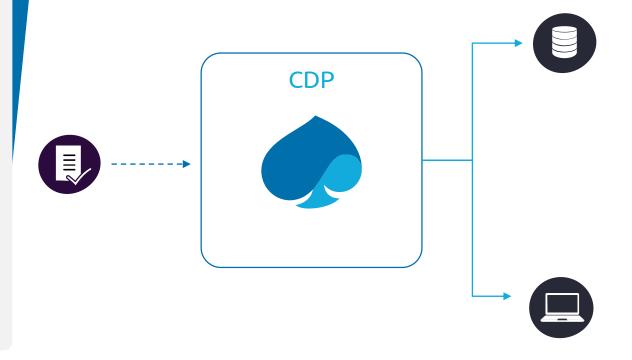
Automated Validation models ensures accuracy and contextual enrichment





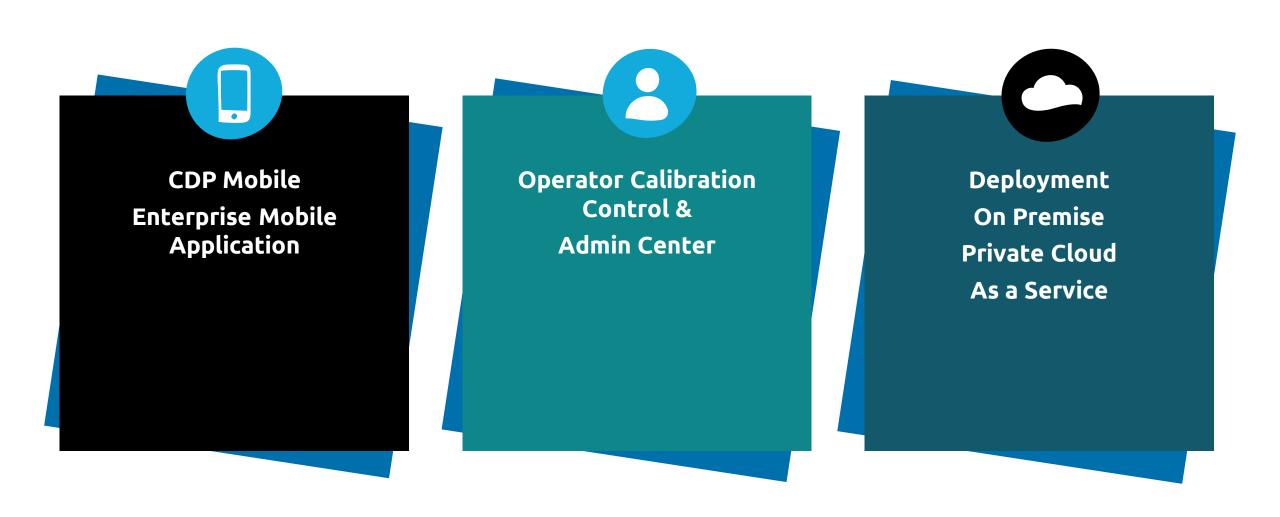
#### **INTEGRATION**

API based output that can be integrated with any of the downstream application



### **EXTENDED CAPABILITIES**





### **HOW DOES CDP BRING VALUE TO OUR CLIENTS?**





#### **Reduced Costs**



"Read" and store handwritten and text images and convert to alphanumeric strings in seconds



Deep Learning to improve Data Quality



Automated Data Validation with final Confirmation enabled for user who enters the Data



Digital Workplace Enablement



Real-time KPI Reporting and Analytics to drive actions in Data Governance



Manage Complex array of Data Sources



### **CDP VS ALTERNATIVES**



### Pay as you go model

#### Zero touch Processing

Uses advanced AI and can handle various formats of the same document type

Not a tool. It's a Solution to fit any client portfolio



#### Can Extract -

- Signatures
- Handwritten
- Free text (No Key data)
- Radio buttons
- Check boxes
- Tables(bordered or borderless)

Web API base output - Easy integration with client applications



### **APPLICATIONS OF CDP**





#### Customer **Onboarding**

- Process KYC documents by extracting **RIGHT** information
- Auto-Fill and Validate the Application Form
- Highlight the Incorrect or Missing information



#### Mortgage **Processing**

- Scan and Categorize the Loan **Application Documents**
- Extract Key Information
- Assess and Finalize the Applicant's Creditworthiness



#### **BPO process Automation**

- Cheques, vouchers, invoice document processing using business and logical rules
- Use RPA to interact with applications



