



# SAP INTELLIGENT RPA

**Harsha Bhat** | Solution Owner- SAP Intelligent RPA | SAP SE, Walldorf  
[harshavardhan.bhat@sap.com](mailto:harshavardhan.bhat@sap.com)

April 2020

External

# Disclaimer

The information in this presentation is confidential and proprietary to SAP and may not be disclosed without the permission of SAP. Except for your obligation to protect confidential information, this presentation is not subject to your license agreement or any other service or subscription agreement with SAP. SAP has no obligation to pursue any course of business outlined in this presentation or any related document, or to develop or release any functionality mentioned therein.

This presentation, or any related document and SAP's strategy and possible future developments, products and or platforms directions and functionality are all subject to change and may be changed by SAP at any time for any reason without notice. The information in this presentation is not a commitment, promise or legal obligation to deliver any material, code or functionality. This presentation is provided without a warranty of any kind, either express or implied, including but not limited to, the implied warranties of merchantability, fitness for a particular purpose, or non-infringement. This presentation is for informational purposes and may not be incorporated into a contract. SAP assumes no responsibility for errors or omissions in this presentation, except if such damages were caused by SAP's intentional or gross negligence.

All forward-looking statements are subject to various risks and uncertainties that could cause actual results to differ materially from expectations. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of their dates, and they should not be relied upon in making purchasing decisions.

# Agenda

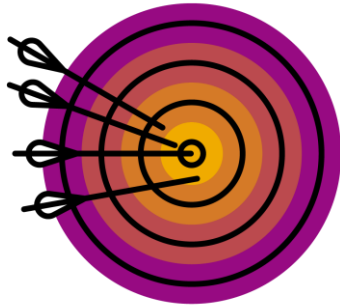
- WHAT IS ROBOTIC PROCESS AUTOMATION (RPA)?
- WHAT ARE THE USE CASES FOR RPA / BUSINESS VALUE OF SAP INTELLIGENT RPA
- SOLUTION ARCHITECTURE & OVERVIEW FOR SAP INTELLIGENT RPA
- EXAMPLE INTEGRATION SCENARIO DEMO
- KEY TAKEAWAYS AND ADDITIONAL MATERIALS
- Q&A

# Virtualizing workforce and maintaining business continuity

## SAP Intelligent RPA for remote worker automation

### Urgent challenges

---

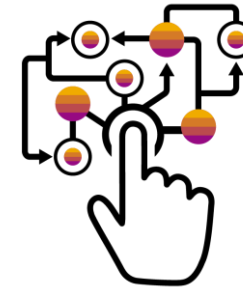


#### Scattered workforce and business disruption

- Efficiency loss towards demanding SLAs
- Supporting employees to achieve more with less resources and maintain balance
- Physical unavailability of staff

### Workforce digitization

---



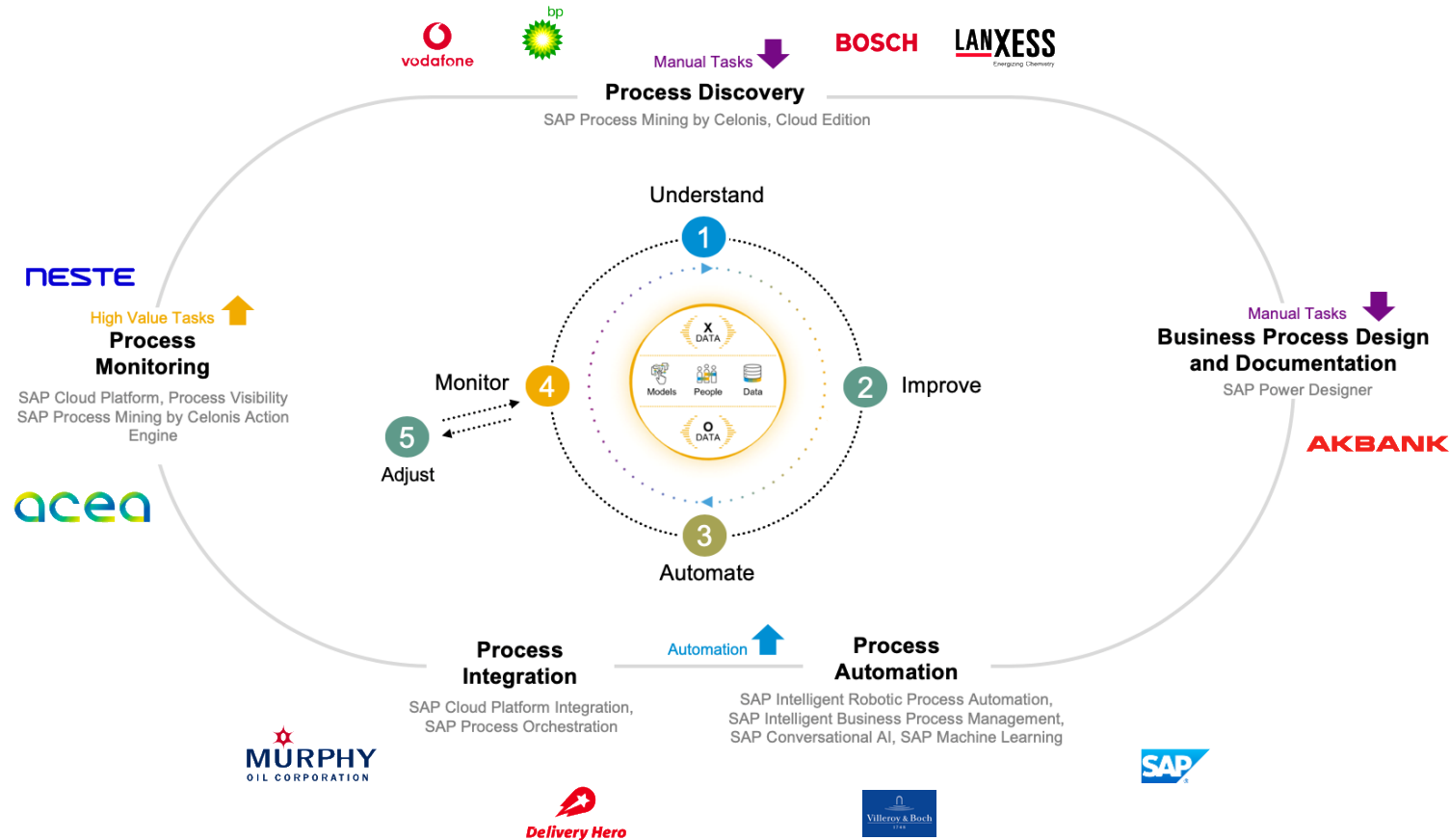
#### Enable remote services and automation

- 24 x 7 conversational serviceability
- Reduced human errors and burn out
- Digital assistants & touchless execution
- Free staff to perform non-repetitive, high-value actions

