

[www.polydocs.io](http://www.polydocs.io)  
[info@polydocs.io](mailto:info@polydocs.io)

# POLYDOCS

Almost all business processes  
begin, include or end with a document.

## THE PLATFORM OF DIGITALIZATION FOR BUSINESS PROCESS AUTOMATION - INCLUDING DOCUMENTS



# WHO ARE WE?







**Inês Brandão**  
Managing Consultant  
@ POLYDOCS GmbH



**Robin Mönikheim**  
Product Owner  
@ POLYDOCS GmbH

# POLYDOCS GMBH

**Polydocs GmbH develops software that helps you with your digitalization.**

POLYDOCS is laser-focused on delivering AI-based document processing platform to accelerate digitalization in your ecosystem. Data from documents are read, captured, and integrated with existing systems to leverage the data and automate tasks and processes with higher accuracy and immediate incremental value.

**Website:**

<https://polydocs.io/>

**Contact:**

[info@polydocs.io](mailto:info@polydocs.io)



# POLYDOCS VISION & CULTURE

01

We leverage technologies to deliver innovative solutions with **significant business value** for our customers to accelerate their **digitalization** for their **business process automation**.

02

We build products and provide professional services for our customers, partners and our community to empower them to achieve **higher productivity, enhanced agility and reduced operational costs**.

03

We focus on delivering business value, **accelerate cloudification, data integration and technology adoption**.





# TABLE OF CONTENTS

## 01

Definitions with main trends & challenges on current business processes.

## 02

Our AI-based Cloud-solution for business automation digitizing documents.

## 03

Our workflow automation solution to integrate and automate business processes.

## 04

Our agile project implementation explained step by step.



01

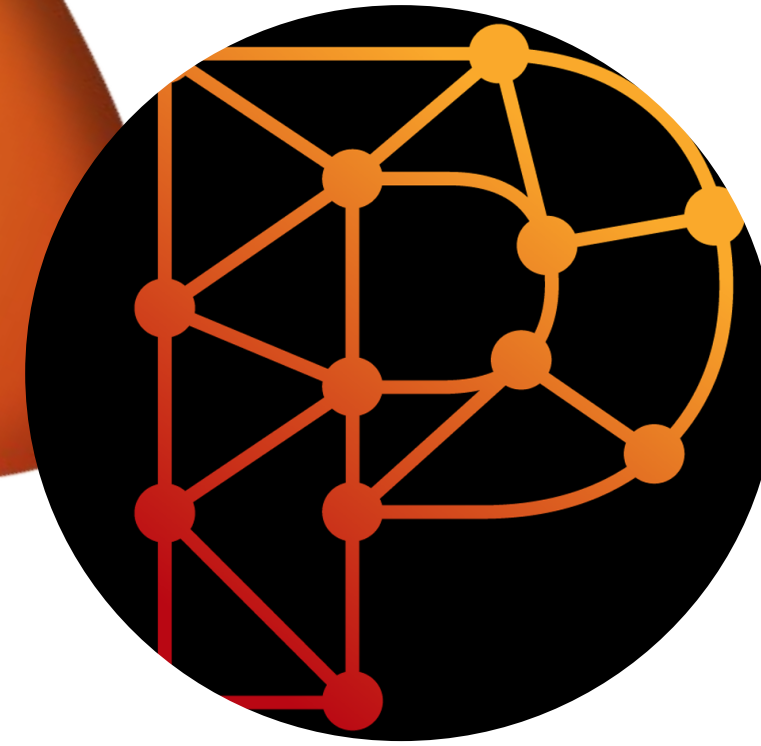
# DEFINITIONS WITH MAIN TRENDS & CHALLENGES ON CURRENT BUSINESS PROCESSES.





# WHAT WE DO?





## THINK DIGITAL

**We help our customers to multiply their stream of revenues by supporting them in digitalization.**





# WHAT IS DIGITALIZATION?





# KEY DEFINITIONS

## DIGITIZATION VS. DIGITALIZATION VS. DIGITAL TRANSFORMATION



### DIGITIZATION

Digitization refers to creating a digital representation of physical objects or attributes. For instance, we scan a paper document and save it as a digital document (e.g., PDF). In other words, digitization is about converting something non-digital into a digital representation or artifact.