#### Contract Intelligence

 Automated Evaluation of Contract terms (Highlight major terms and provide recommended actions)



#### **Cheque Fraud Prevention**

- Identify Handwritten Text
- Signatures Validation & Verification
- Process Payments



#### Claims **Processing**

Automatically capture useful written or printed data from a large number of scanned claims for faster processing



#### Environment **Analysis**

- Scan Social Media, News,
- Highlight noteworthy happenings (NLG)

### **EXAMPLE - THE CURRENT WAY**





**Back Office Staff** 

Receives the document and classifies the document on the basis of type of the document

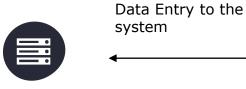


Documents are converted to electronic copy

Scanner



- 10 Million Documents/ year
- 400+ Back Office Staff
- Manual Classification of **Documents**
- Manual Data Extraction
- Manual Data Entry
- **Manual Errors**
- High Processing time.





E-copy of the documents is processed manually-

- Validating the documents
- Extracting the required details.

**Consuming Application** 

**Back Office Staff** 

### **EXAMPLE - THE AI WAY**



## **CDP API** Document Type Extracted values Scanned Documents Prediction ассигасу



CDP AI ML based solution

- Powered with MS Cognitive Services
- OCR with Computer Vision
- Automatically detect document type
- Read, understand and extract key information
- Continuous training for higher accuracy

- **Automated Solution**
- Powered with AI and ML
- Manage Document Volume
- **Reduced Operating Cost**
- Higher Accuracy
- Reduced Processing Lead Time
- Multiple Format and Type Support
- **Exception Handling**