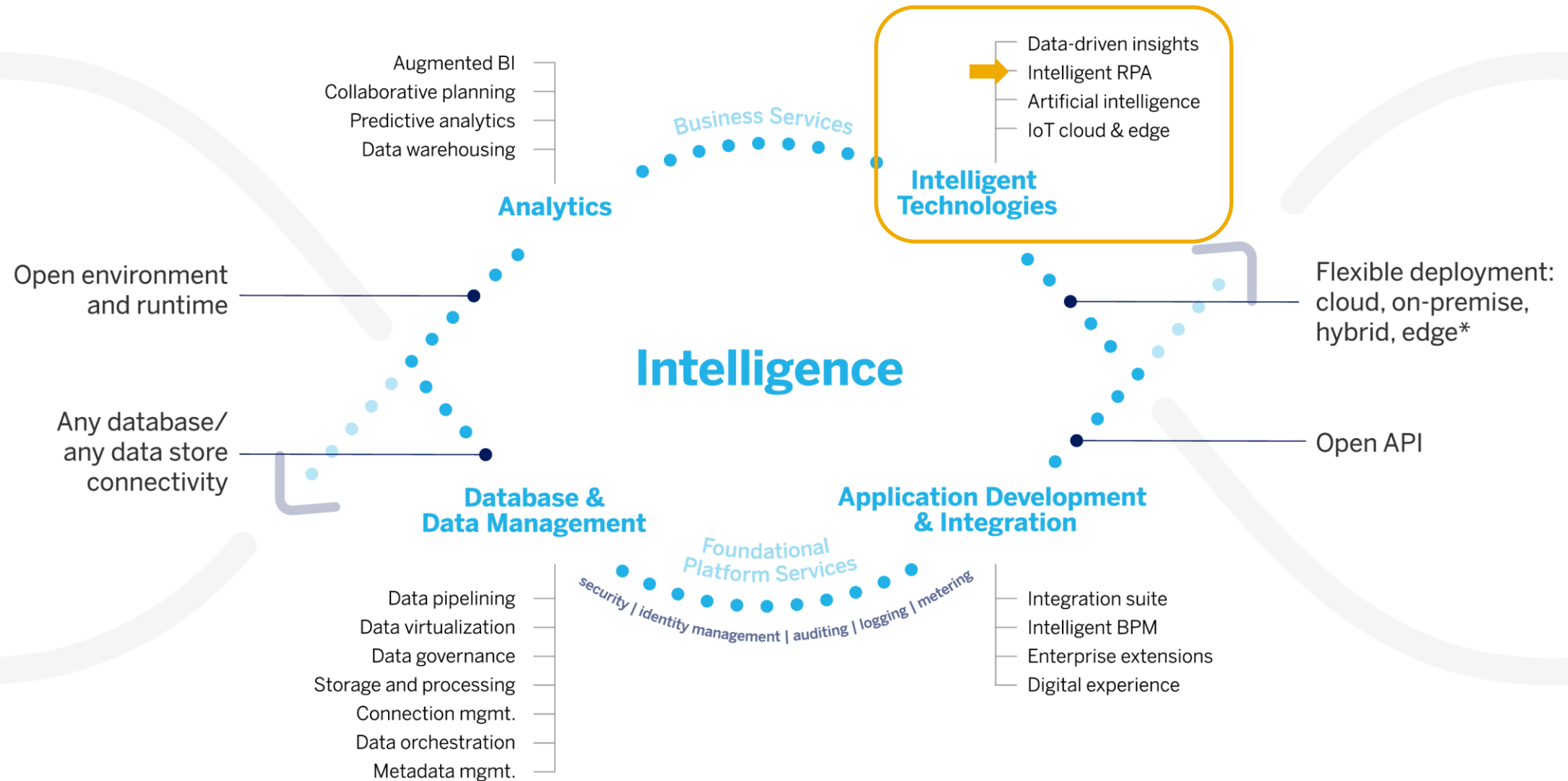
# Next Generation Process Excellence

Integrate process automation technologies end to end

Understand | Improve | Automate | Monitor



# Business Technology Platform



\*Services availability may change per deployment model and IaaS vendors

# Process Excellence combining Technologies & prebuilt Content

## Easy access to ML services

ML provides easy processing of documents and unstructured data to be embedded into RPA workflows

Use ML Services to improve RPA training

## Conversational User Experience

Process Intelligence assistance with SAP Conversational AI

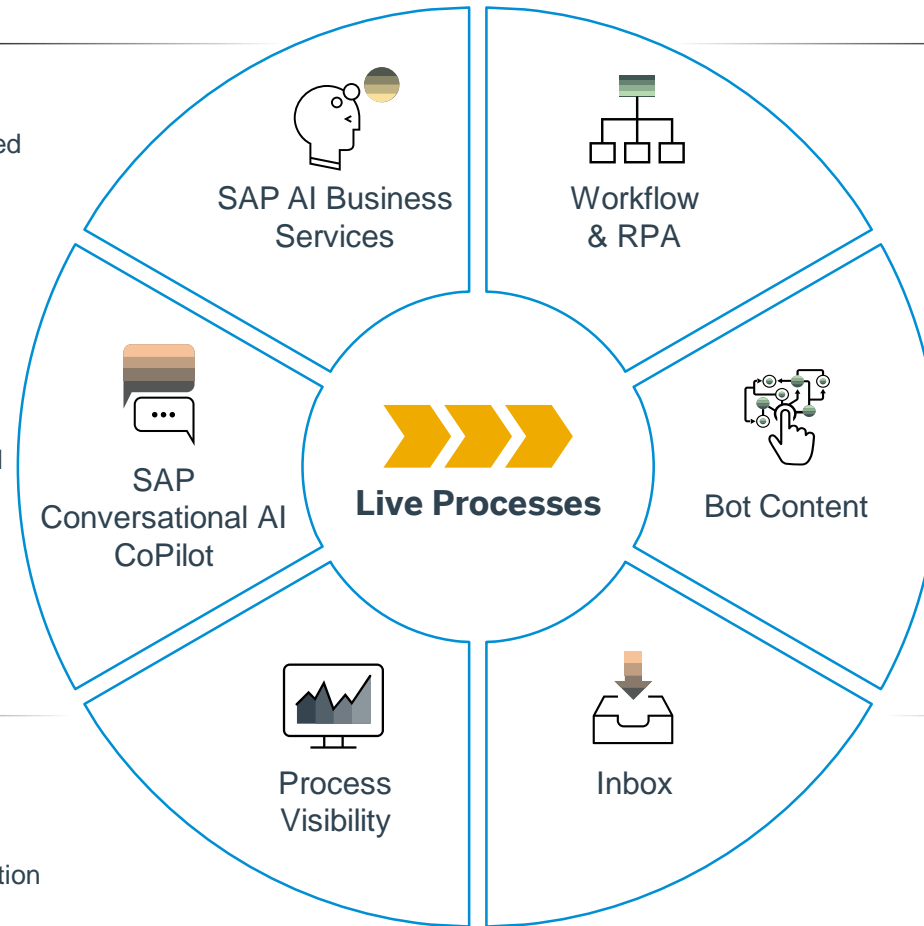
Natural user interaction with the bot

## Monitoring & Process Intelligence

Integrated Monitoring and Process Visibility

Co-Offering with SAP Process Mining by Celonis, cloud edition

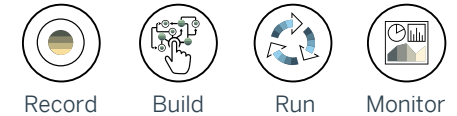
Stakeholder satisfaction using SAP Qualtrics at any stage



## Robotic Process Automation

Intelligent Robotic Process Automation helps run repetitive, tasks that span across systems (SAP and non-SAP)

Intelligent RPA runs on SAP CP Workflow as bot runtime



## Prebuilt Content

Best practice content for S/4HANA

DBS, Industry packages

## Digital Experience

Usage of Inbox for user interactions and decisions

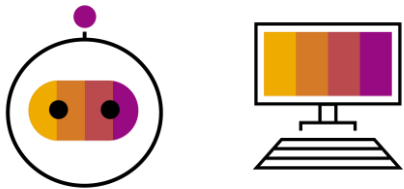
WHAT IS ROBOTIC PROCESS AUTOMATION  
(RPA)?



# What is SAP Intelligent RPA?

## Robotic Process Automation (RPA)

Software robots **mimicking human users** for manual process tasks on user interface for automating process execution. It can bring new speed, efficiency in process execution and free up human workers from **repetitive tasks** for more time availability towards **high-value tasks**.



### Unattended (Digital Worker)

Fully automated process, where robots are working autonomously with human supervision only

*Example: Purchase Orders are sent in to an inbox and have to be read, identified, information has to be taken and brought into ERP system to create the PO reference. A bot can run the full process autonomously.*



### Attended (Digital Assistant)

Partially automated process, where robots are co-working with humans

*Example: An insurance clerk is called by a customer who has an accident. He doesn't want to click through X different systems to get to collect and display the customer data in a 360 view.*

# Criteria for Processes Automation with SAP Intelligent RPA

## Focus Area Criteria

### Collect Data

- consolidate and manipulate data from multiple data sources, such as excel, vendor portal, SAP systems
- multiple applications touched by the user during process execution. E.g. excel, outlook, web application, S/4HANA, ECC, non-SAP systems

### Collaborate, trigger user action and communicate

- approval follow-up with multiple stakeholders
- workflow trigger
- automatic service ticket resolution
- monthly reports
- email integration

### Improve user productivity

- process can be accelerated and improved by a digital assistant. For example the integration of chat bots and RPA bots to perform operational work on user's behalf.
- part of the processes are completely executed by bots, e.g. 24/7 execution



**Manual & repetitive**



**High volume**



**Multiple systems**



**Workaround for native integration**

# SAP Intelligent RPA in a Nutshell

## Typical use cases

Extract data through various connectors e.g. Excel, pdf, external apps, Web sites, 3<sup>rd</sup>-party apps and enter in a finance system

Log in to 15 SAP instances, collect purchase requisitions and distribute to SSC teams



Download various reports, collate and save in shared drive

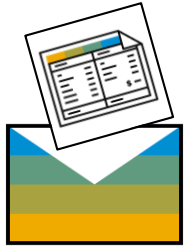
Check ticket inbox in a shared service center and route to bots

Search invoices by reference number in various ERP instances

# Example : Purchase order creation – Manual steps



## Incoming purchase orders



You receive tons of purchase orders via email every day.

You need to identify and filter them.

## Analyzing and extracting the content



You need to understand the information and extract the relevant data from the documents and store it in a task list.

## Entering in ERP



You need to manually record the purchase order in your ERP system, navigating through different screens and typing the order information.



## Repetitive order creation



Manual, tedious, repetitive, error-prone task leads to long queues and frustrated employees and customers.

# Why Intelligent Robotic Process Automation?

## Shared Service Automation



Execute faster, reduce errors, optimize processes & resources by automating manual tasks