### DIGITALIZATION

Digitalization refers to enabling or improving processes by leveraging digital technologies and digitized data. Therefore, digitalization presumes digitization. Digitalization improves an existing business process or processes but doesn't change or transform them. It takes a process from a human-driven event or series of events to software-driven.

### DIGITAL TRANSFORMATION

Digital transformation is about the entire transformation of the company. Digital transformation includes other changes brought about by digitalization. New business areas or business models can open along the way.







# KEY DEFINITIONS

## DIGITIZATION VS. DIGITALIZATION VS. DIGITAL TRANSFORMATION



### SUMMARY

**Digitization** refers to creating a digital representation of physical objects or attributes.

**Digitalization** refers to enabling or improving processes by leveraging digital technologies and digitized data.

**Digital Transformation** is really business transformation enabled by digitalization.



# WHAT DO WE NEED FOR DIGITALIZATION?





# WHAT DO WE NEED FOR DIGITALIZATION?

## STEP 1: DOCUMENT INGESTION



01

**Scanning**, to turn paper documents—physical mail, for example—into digital images.

02

**Optical character recognition (OCR)**, to detect characters in the digital images and convert the output of a scanner or fax machine into digitally stored text

03

**Data extraction**, to pull out relevant pieces of information from the OCR output and other digital sources (for e.g., email or online chats).

04

**Interpretation**, to take effective, logical steps to transfer the information to relevant IT systems

05

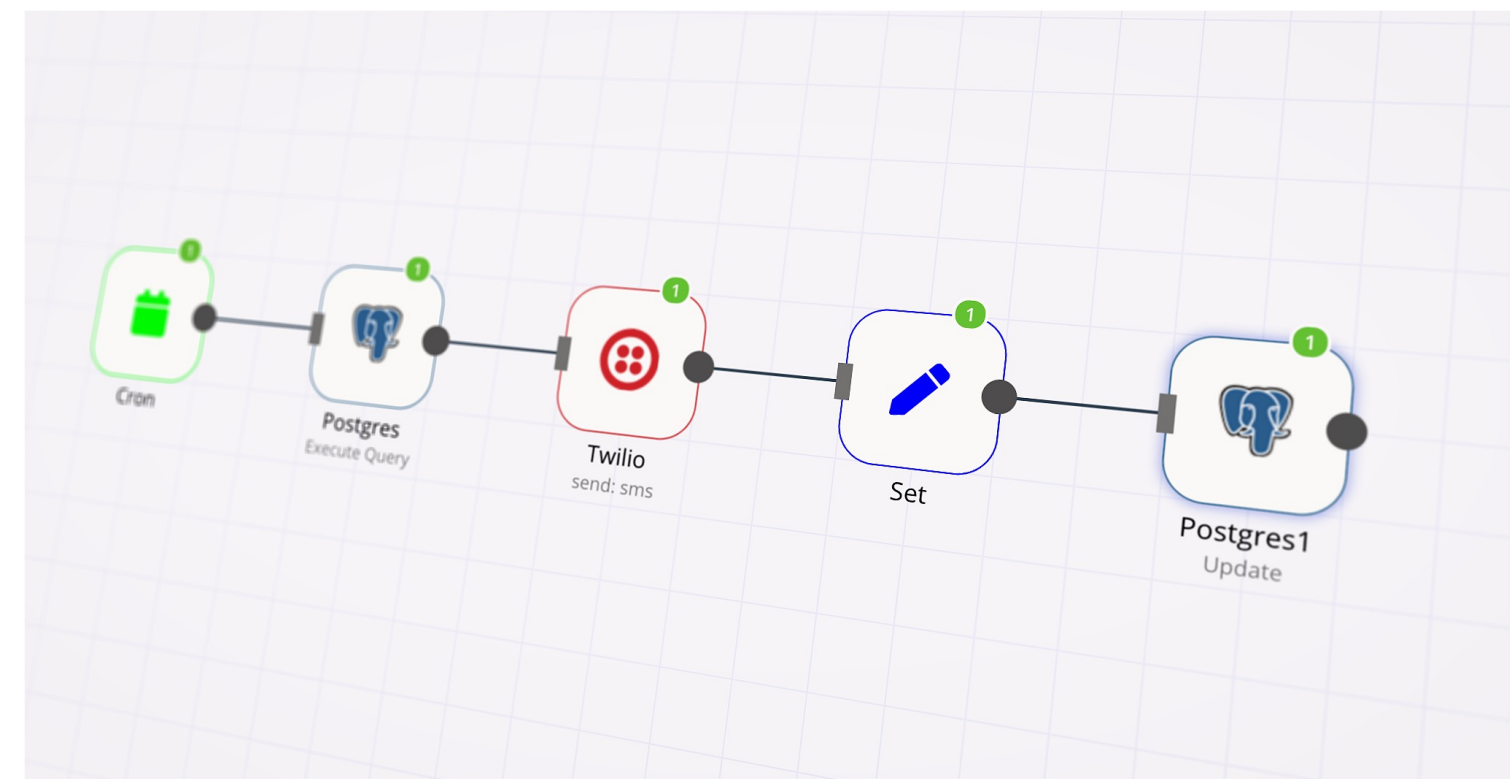
**Exception handling**, to recognize errors and uncommon scenarios and provide alternative routes for their proper handling

