



SAP TechEd [INT260]

Take Advantage of Templates in Document Information Extraction

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Dr. Tomasz Janasz, Dr. Karthik Muthuswamy

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Welcome and let's get started!



Presenters

- Dr. Tomasz Janasz, Area Product Manager
- Dr. Karthik Muthuswamy, Senior Data Scientist

Objective

Learn how to use **Document Information Extraction**, Extension Capabilities

Agenda

- Document Information Extraction Primer – 10 min
- Workshop – 90 min
- Use cases, reference architecture and consumption options – 10 min

Document Information Extraction Primer



Business document processing

Introduction

Business Documents

550B

estimated invoice
document volume in 2019

100B

estimated delivery note
volume in 2018

11B

paper receipts printed in
the UK alone per year

124B

business emails received
and sent per day

60%

sales orders come in via
unstructured documents

SAP AI Business Services Business Document Processing



Classify

**Document
Classification**

Classify incoming
documents



Extract

**Information
Extraction**

Extract semantical
information
from documents



Enrich

**Master Data
Matching**

Enrich extracted
information and match
extracted information
to your business data

Transform **unstructured documents** into **structured information** with machine learning-based document processing and embed the information into your business processes for **instant value**.

Instant Value



Automation

Increase efficiency and
enable teams to focus on
strategic tasks



Accuracy

Achieve more accurate
results than classical
systems



Speed

Process incoming
documents faster and
improve customer service

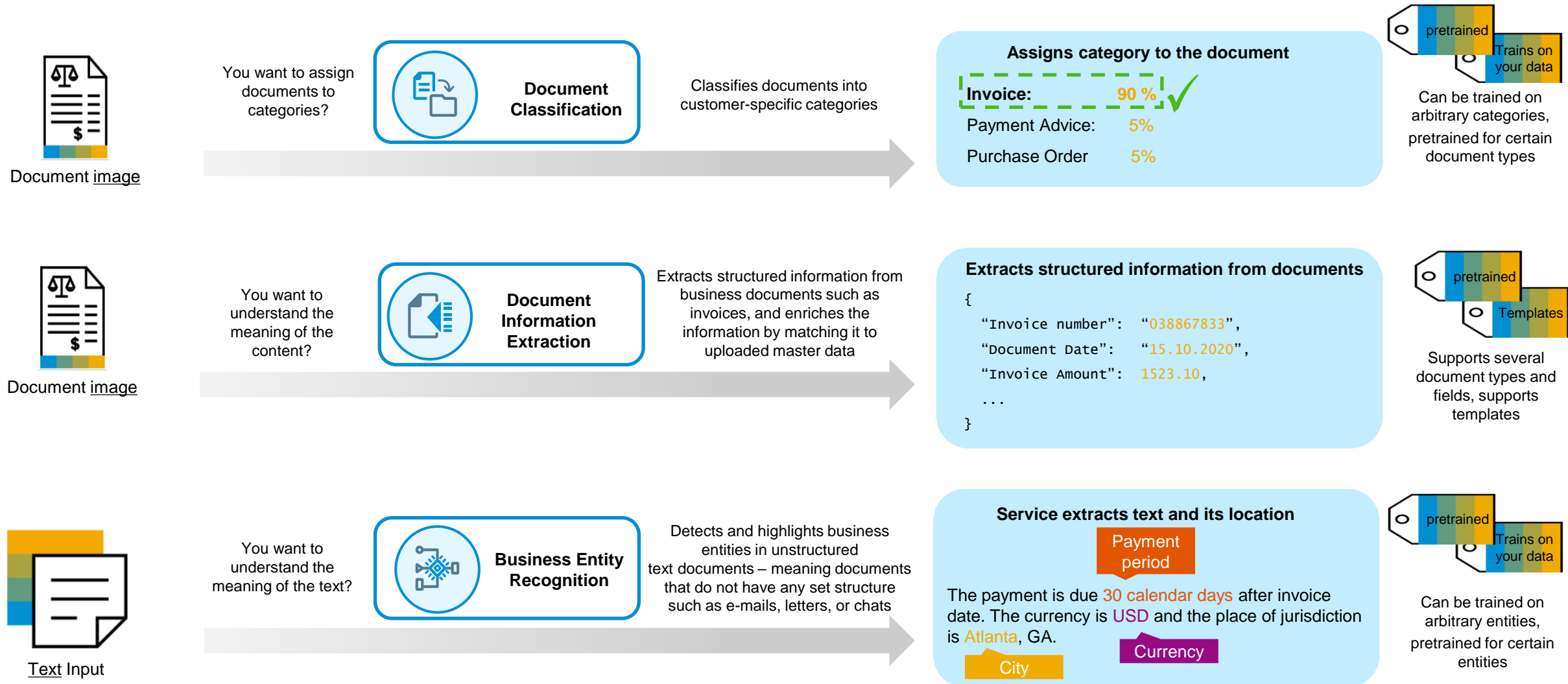


Cost

Reduce business
document processing
costs and leverage
advantages in follow-up
processes