## Financial Transformation



Faster financial closing, lower manual efforts & optimize resources

## Customer Service Automation



Increase customer satisfaction and higher throughput

## Operation Automation



Manual task automation, monitoring & visibility

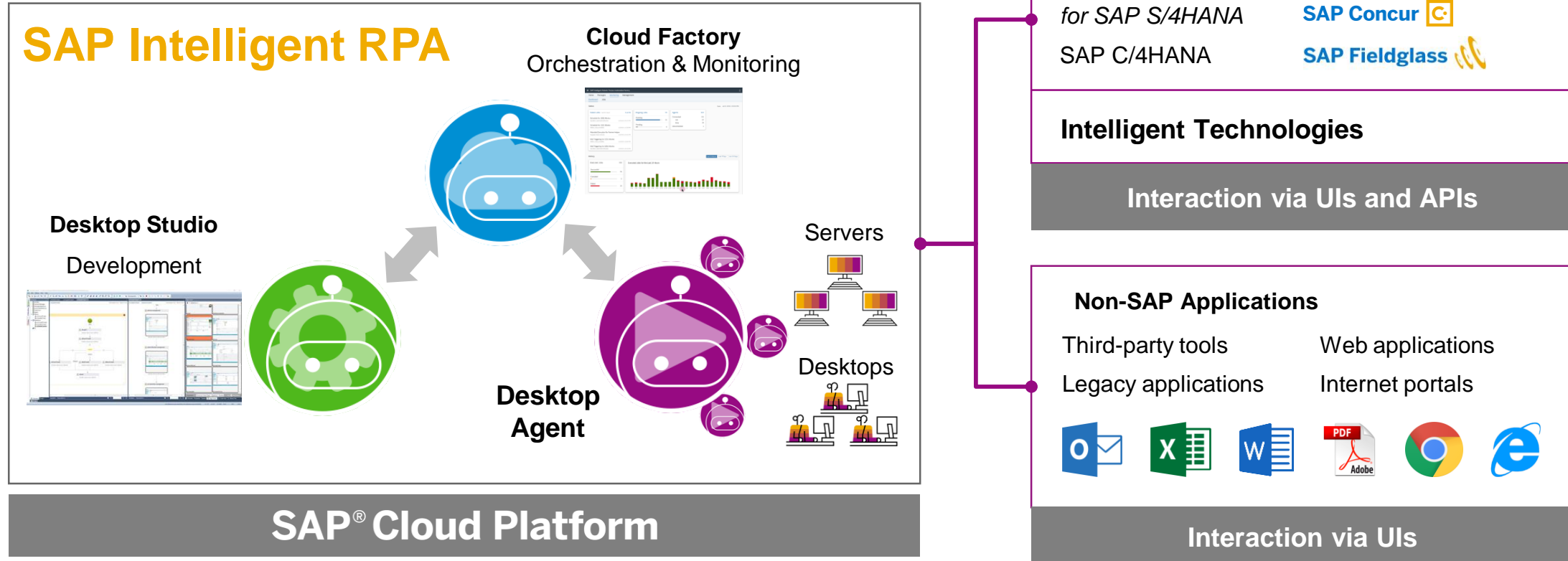
## Data Management



Faster onboarding for employees and customers, consistent master data

# OVERVIEW OF SOLUTION ARCHITECTURE

# Solution Overview



# Desktop Studio



## Suite of tools for process automation development

### Application capture

- Capture application pages for any technology (Web, Windows, Java, ...)
- Detect changes for easier maintenance

### Workflow designer

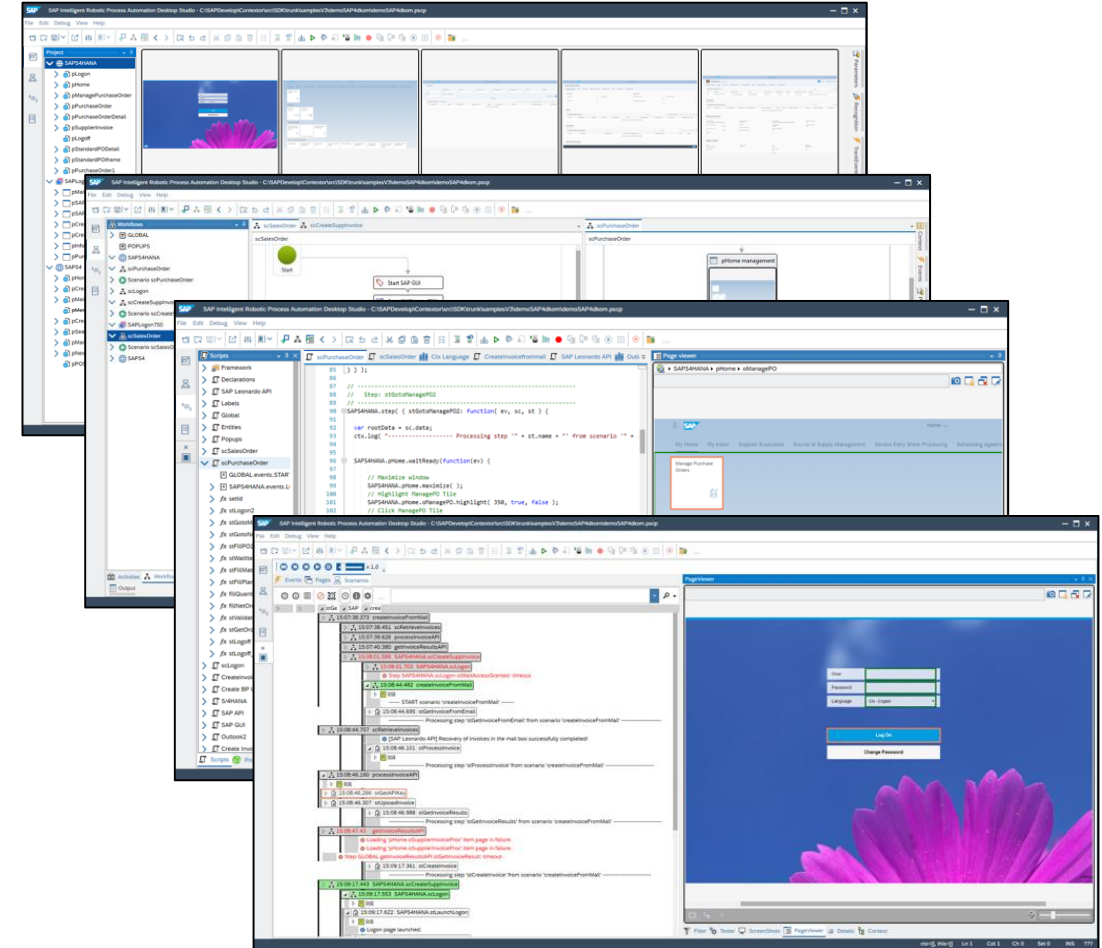
- Graphical designer for simple automations
- Generate JavaScript scenarios for runtime execution

### Advanced integration

- JavaScript editor for advanced usage
- Enrich functionalities with libraries
- Easy navigation between script and graphical design
- Snippets and code generation

### Test and validation

- Local debugger (step by steps, watches, ...)
- Recorder / re-player for remote investigations and off-line analysis