# WHAT DO WE NEED FOR DIGITALIZATION?

## STEP 2: BUSINESS PROCESS AUTOMATION

Data utilization, to ensure awareness of newly available information, trigger relevant workflows, integrate data into consolidated views of consumers and providers, automate processing, and ensure data security.

- Document dataflows
- Automatic process workflows
- Automatic data triggers
- Low-code platforms





# LATEST TRENDS & CHALLENGES





# LATEST TRENDS

## Prioritize automation based on business value.

Companies need to determine which automations will have the most positive impact on customers and employees, such as in the areas of customer loyalty, finance and accounting, and operational processes.

## Automate the entire process end-to-end.

To digitally transform these types of processes, intelligent automation platforms must be able to ingest unstructured data from financial documents, contracts, forms, images or digital assets.

## Automation requires processor optimization.

Process orchestration combines complex task automation and deep process automation within end-to-end business workflows, creating seamless collaboration between human and digital workers.





# MAIN CHALLENGES

Companies are held back in leveraging data kept in documents.

+ COVID 19 is forcing companies into efficiency gains via digitization.

## TOO HIGH INVESTMENTS

Current offerings are too expensive, too complex to implement and to operate because of outdated technology.

## CLOSED FOR INTEGRATION

Companies experience expensive and restricted integration options, and they are kept from delivering innovation securely by leveraging the data in documents.

## INSUFFICIENT AUTOMATION

Too complex and limited solutions are overwhelming the users and prevent successful digitalization of documents and significantly lower productivity gains.



02

# OUR AI-BASED CLOUD-SOLUTION FOR BUSINESS AUTOMATION DIGITIZING DOCUMENTS.





# INTELLIGENT DOCUMENT PROCESSING

## STATE OF THE ART



### PHASE 0

Manual processing  
with no automation.



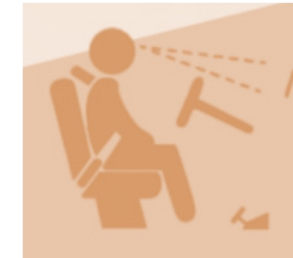
### PHASE 1

Simple template-  
based extraction.



### PHASE 2

Training-based  
document processing  
relying heavily on  
annotation and  
training based on a lot  
of documents.



### PHASE 3

Autonomous  
extraction relying on  
few-shot training.



### PHASE 4

Zero-shot  
autonomous  
extraction with rare  
exception handling.