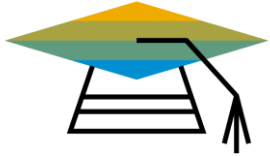
Business document processing

AI Business Services for business document processing



Document Information Extraction

Technical Overview & Roadmap



Machine Learning Models

- [Pre-trained global models](#)
 - Supplier Invoice
 - Payment Advice
 - Purchase Order
 - Business Cards (only via API)

Note:
Global models are managed by SAP
Subject to data access / co-innovation

- **Support** (per document type)
 - [Extracted Header Fields](#)
 - [Extracted Line Items](#)
- **Globalization**
 - ISO-8859-1 – Latin 1 character-encoding scripts
 - [Official languages](#) (per document type)
 - Data Centers: EU10, EU11, JP10, US10, AP10
- **Consumption**
 - [DOX API Reference](#)
 - [DOX User Interface Application](#)



Additional Capabilities

- [Business OCR](#)
 - [Official languages](#)
- [Enrichment Capabilities](#)
 - Business entity master data (e.g. supplier)
 - Employee master data
- **Extension Capabilities:**
 - [Template-based extraction](#)
 - [Schema Configuration](#)

Find also on
SAP Discovery Center



Roadmap Outlook ([LINK](#))

- Free tier option for Document Information Extraction
- Support for supplier invoices from additional countries
- Internationalization of the user interface of Document Information Extraction
- Document classification capability as part of Document Information Extraction API
- Further extension capabilities to be announced