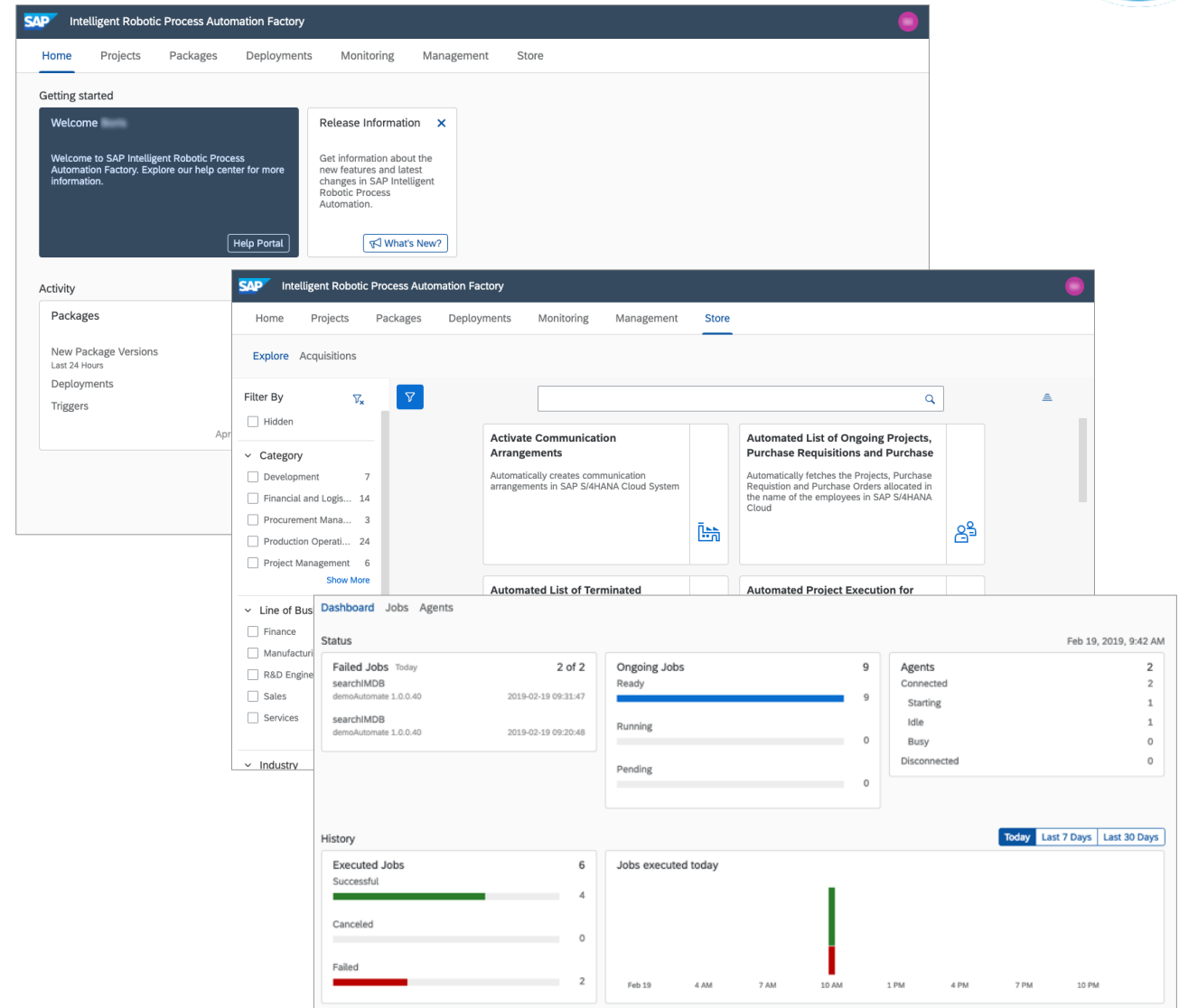


# Cloud Factory



## Bot management

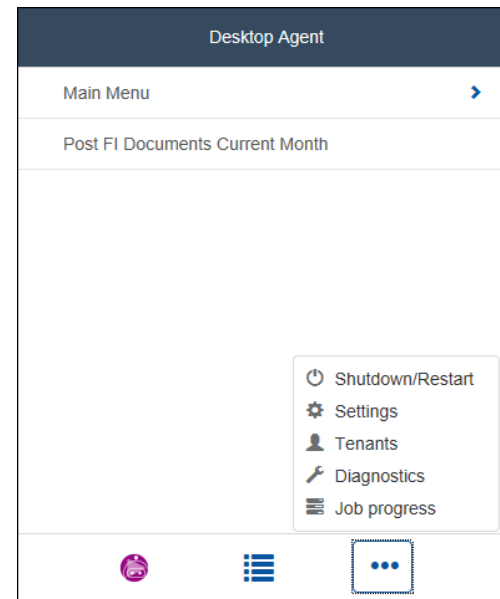
- Manage customer landscapes and create test/dev/prod **environments**
- Deploy **prebuilt content**
- Manage **projects** and **packages** them for attended and unattended execution
- Distribute and **orchestrate execution** on agents
- **Monitor** execution



# Desktop Agent

## Runtime module on customer desktops and servers

- Multi-technology for UI automation
  - Web, Windows, Java, emulators, ...
- Same product and skills for attended / unattended
- Parallel or sequential execution on applications
- Scenarios with mix of UI and API automations,
- Fast and robust automations
- Secured connectivity with the Cloud Factory
- UI assistance for attended mode
  - Training / Contextual Help / 360° View / Quick Launch / ...

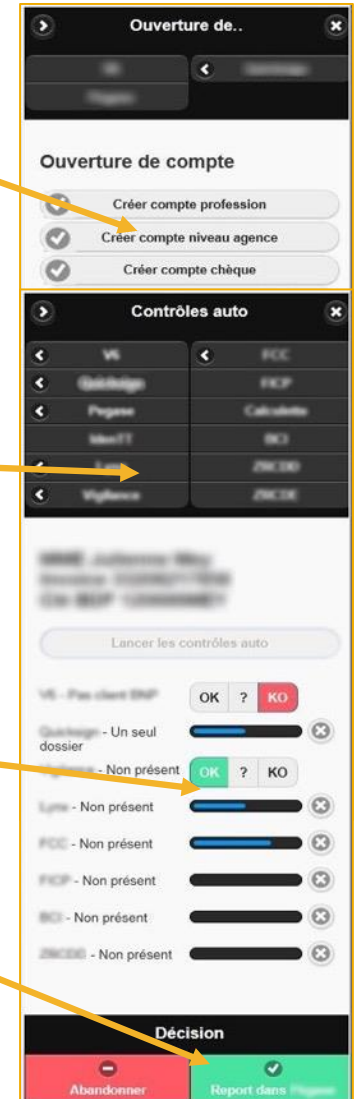


Available tasks

Launch and activate business apps

Visual feedback on automated tasks

Keep human interaction for final approval



# SAP Intelligent RPA

## Integration Summary

### Universal approach on RPA

- Wide Range of UI / API technologies for end to end automations on any business process
- Connect to Web, SAP GUI, Windows, Java applications

### Build Automation Scenarios

- Application captures : easier to maintain and enhance
- Graphical Workflow Designer and advanced JavaScript Editor for automations

### API Trigger & Notifier

- Connect to any web services (ML Foundation, ...)
- Expose Automation Scenarios to the outside world

### Integration with SAP Intelligent Services

- SAP Machine Learning APIs including Intelligent OCR
- CAI Chatbot integration

### Integration with SCP Workflow

- Uniquely combine BPM and RPA automations

### Store

- SAP provided content

## SAP Intelligent RPA

### Integrates with

- Any underlying application
- Intelligent BPM via its API trigger framework
- CAI via its API and notification framework
- SAP GUI and SAP UI5 connectors for easier bot building
- SAP Data Intelligence

### Commonly available with/in

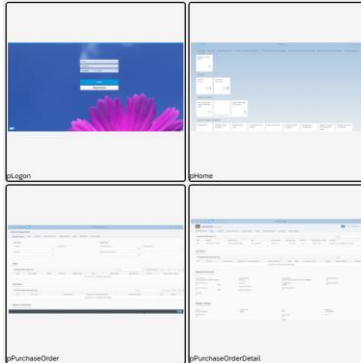
- SAP Cloud Platform
- CPEA
- Intelligent Technology Packages
- SAP Services
- Pre-built bot content



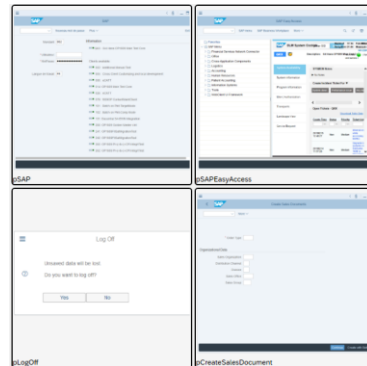
# Connectors & Capture Application Pages

## Wide range of supported UI & API Technologies

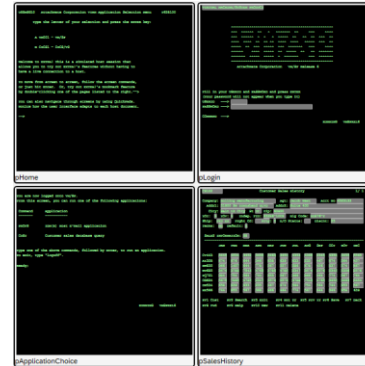
- Web, Windows, Java, Emulators, Office applications, ...  
Advanced support for SAP applications : SAP GUI, SAP UI5 , S/4 HANA ...  
Works also with non-SAP applications
- Support for hybrid virtualized architectures (Citrix / Remote Desktop)



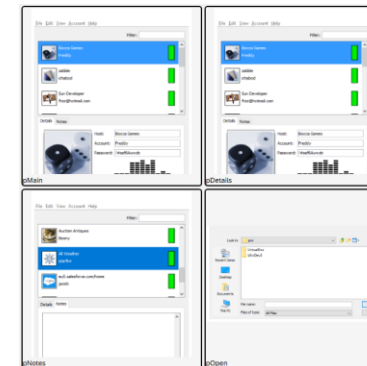
Web applications



SAP GUI applications



Emulator applications



Windows / Java applications

# API Triggers



- Attached to a scenario/process in a deployment
  - Can be added, modified or removed at any time
- Dedicated API endpoint protected by API key
- Provides input for bot execution
  - Defined by scenario input schema
- Can provide invocation context for call correlation
  - Invocation context is available in notifiers

Edit API trigger

Activation ☒

\*Name

Description

\*Execute

Trigger owner  [Assign to me](#)

② Use credentials of ☒ Trigger owner ☐ API trigger caller

URL

X-Token header [Generate new token](#)

② Payload [Example](#) [Input Schema](#)

```
{  "invocationContext": "${invocation_context}"}
```

Show required fields only ☐

Save OK

# API Notifiers



- Attached to a trigger
  - Can be added, modified or removed at any time
- Reacts on activation event
  - Job Start/Success/Failure/Cancel
  - Different variables are available for different events
- Rest Call configuration
  - Callback URL
  - Authorization
  - Headers
- Payload
  - Custom JSON structure
  - Use `${invocation_context}` sent with API trigger
  - Use variables available for the notifier event
    - `${output}`
    - `${error}`

Create API Notifier

\*Notify on

Available Variables `${invocation_context}`  
`${output}`

\*Name

Description

Callback URL

HTTP Method

Authorization

\*Username

\*Password

Headers [Add Header](#)

Payload

```
1 {  
2   "invocationContext": "${invocation_context}"  
3   "output": "${output}"  
4 }
```