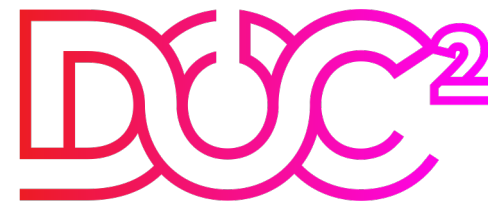
### PHASE 5

Fully autonomous  
document processing.

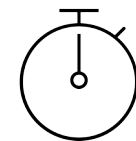


# DOC<sup>2</sup> – INTEGRATED DOCUMENT PLATFORM

DOC<sup>2</sup> powers innovation by digitization of documents across industries.



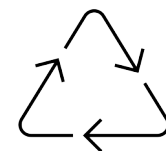
DOC<sup>2</sup> is the **integrated document platform** that enables every company across industries to leverage data within documents to **optimize business processes** and enhance productivity, fully integrated with their existing landscape such as ERP or CRM solutions.



Fast implementation time.



Self-service model for efficient support.



Short innovation cycle with integrated workflow engine

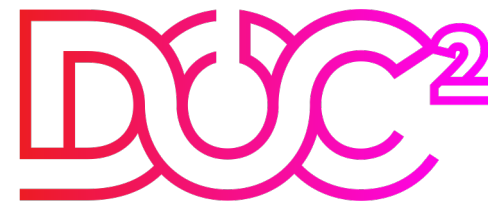
Based on our AI and process experience, we integrated the plugin technology into an encompassing **integrated document platform** for document processing, including **workflow capabilities** and a **document management system**.



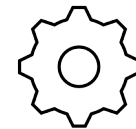


# DOC<sup>2</sup> – INTEGRATED DOCUMENT PLATFORM

At it's Core, DOC<sup>2</sup> is a modular document platform leveraging the data and documents in easy-to-implement workflows & create innovative solutions.



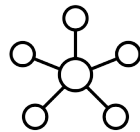
AI to classify documents based on layouts.



API Architecture & ease of integration.



Document Management & Workflow System.



Deep Learning to capture content.



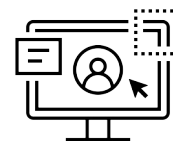
Secure Cloud in Germany.



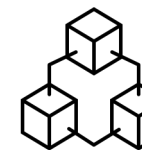
Numerous Use Cases across industries.



Swarm intelligence and self-learning system.



Modern, simple UI.  
No IT resource required.