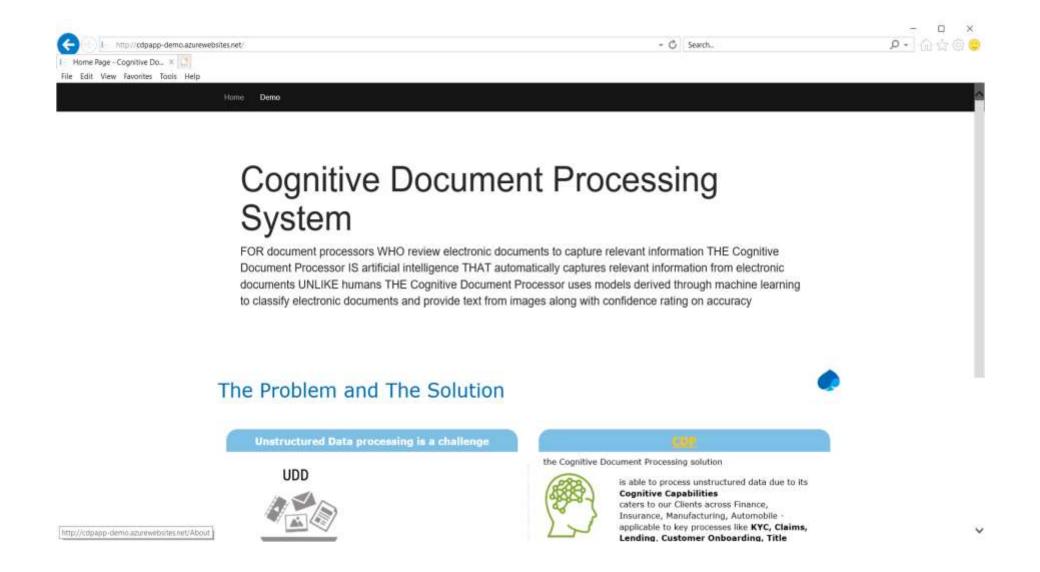


Mail room Staff



**Business Application** 



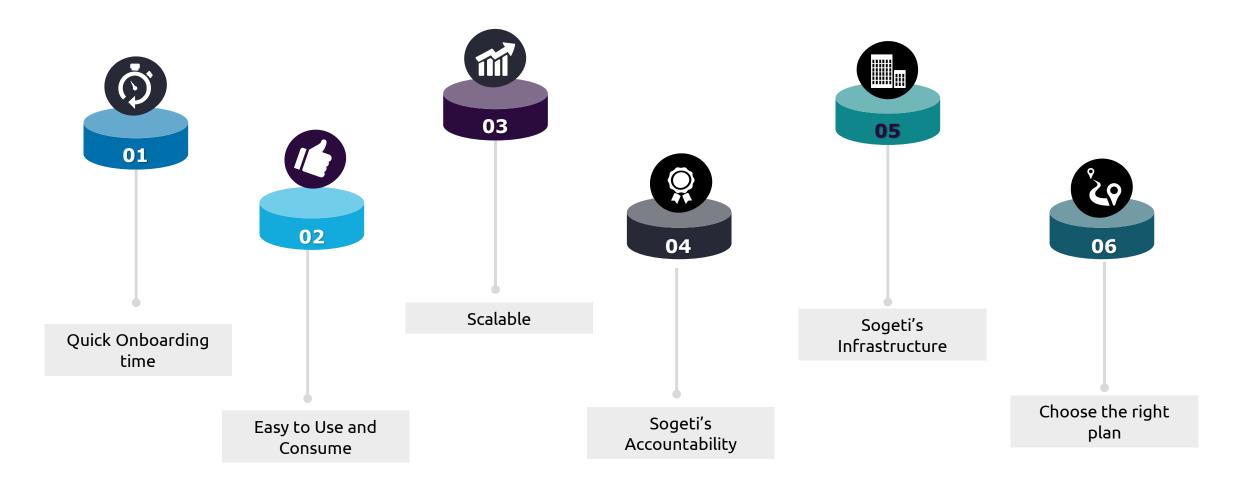






### **CDP AS A SERVICE - VALUES**





### CDP – AS A SERVICE PLANS



	Basic	Premium	
Language Supported	English	English, Swedish, Dutch	
Maximum Number of data fields* formats	10, 25	No Limit	
Type of Fields Supported	Key value Paired – Printed and hand written	Key value Paired – Printed and hand written, Radio Button, check boxes, Free text and Signature Detection	
Price Per Page Scanned	0.20 Euro	0.15 Еиго	
Price per new data Field**	500 Euros	Basic: 500 Euros (Max 15 historic Premium: 800 Euros Formats)	
Price Per new Format	1000 Euros	1250 Euros – Max 100 Fields	
Price Per new Language	NA	1500 Euros	

<sup>\*</sup>Maximum allowed data fields across all trained formats under the subscription.

\*\* Time and Cost for training all the historical formats on new field for premium services may vary depending on the volume of historical formats.