Workshop

SAP TechEd
Github Repo

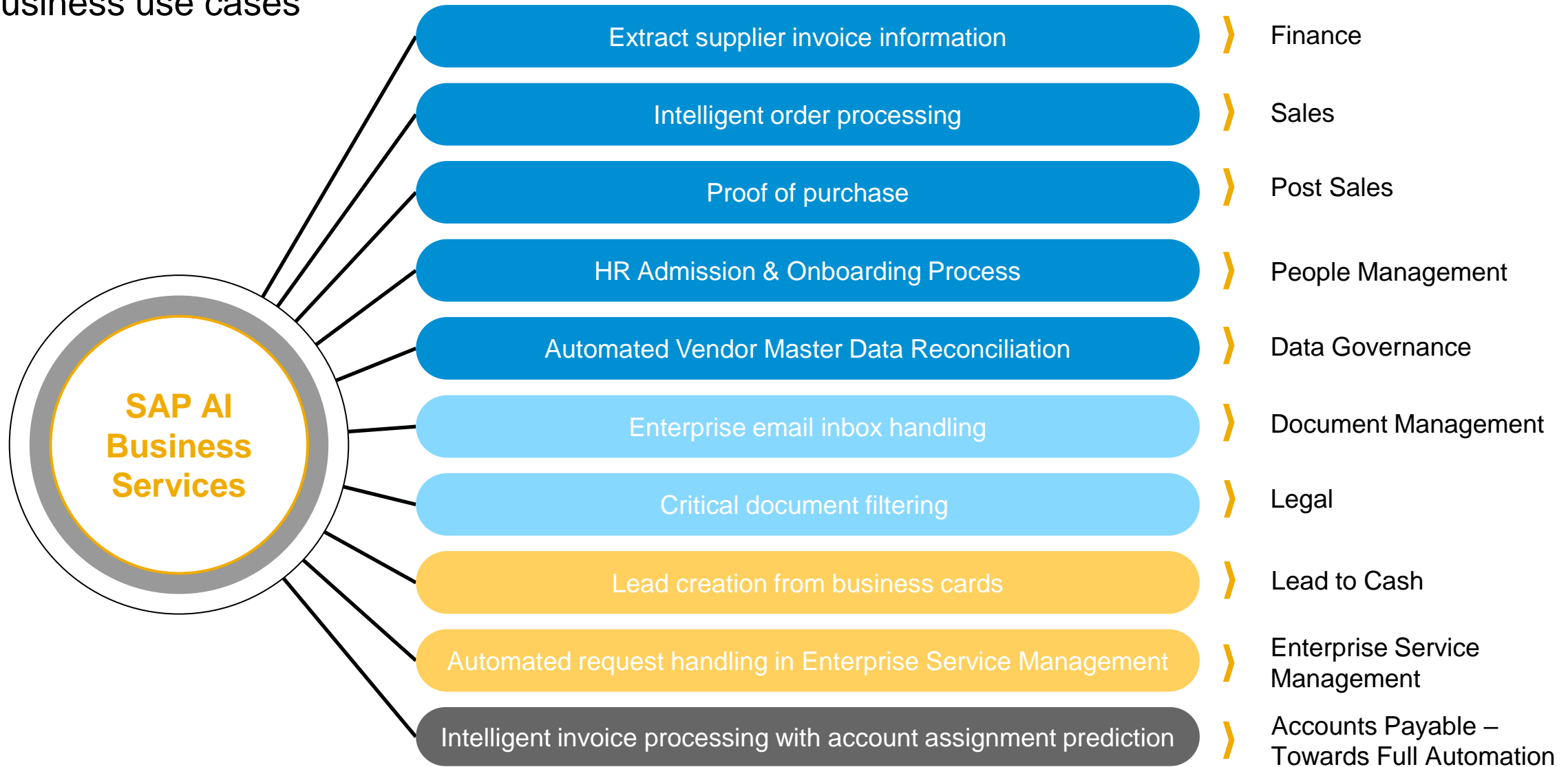


Use cases, architecture & consumption options



Business document processing

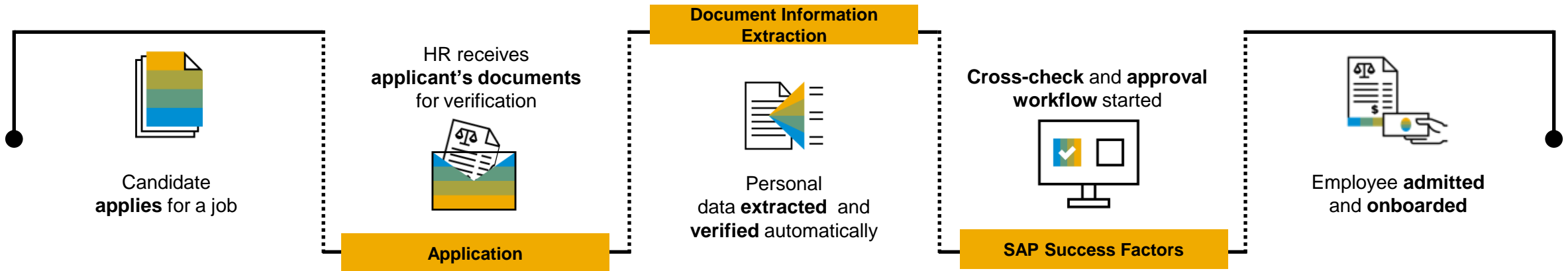
Business use cases



■ Document Information Extraction ■ Document Classification ■ Business Entity Recognition ■ In conjunction with Invoice Object Recommendation

HR Admission & Onboarding Process

Live with
global
food
company



Business Challenge

- Decentralized HR admission process
- Labor intensive process with lots of paper-handling
- Manual errors produce HR data inconsistency



Solution

- Centralized and digitalized admission process via a user-friendly application
- Document Information Extraction is used to provide AI-enabled data extraction from unstructured documents based on 19 unique schemas and templates
- The application is integrated with SAP Success Factors
- Data is handled according to the official service's [Security Guide](#)