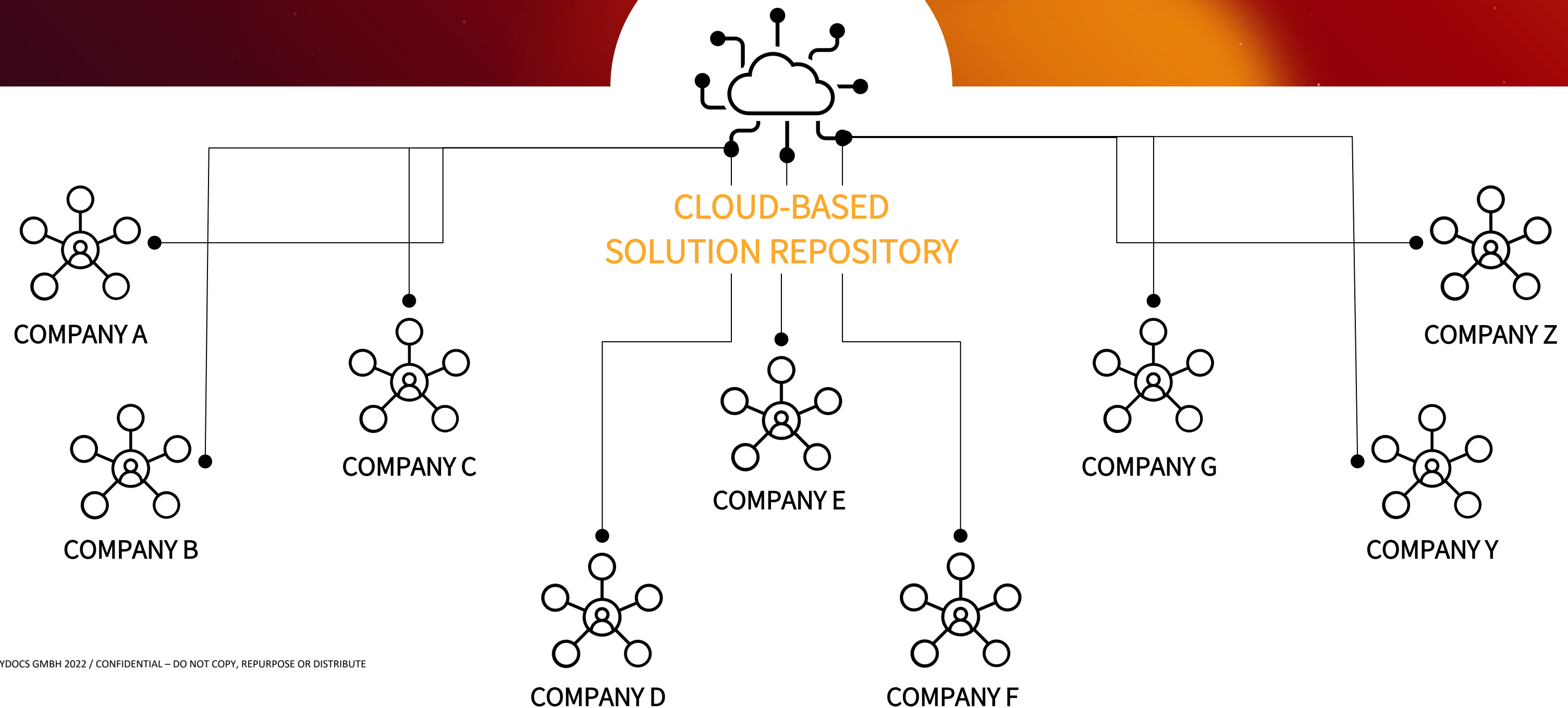


Seamless migration from legacy solutions.



# DOC<sup>2</sup> – INTEGRATED DOCUMENT PLATFORM

DOC<sup>2</sup> enables swarm intelligence and the AI is trained by the user as well as the models are improved by the feedback of the users.





# SOLVED CHALLENGES

**We have an open and scalable cloud and API-driven IT architecture.**

**+ DOC<sup>2</sup> is the only true document platform with plug&play, self-learning AI applying swarm intelligence.**

## LOW EFFORT & LOW TIME-CONSUMING PROCESS

DOC<sup>2</sup> leverages data within documents to optimize business processes and enhance productivity

## API ARCHITECTURE AND INTEGRATION VIA WEBHOOKS

DOC<sup>2</sup> is a modular platform which can be easily connected and integrated through API with other ERP systems such as Infor LN or Infor M3.

## SELF-LEARNING AND SWARM INTELLIGENCE

DOC<sup>2</sup> enables swarm intelligence and the AI is trained by the user as well as the models are improved by the feedback of the users. Continuous improvement.