### **CDP AS A SERVICE - TIMELINE**



Onboarding

1 Week







**Event** 

New Field

New Format

Time

1 Week

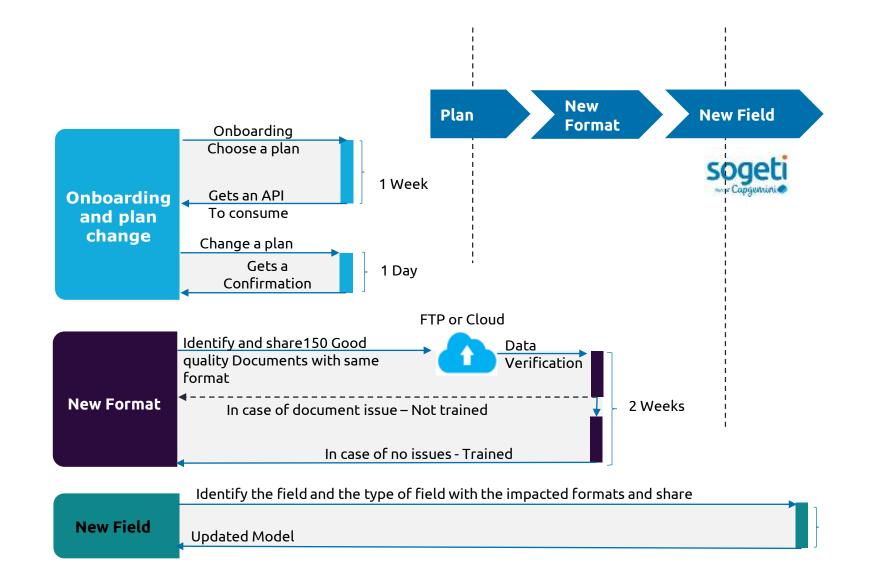
2 Weeks

### **HOW IT WORKS**









Sogeti - CDP | August 2021

1 Week

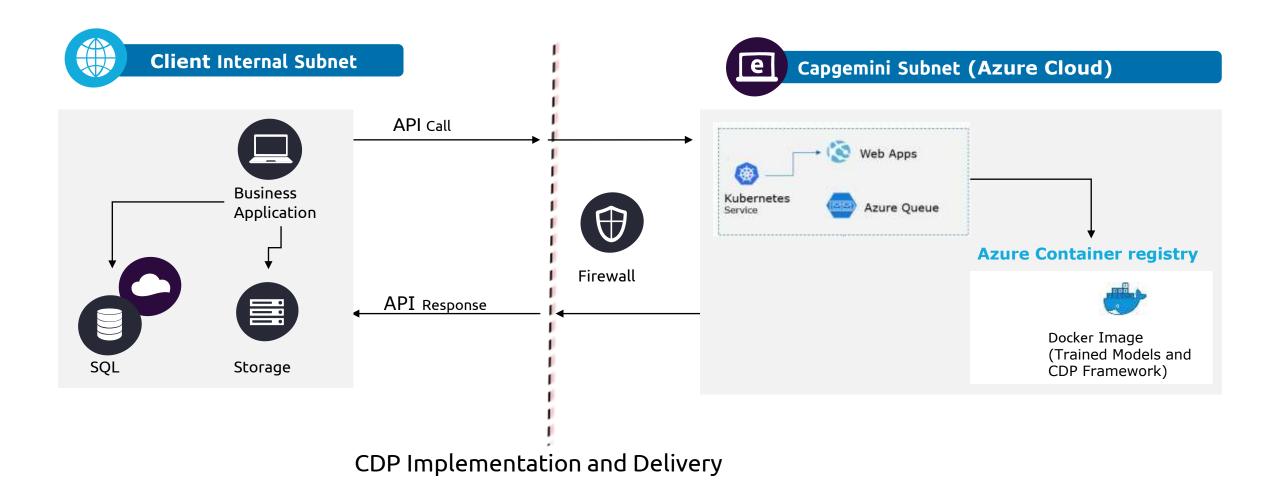
### **EXAMPLE - BASIC**



	New Customer	Additional Format Requirement	Additional Field Requirement
Existing Formats	0	1	2
New Requested Format	1	1	0
Format Fees	1000 X 1 = 1000 Euros	1000 X 1 = 1000 Euros	1000 X 0 = 0
New Data Fields Requested	5	0	3
Existing Fields	0	5	5
Field Fees	5 X 500 = 2500 Euros	Existing Field = 5 X 0 = 0 (up to 10 Fields) New Field = 0 X 500 = 0	Existing Field = 5 X 0 = 0 (up to 10 Fields) New Field = 3 X 500 = 1500 Euros
Total Fees	3500 Euros	1000 Euros	1500 Euros
Cumulative Fees	6000 Euros		
Comments	Total 1 format with 5 fields trained	Total 2 Formats with the existing 5 fields trained for all the formats.	Total 8 fields will be trained on all applicable formats