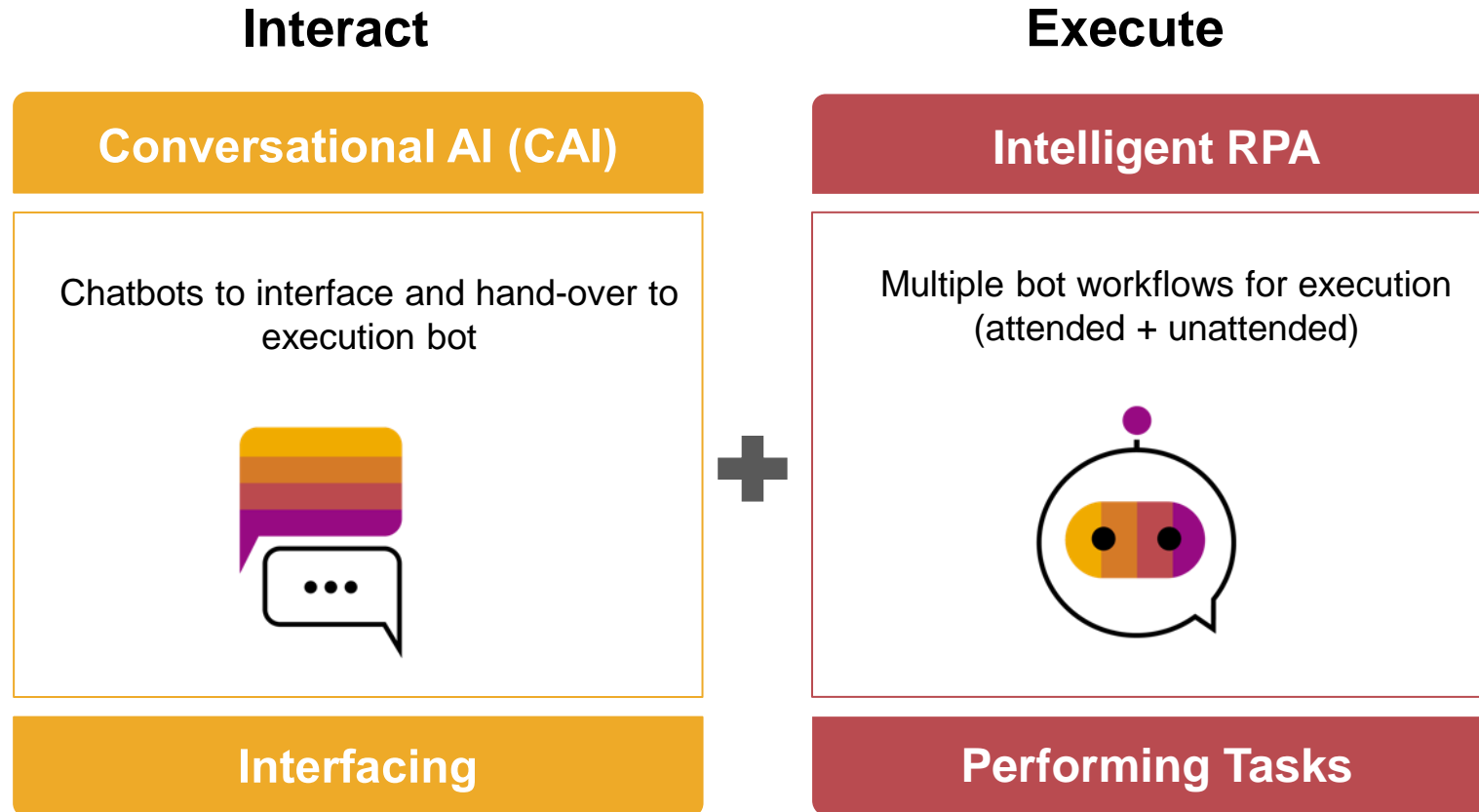
[Create](#) [Cancel](#)

# EXAMPLE SCENARIO INTEGRATION EXAMPLES

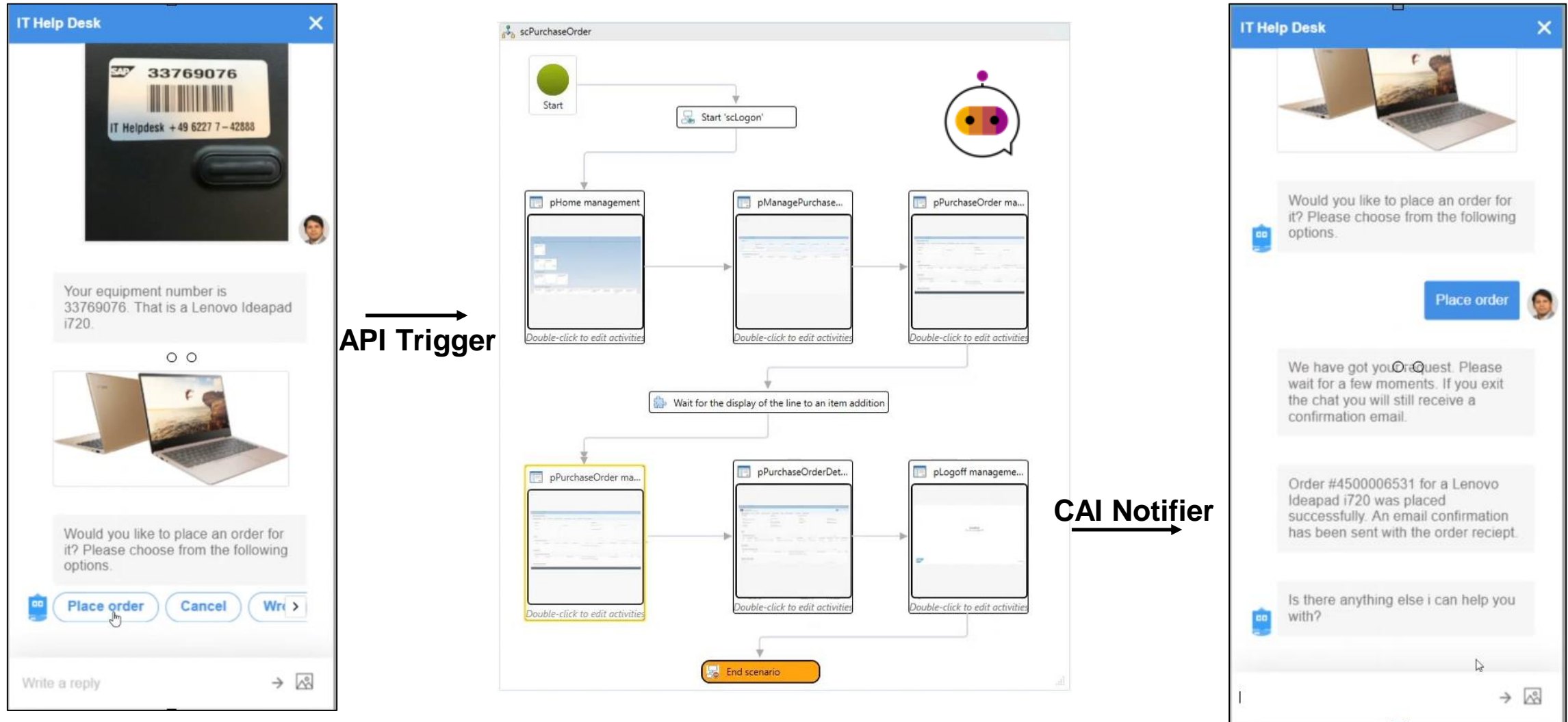
# **Integrate SAP Intelligent RPA with Chatbots**



## Example Scenario : Trigger a BOT from Conversational AI and receive feedback

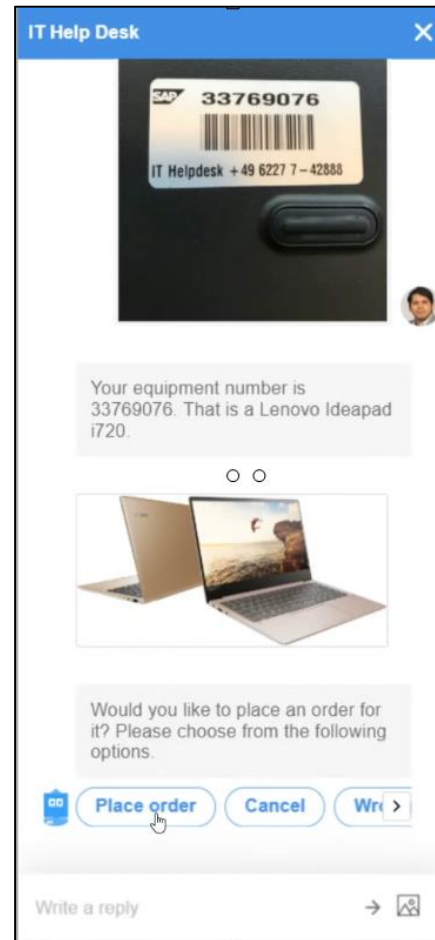


# Example Scenario : Trigger a BOT from Conversational AI and receive feedback



# API Trigger – open Intelligent RPA bot endpoint

- Attached to a scenario/process in a deployment
- Dedicated API endpoint protected by API key
- Provides input for bot execution
  - Equipment number
- Can provide **invocation context** for call correlation
  - Conversation ID

A screenshot of the "Edit API trigger" configuration window. It contains fields for Name, Description, Execute, Trigger owner, Use credentials of, URL, X-Token header, and Payload. The "Activate" toggle is turned on. The "Name" field is "My CAI Trigger". The "Description" field is "called from my chatbot". The "Execute" field is "searchIMDB". The "Trigger owner" is "anja.monakova@sap.com". The "Use credentials of" field is set to "Trigger owner". The "URL" field is "https://webapi--ipa--dev--webapiwdf.cfapps.sap.hana.ondemand.com/v1/webapi/triggers/run/5a7e83cd-93c0-4fa4-8b5e-1ba289d8a911". The "X-Token header" field has a "Generate new token" button. The "Payload" field contains a JSON object: {"invocationContext": "\${invocation\_context}"}. There are "Example" and "Input Schema" links. At the bottom, there is a "Show required fields only" checkbox, a "Save" button, and an "OK" button.