03

**OUR WORKFLOW AUTOMATION  
SOLUTION TO INTEGRATE AND  
AUTOMATE BUSINESS  
PROCESSES.**



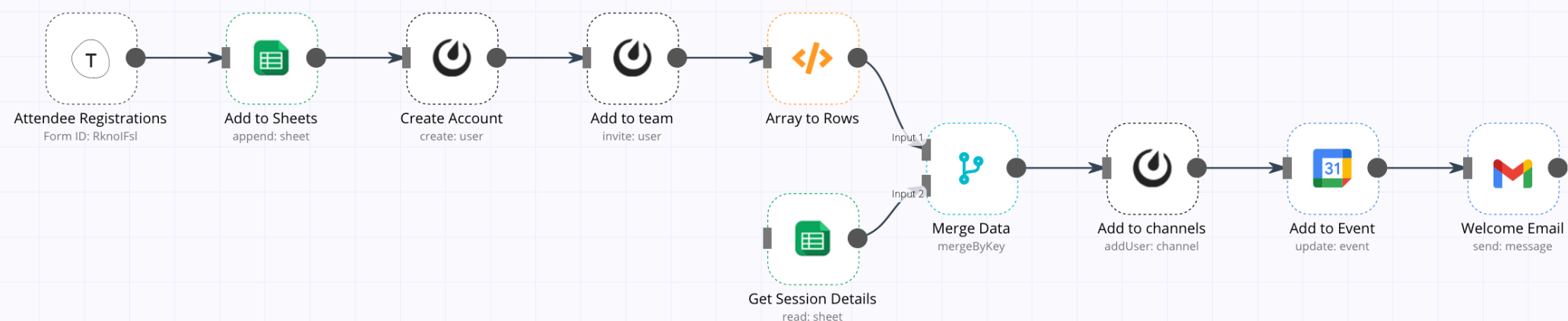
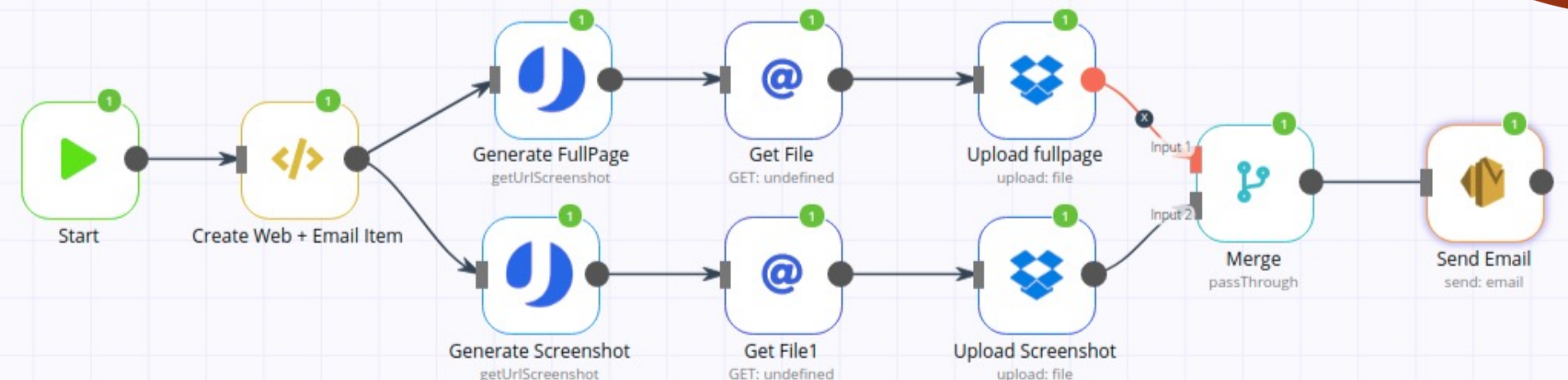


# THE POWER OF WORKFLOW AUTOMATION

- Simplify workflow design.
- Improve performance and results.
- Automate collaborative work.
- Automate your entire organization.

## INFINITE USE CASES

Build and deploy business rules, workflow, and unify data for consistent user experiences. More than 200 adapter and countless pre-configured templates of workflows.



# DEMO





# DOC<sup>2</sup> – DOCUMENT PROCESS WORKFLOW

## STEPS THROUGH THE PROCESS OPTIMIZATION



### IMPORT

E-Mail Connection  
Scanner-Dropfolder  
FileShare



### OCR

Optical character  
recognition



### CLASSIFY

Purchase orders  
Delivery notes  
Invoices  
Etc.



### EXTRACT

Extraction of all  
unstructured and  
valuable data.



### VERIFY

Validation of the  
content by the  
user, if necessary  
for AI Training.



### WORKFLOW

Approval,  
Notification  
triggers  
OR ANY  
AUTOMATION





# FINANCIAL SCENARIO CASE DEMO

FROM PURCHASE ORDER, TO ORDER CONFIRMATION, TO DELIVERY NOTE & TO INVOICE

Invoice Number

Invoice Date

Customer Address

Account Number

Fake Corp. GmbH Qualitätsmangos, Inweg. 42, D-12345 Blatzdell

Huber GmbH

Bernadistr. 4  
84323 Exciting

Invoice Number: 300870159  
Date: 23.04.2021  
Account: 177723

We invoice your order according to our General Terms of Business - see current catalogue.  
Concerning subsequent reduction of invoice amount we refer to possible agreements on payment conditions.