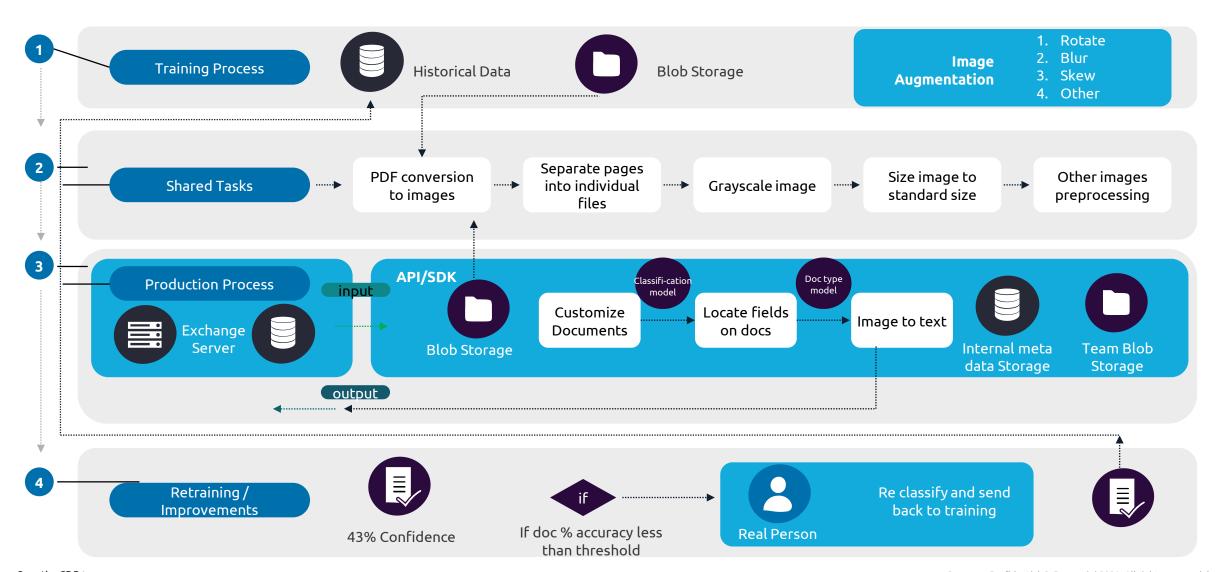
### CDP ARCHITECTURE - CDP AS A SERVICE





### **SOLUTION – AZURE CLOUD AND ON PREMISE**







### CDP - ON PREMISE AND CLOUD - IMPLEMENTATION ROADMAP



Phase 1 **Proof of Concept** 



Phase 2 Implementation



Phase 3 Scaling

### CDP – ON PREMISE AND CLOUD - PROOF OF CONCEPT



01 **Client Overview** 

- Overview of client environment, tools & architecture, data quality
- Capture scope of paper inputs
- Define and agree baseline KPIs
- Compliance landscape

02 **Model Development** 

- Development and deployment strategy
- Develop a custom CDP solution depending on a data type and complexity
- Train / test / tune

**Deployment** 

- Measure outcomes against baseline KPIs
- Deploy Docker container and other Services
- Next Steps

3 days

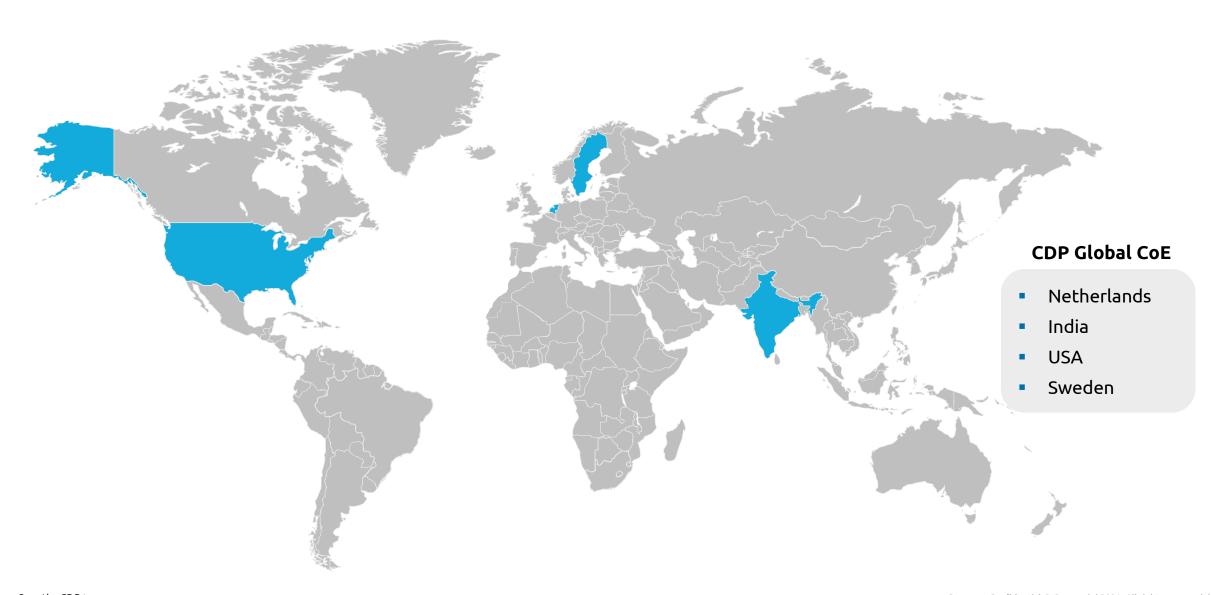
4 Week Sprint

On-prem or Cloud

40K USD

### **DELIVERY THROUGH A GLOBAL COE**





### CDP COE - WHO ARE WE?





Mark Oost – CTO Analytics & A.I.



**Arun Sahu** AI/ML Specialist India



**Anurag Sharma** AI/ML Specialist USA



Deepa Mamtani AI/ML Specialist NL



Michael Ohlsson AI/ML Specialist Sweden





Q&A

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