# CAI Notifier – notify users about the bot execution status

- Choose notifier activation event
  - Success/Start/Failure
- Configure notifier
  - Conversation id
  - Chat bot authorization token
- Select action to be performed
  - Send a text message to conversation
  - Modify conversation state
- Configure action parameters
  - Message to be sent
  - Memory and language to be updated

Create CAI notifier

\*Notify on  Available Variables `${invocation_context}`  
`${output}`

\*Name

Description

\*Conversation ID

\*Token

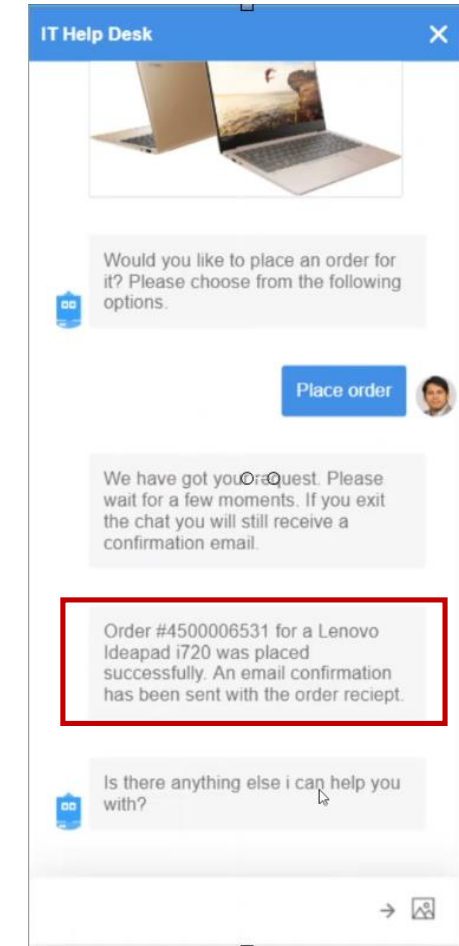
\*What do you want to do?

Message type

Delay in seconds

\*Message content

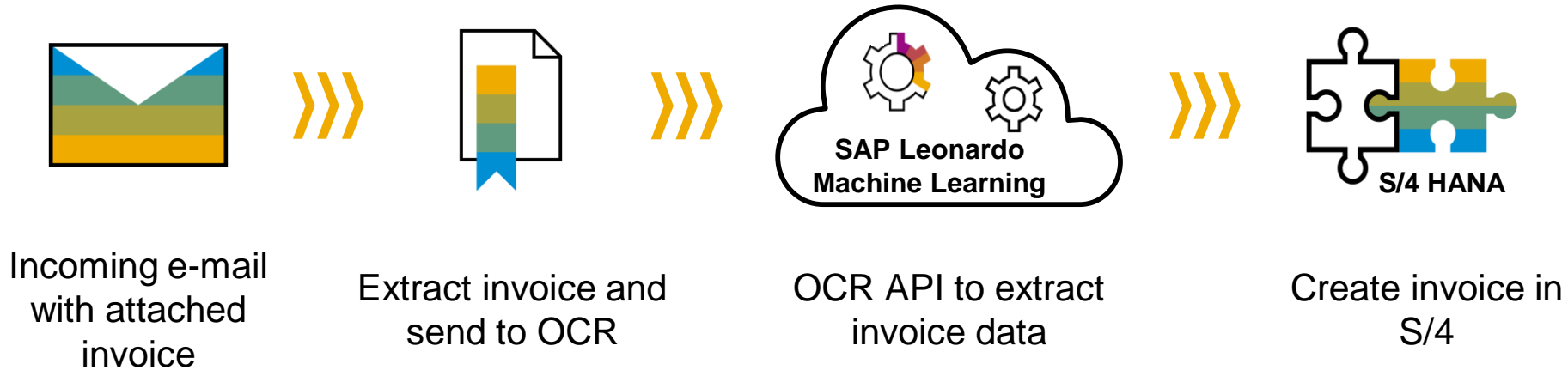
Create Cancel





# **Integrate SAP Intelligent RPA with ML services**

# Example Scenario : E-Mail to Invoice

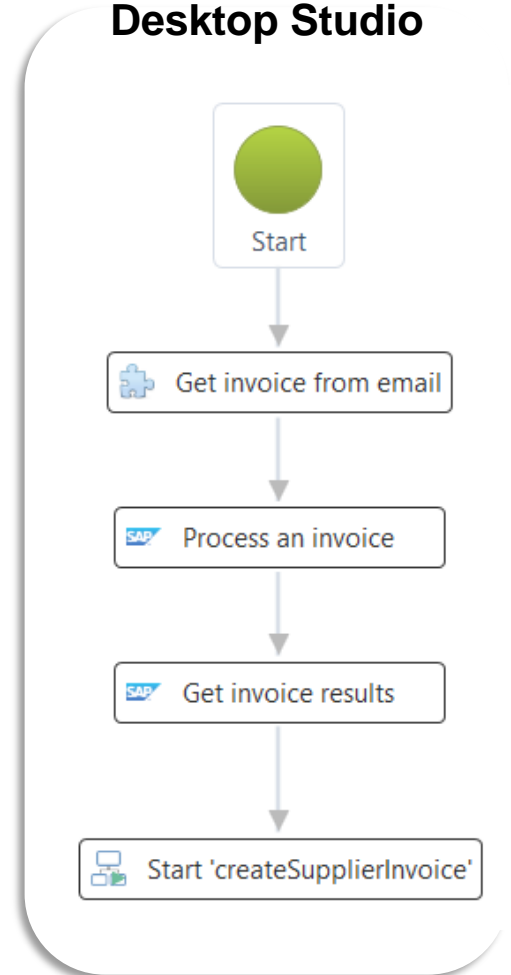


## Key Takeaways :

SAP Intelligent Robotic Process Automation

- Can be used to read E-mail and extract attachments
- Offers integration to SAP Leonardo Machine Learning and SAP API Business Hub. ( Document Information Extraction service is used in this example )
- Integrates seamlessly with S/4

## Scenario modeled in Desktop Studio



# Product Demo | Automated Supplier Invoice Processing

SAP Intelligent Robotic Process Automation Desktop Studio - C:\Users\1050727\code\ML-IPA-Cbt-SDK\samplesV3\demoSAP4dkom\demoSAP4dkom.pscp

File Edit Debug View Help

Workflows Explorer Workflow Editor UI Designer

createInvoiceFromMail x scCreateSupplierInvoice

createInvoiceFrom...

createInvoiceFromMail

Start

Get invoice from email

Process an invoice

Get invoice results

Start 'createSupplierInvoice'

Context

- SAPUser
- PurchaseOrder
- SAPGUIUser
- SalesDocument
- Invoice
  - ID
  - Number
  - EmittedDate
  - PurchaseOrderNo
  - Currency
  - SubTotal
  - PrimaryTax
  - TotalGross
  - VendorName
  - VendorAddress
- Mailbox

Events

Activities

Pages Activities

- SAPS4HANA
- SAPLogon750
- SAPS4

Output

Ln 1 Col 1 Ch 0 Sel 0 INS ???



# **Integrate SAP Intelligent RPA with MS tools**

# DEMO : example Scenario : Excel to Sales Order



Excel spreadsheet  
with Sales Order  
details

Extract data from  
excel

Create Sales Order  
in ECC

## Key Takeaways :

SAP Intelligent Robotic Process Automation

- Can process MS Excel and extract information
- Supports automation of SAP GUI in SAP ERP and other SAP applications
- Loop over Excel row to create jobs to be distributed by Cloud Foundry

# Excel to Sales Order in SAP ERP

A	B	C	D	E	F	G	H	I	J
AVC	0001	01	01	ITAG01	test	HW-1761	10	0001	
AVC	0001	01	01	ITAG01	test	HW-1762	10	0001	
AVC	0001	01	01	ITAG01	test	HW-1763	10	0001	
AVC	0001	01	01	ITAG01	test	HW-1764	10	0001	
AVC	0001	01	01	ITAG01	test	HW-1765	10	0001	

Sales Order data in MS Excel

Sales document Edit Goto Extras Environment System Help

Change Standard Order 11022: Overview

List of sales orders

Standard Order	11022	Net value	4.096,00	EUR
Sold-To Party	ITAG01	IT1/ PO Box 0 12 33 / 01233 Dresden		
Ship-To Party	ITAG01	IT1/ PO Box 0 12 33 / 01233 Dresden		
PO Number	test	PO date		

Sales Item overview Item detail Ordering party Procurement Shipping Configuration Reason for rejection

Req. deliv.date D 12.08.2019 Deliver.Plant

☐ Complete dlv. Total Weight 0 KG

Delivery block Volume 0,000

Billing block Pricing date 12.08.2019

Payment card Exp.date

Card Verif.Code

Payment terms 0001 Pay immediately w/o d. Incoterms FH

Order reason

All items

Item	Material	Order quantity	Un	S	Description	Customer Ma
10	HW-1761	10	ST	✓	Compressor	

Sales Order in SAP ERP

Workflows

GLOBAL

POPUPS

S4HANA

- scPOs\_from\_excel
  - Scenario scPOs\_from\_excel
- scInPurchaseOrder
  - Scenario scInPurchaseOrder
- scLogin
- scLogout
- scPOJob
- scProcessPO

SAPLogon750

- scCreateSaleOrder
  - Scenario scCreateSaleOrder

Properties

1 - General

Description

Display Name

scPOs\_from\_excel

2 - Activity

Input Data Ma...

Scenario Time...