Your order No.	Order date	Order type	Name/Dept.
PO 30007667 / 18414820	05.10.2020	eShop order	Mango, José
Our order no. 43963707	Our del. note no.: 4724714919	Delivery on:	28.04.2021

Pos. No.	Qty.	Cat.No. Size	PO. No.	Material description	Unit Price	Discount %	Total EUR
00010	4	1	30007667	Mango set, 6 pcs. in a case	96,50	0,00-	476,00
00020	2	2	30007667	Mini mango set carbide 10 piece	67,00	0,00-	132,00
00030	3	3	30007667	Big mango set carbide 3 piece	32,00	0,00-	96,00
00040	4	4	30007667	Collection box for used mangos	12,00	0,00-	48,00
Sub Total					EUR		752,00
16,00% VAT					EUR		120,32
Total					EUR		872,32

Payment: Up to 20.10.2020 minus 2,00 % cash discount = 854,87 EUR  
Up to 05.11.2020 without deduction

Fake Corp. GmbH Qualitätsmangos  
Inweg. 42, D-12345 Blatzdell  
Tel. +49 12 8300-0, Fax +49 89 89 898  
E-Mail: info@mangodemo-group.com

Registrierung: München HRB 5497  
Ust-IdNr.: DE 150575919  
WEEE-Reg.-Nr.: DE 53679614

Geschäftsführung  
Mango José

Bankverbindungen:  
Bank Name - Belfort

BANK  
DE 12 3456 789 1000 5475 00

BIC:  
HYVEDA3333

01

Automatic import of documents through email connection or scanner drop folder connection.

02

Automatic & self-learning classification of document types and languages.

03

Automatic & self-learning extraction of index fields and line items of tables.

04

Fully integrated platform to Infor with supplier masterdata validation, PO matching and export. → WORKFLOW



04

# OUR AGILE PROJECT IMPLEMENTATION EXPLAINED STEP BY STEP.



# DOC<sup>2</sup> – ROLLOUT & IMPLEMENTATION

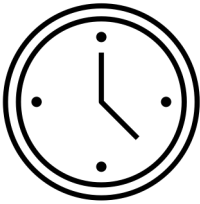
DOC2's AI enables superior on-boarding and immediate positive ROI for customers.

ROLLOUT

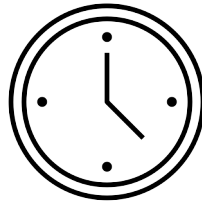
INTEGRATION

ACCURACY

DOC<sup>2</sup>



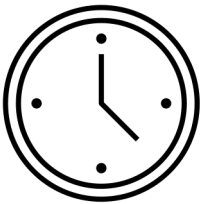
24 H



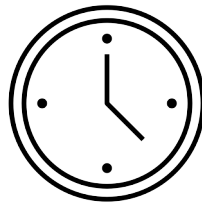
24 H

95 %

LEGACY



1 W



1 W

30 - 70 %





# DOC<sup>2</sup> – PROJECT PHASES

Successful business case for project completion.

LEGACY

INITIATION

DESIGN

CONFIGURATION

DEVELOPMENT

UAT

GO-LIVE

  
OPTIMIZATION



INITIATION


DESIGN

CONFIGURATION

DEVELOPMENT

UAT

GO-LIVE

  
SELF-OPTIMIZATION



**WE INVEST IN DIGITALIZATION  
LET'S DO IT TOGETHER!**



**Inês Brandão**  
[ines.brandao@polydocs.io](mailto:ines.brandao@polydocs.io)

[www.polydocs.io](http://www.polydocs.io)  
[info@polydocs.io](mailto:info@polydocs.io)

**POLYDOCS**

Almost all business processes  
begin, include or end with a document.