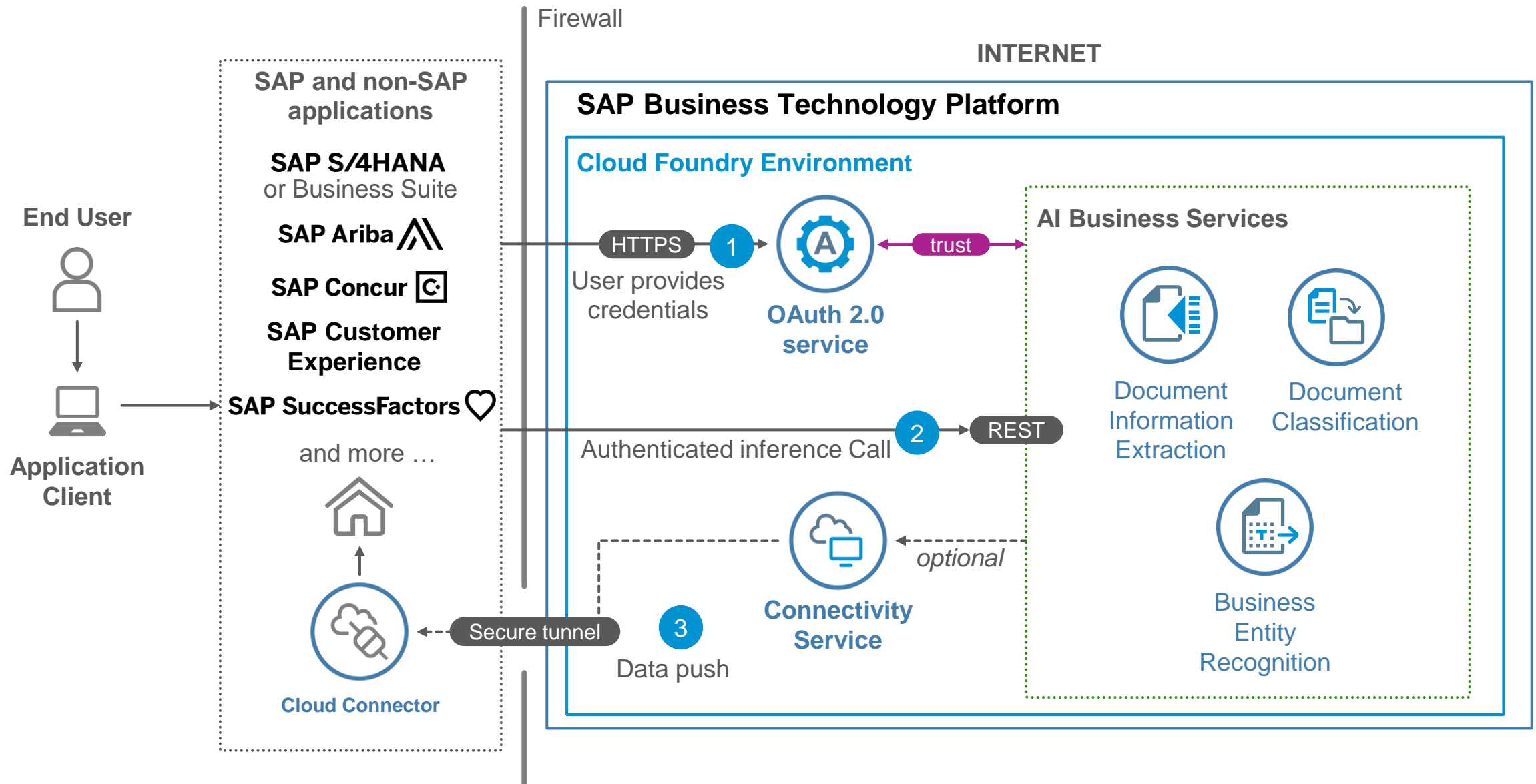


Benefits and Value

- Candidate documents are processed and verified automatically using AI technology
- Accelerates onboarding of new employees: 3x faster to complete the admission process
- Improved governance and control over admission process
- Reduction of manual errors and improvement of HR data
- Improved governance and executive supervision of the admission process (KPIs, SLAs, quality, candidates' feedback)