600

Step Timeout

60

3 - Code Generation

Scenario Name

4 - Unattended Management

Is Exported

☒

Is Plannable

☒

Description

Description

scInPurchaseOrder

scCreateSaleOrder

scPOsfrom\_excel

scPOs\_from\_excel

scPOs\_from\_excel

Start

Set context Retrieve excel from email

Initialize Excel

Open Excel

Get range table

Set context Iterator

Set context Header

Set context move to first entry

Set context POsindex

pHome management

Context

locals

PurchaseOrder

- ID
- SupplierID
- SupplierName
- PurchasingOrganization
- PurchasingGroup
- Creator
- CreationDate
- Currency
- Material
- Plant
- Quantity
- NetOrderPrice
- NetOrderValue

SAPLogon750Data

Context Events

Activities

Pages Activities

S4HANA

SAPLogon750

Activities

Error list (0)

# **Integrate SAP Intelligent RPA with BPM**

## BPM and RPA | Two sides of the same “Intelligent Automation” coin

### BPM (Workflow)

- Business Process Management
- Deals with orchestrating the end-to-end process
- Strategic initiative, holistic, structured approach
- **Fosters teamwork, streamlines collaboration and production workflows**

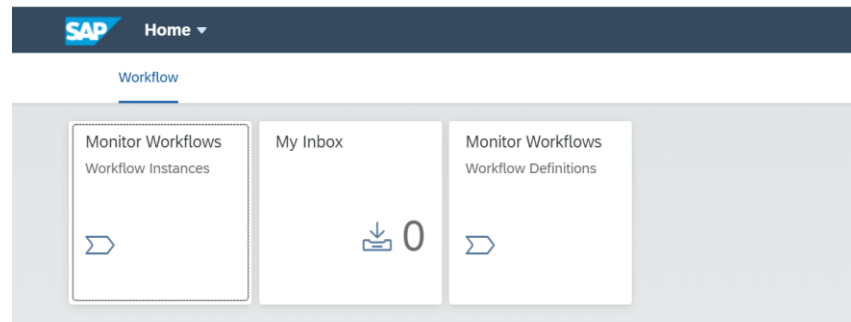
### RPA

- Robotic Process Automation
- Deals with automating specific tasks within a process
- Tactical initiative, focused, agile approach
- **Frees employees from tedious repetitive tasks, leverages their human skills**

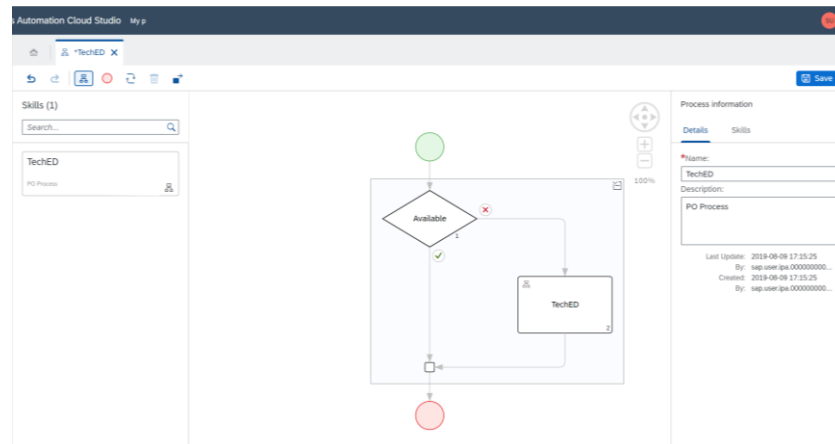
# Intelligent RPA - SCP Workflow Integration

UI to design your SAP workflows in RPA executed by SAP Cloud Platform Workflows

## 1. User tasks integrated SAP WFL Universal Inbox



## 2. Author Workflow using IRPA visual editor



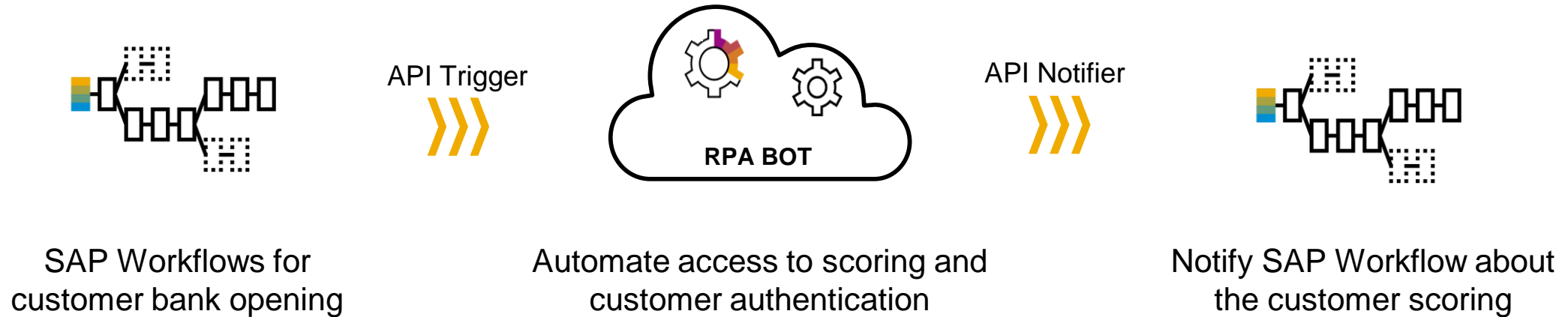
## 3. Monitor Workflow execution

The screenshot shows the SAP Intelligent Robotic Process Automation Factory Monitoring interface. At the top, there is a dark blue header with the SAP logo and the text 'Intelligent Robotic Process Automation Factory'. Below the header, the 'Monitoring' tab is selected. The main area contains a dashboard with filters for 'Date Range' (Aug 6, 2019), 'Scenario' (Search...), 'Status' (dropdown), 'Package' (Search...), 'Environment' (Search...), and 'Machine' (Search...). Below the filters, there is a table with columns: Scenario, Status, Package, Environment, Machine, Last Update, and Duration. The table contains five rows of data, all with a 'Successful' status.

Scenario	Status	Package	Environment	Machine	Last Update	Duration
Process0608-bis	Successful	No Value	No Value	No Value	Aug 6, 3:06 PM	1 min
SubProcess0608-Scenario	Successful	No Value	No Value	No Value	Aug 6, 3:06 PM	No Value
searchIMDB	Successful	Project0608-bis	Environment-i051314	PARN34426611A	Aug 6, 3:06 PM	No Value
SubProcess0608-UT	Successful	No Value	No Value	No Value	Aug 6, 3:06 PM	No Value
UserTask0608	Successful	Project0608-bis	Environment-i051314	No Value	Aug 6, 3:06 PM	No Value

# Example Scenario : Open a bank account

## Intelligent RPA / BPM integration



## KEY TAKEAWAYS

- Use RPA to automate manual tasks
- Use RPA when no system API is available
- Automate access to multiple applications (applications mashup)
- Use API trigger endpoint to launch a bot
- Use API notifier to receive updates
- Exchange information and context through API triggers and notifiers payload



- Applications
- AuthMe
    - pHome
    - pLogin
    - pIdent
    - pResults
    - pIdentUploaded
    - AuthMeGoogleChro
    - ScoringCo



Parameters

1 - General	
1 - Name	AuthMe
2 - Comment	
3 - Server	None
3 - Techno SDK	V3
5 - Custom type	
2 - Driver	
No Wait for Load	<input type="checkbox"/>
One Instance per T...	<input type="checkbox"/>
Synchro Delay (ms...	250
Use ID as Item Name	<input checked="" type="checkbox"/>
Use V3 connector	<input checked="" type="checkbox"/>
9 - Technical	
Connector	WEB3
Launch path	file:///C:/Users/D063972/
Offline Path	C:\dev\RPA\DesktopStud
Technology	WEB

Comment:

Criteria [AuthMe]

TITRE = auth.me
-----------------

Captured data

TITRE = Office Preload
DOMAIN = Error HRESULT E_FAIL has been returned from a call to a COM component.
URL = res://C:\Program Files (x86)\Microsoft Office\Root\Office16\OSF.DLL/OfficeJsPreloader.html?locale=en...
CX = 1184
CY = 8
MAINFRAME = true

Subtree

--

**MORE PREDEFINED BOT EXAMPLES**

# More Bots Available Ready to Use : **SAP Intelligent RPA Store**



- ~76 bots available ready to adopt
  - Generic as well as S/4 specific bots

## Browse, Filter and Search Content

- Category
- Line Of Business
- Industry
- Free search

## Get a look of the content provided

- Summary
- Short and Full Description
- What's New
- Content Detail

Available on a public website here :

<https://store.irpa.cfapps.eu10.hana.ondemand.com/#/home/order=asc/search=/tag=>

The screenshot displays the SAP Intelligent RPA Store interface. At the top, there's a header with the SAP logo and 'Intelligent Robotic Process Automation Store'. Below this is a 'Browse Store' section with a search bar. A 'Filter By' sidebar on the left allows filtering by Category (Data Privacy, Data Warehouse Man..., Development, Financial and Logistic..., Platforms and Tools) and Line of Business (Asset Management, Commerce, Finance, Human Resources, Manufacturing). The main content area shows a list of bots, with 'Manage Payment Advice' selected. The details for this bot are shown below, including its description, summary, tags, and key process steps covered. The description states that the bot collects remittance files from a user mailbox and uploads them to the S/4 HANA FIORI application. The summary mentions that it allows for automatic management of payment advice. The key process steps covered are 'Collect file', 'Upload file', and 'Trigger reconciliation'. The benefits listed are 'Mailbox monitoring for new files to process' and 'Automatic upload of the file into the proper FIORI application'. The 'What's New' section is also visible.