Business document processing

Blueprint

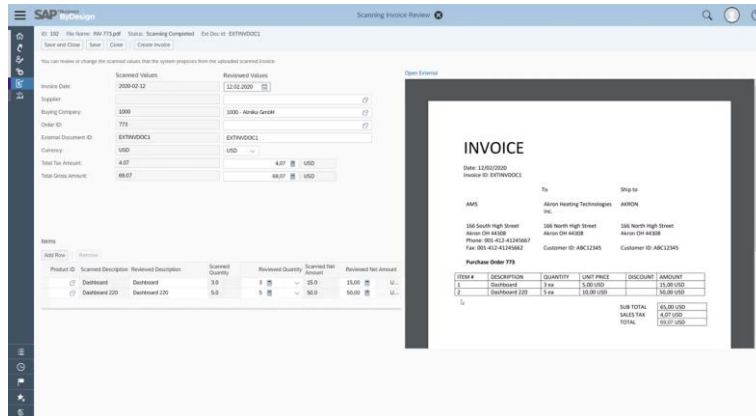


Business document processing

Consumption options

Standard Integration

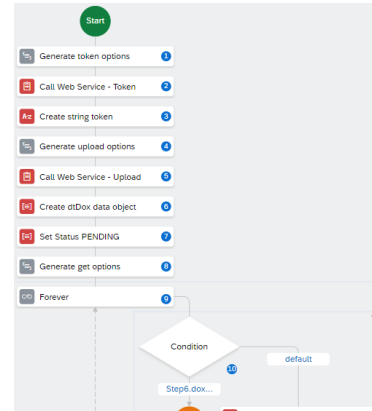
(Integrated into SAP Business Applications)



- [SAP Concur Invoice](#) (Invoice Capture)
- [SAP Cash Application](#) (Payment Advice Extraction)
- [SAP Business ByDesign](#) (Intelligent Invoice Scanning)
- [SAP Business ByDesign](#) (Mobile Expense Scanning)
- [SAP Business One 10.0](#) (Intelligent Invoice Scanning)
- [SAP S/4HANA Cloud 2011](#) (Sales Order Automation)
- [SAP S/4HANA Document Management System](#) (Classification)
- SAP Shared Service Framework for Finance (Email Processing)

Custom Automation Scenarios

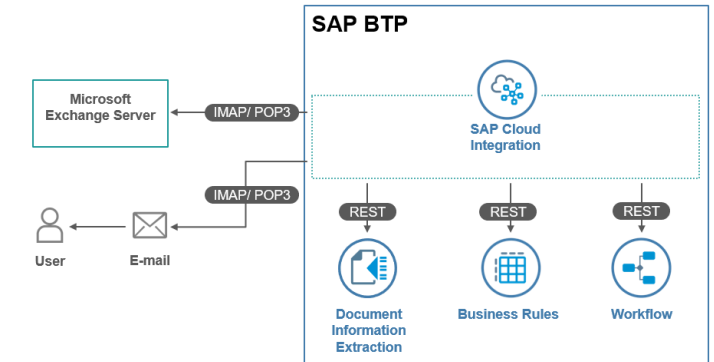
(SAP Intelligent RPA)



- **!!NEW!!** [Smart Document Extraction using SAP Intelligent RPA](#) (2109 release)
- [Combining Document Information Extraction and SAP Intelligent RPA 1.0 \(desktop\)](#), incl. [Bot Template](#), [webinar](#)
- [Integrate Document Information Extraction with SAP Intelligent RPA 2.0 \(cloud\)](#), incl. [Bot Template](#)
- [Automate Processing of Email Attachments using ML and Bots with SAP Intelligent RPA 2.0](#), incl. [Customer Reference](#)

Full Extension Flexibility

(SAP Business Technology Platform)



- [Handling Incoming Sales Orders with SAP Business Technology Platform](#)
- Integration packages for SAP Cloud Integration on SAP API Business Hub:
 - ✓ [Enterprise E-mail Inbox integration with Document Information Extraction](#) (incl. [blog](#))
 - ✓ [Enterprise E-mail Inbox integration with Business Entity Recognition](#)
- [Manage Invoices without POs using Document Information Extraction and SAP Workflow Management](#)

Business document processing

Summary



Ready to Use

- Available as AI Business Service on SAP BTP via **Cloud Platform Enterprise Agreement**, on **SAP Store** or as **Pay-as-you-go** model
- Available as **Test Demo & Development** for Partners
- Available on following Data Centers: EU10, EU11, JP10, US10, AP10
- Many supported [document types](#) and [languages](#)

[SAP HELP
PORTAL](#)

[SAP DISCOVERY
CENTER](#)



Ready to Test

Test the service on your own business documents with SAP BTP Trial and dedicated **Tutorial Missions**

- [Use Machine Learning to Extract Information from Business Documents and Enrich Data](#)
- [Shape Machine Learning to Process Standard Business Documents](#)
- [Shape Machine Learning to Process Custom Business Documents](#)

[SAP API
BUSINESS HUB](#)

[SAP
COMMUNITY](#)

Thank you.

Dr. Tomasz Janasz

Area Product Manager

SAP AI Business Services

<https://people.sap.com/tomasz.janasz>

Dr. Karthik Muthuswamy

Senior Data Scientist

SAP AI Business Services

<https://people.sap.com/krtk>

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