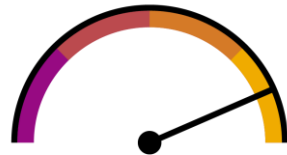
# SAP Intelligent RPA in a Nutshell

## Business value



### Improve Operation

- Remove manual tasks
- Mobilize resources for high-value tasks
- Allow parallelization



### Reduce Cycle Times

- Improve overall process efficiency
- Cut process execution time
- Generate immediate savings



### Increase Compliance & Service Quality

- Reduce human errors
- Gain efficiency with bots running 24/7
- Focus on valuable error-handling



### Gateway to AI

- Support unstructured data
- Self-healing bots
- Exception-handling history

# CURRENT SUCCESS CUSTOMER TESTIMONIALS

# Rehau: Today's Robotic Processes will spark tomorrow's Digital Assistants



## Company

REHAU Polymer (Suzhou) Co., Ltd

## Headquarter

Rehau, Germany

## Industry

Plastics

## Products and Services

Appliances, Technical Equipment, Home Interiors, Roller Shutters, Edging Solutions Surface Solutions and Weaving Material

## Website

<https://www.rehau.com/cn-zh>

## Main Objectives

- Digital Automation to ease manual effort in mass upload of AR posting. Reduce human error and better use of human capital on strategic initiatives.
- Digital workers to execute the batch job to set production orders to be technical completed/Close/Delete, in order to
  - Faster process execution, Ensure transparent timely reporting of manufacturing planning.
  - Optimize period-end closing



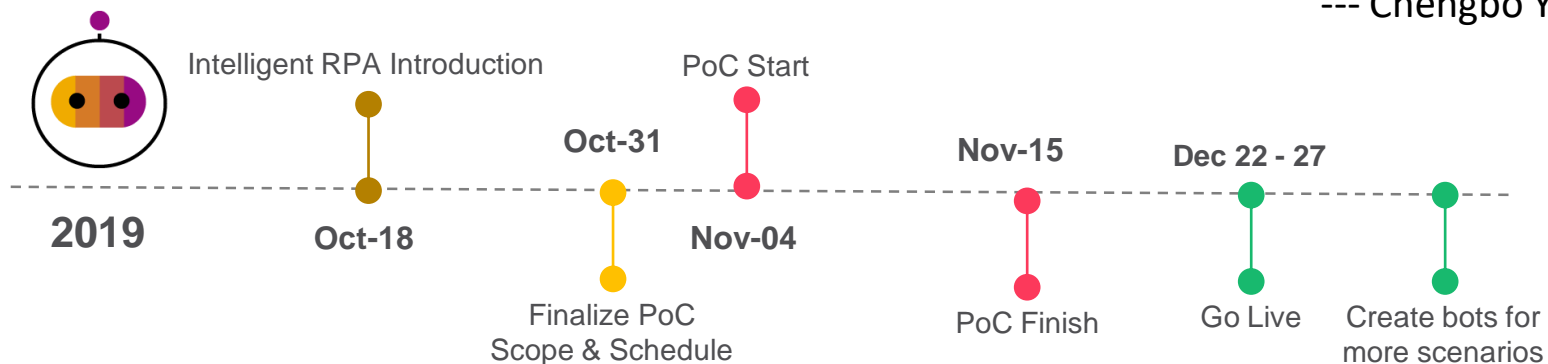
## Customer Voice

“SAP Intelligent RPA and the pre-defined bots in S/4HANA help REHAU to realize intelligent, automatic and accurate process execution. Free up employee's capacity to focus on more high value tasks and improve the user experience.”

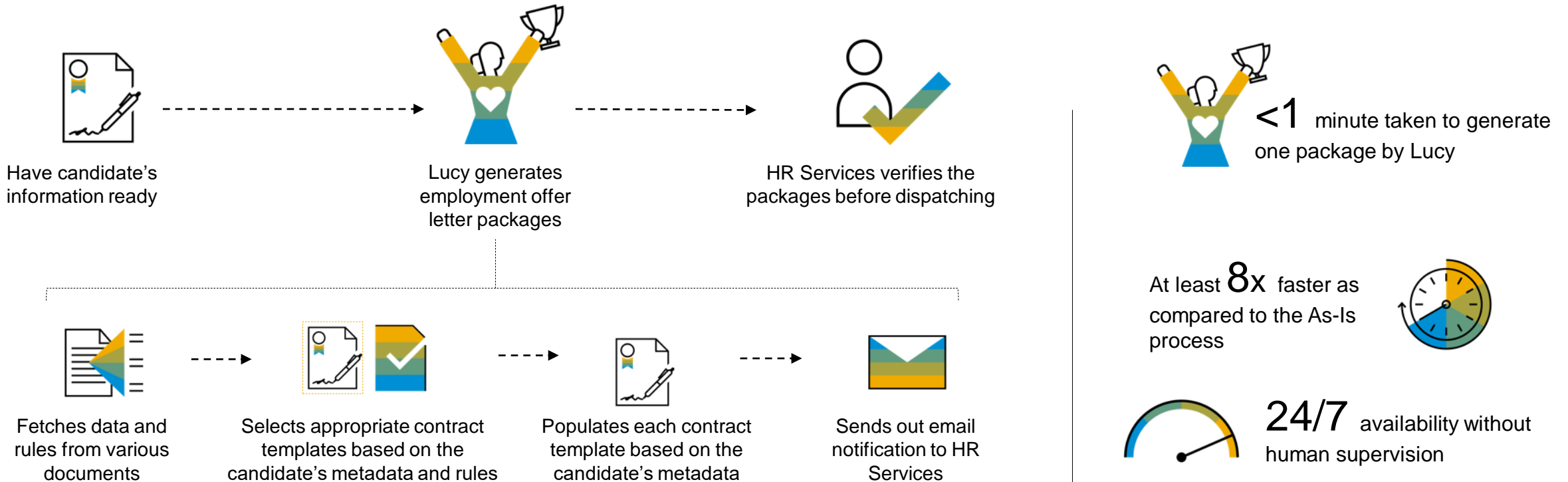
--- Chengbo Yu, Rehau APJ CIO

## Key Facts

- 1000 FI documents per month will be uploaded automatically, Intelligent RPA turns **4 days'** workload into **10 mins**.
- Working as Digital Worker, this bot can automatically proceed approx. 3000 Production orders for all TECO, Closure and Deletion change per month.
- Process 500 orders per batch to close the orders, it used to take 1 day for human work, now only **2 mins 18 seconds** for Intelligent RPA.
- Basically no manually interference needed.



# HR Offer Letter Generation – Lucy Bot with SAP Intelligent RPA



## Improved Efficiency

Business process automation with reduced manual steps



## High-Quality Output

Eliminating potential human errors



## Faster Time-To-Value

Ease of implementation and roll-out



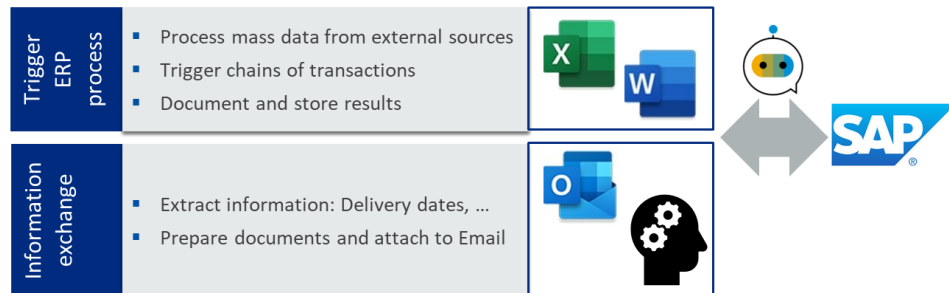
## Co-Innovation Leading to Success

SAP's journey towards Intelligent Enterprise

# With routine tasks handled by bots, Villeroy & Boch can focus on delivering great customer service and maximizing business value.

By deploying **SAP® Intelligent Robotic Process Automation** technology with **SAP Cloud Platform**, Villeroy & Boch Group:

- Enabled tight process integration with the SAP ERP application and productivity solutions
- Created “attended” bots (under staff supervision) that complete simple, frequently occurring tasks such as responding to standard e-mail inquiries and making general ledger postings.
- Helped customer service staff spend more time assisting wholesale customers with nonroutine inquiries
- Freed up finance and purchasing staff to focus on strategic tasks
- Began to evolve the bots to trigger tasks autonomously and leverage SAP Leonardo AI Business Services such as Document Classification and Document Information Extraction for automation of more complex tasks



“Although we’re just at the beginning of our journey with SAP Intelligent Robotic Process Automation, we are already realizing its potential to help us **work more efficiently, serve customers better, and gain competitive advantage.**”

Dr. Daniel Neuhäuser, Head of ERP Core Solutions, Villeroy & Boch Group



Picture Credit | Villeroy & Boch, Mettlach, Germany. Used with permission.



Villeroy & Boch Group  
Mettlach, Germany  
[www.villeroyboch-group.com](http://www.villeroyboch-group.com)

Industry  
Consumer  
products

Employees  
7,500

Revenue  
€853 million

Featured Solutions and Services  
SAP Intelligent Robotic Process Automation,  
SAP Cloud Platform, SAP ERP, SAP Leonardo  
AI Business Services





# SAP runs SAP – Account Creation with SAP Intelligent RPA

## Simplifying Account Creation with SAP® Intelligent RPA



### Before: Challenges and Opportunities

- Business cards scans that don't typically provide all the required information to create a new account in the SAP® Master Data Governance application
- Need for a shared-services data agent to manually enter the missing information – after searching for it across multiple sources and systems
- Overall account creation process that is manual, time-consuming, and error-prone

### Why SAP

- SAP Intelligent Robotic Process Automation (SAP Intelligent RPA) technology, which serves as a digital assistant to the shared-services agent
- **Automatic account data enrichment** for new requests in SAP Master Data Governance, including tax identification information and the Dun & Bradstreet D-U-N-S Number
- Automatic inclusion of marketing attributes, such as revenue, number of employees, and industry code – in turn leading to the correct market-unit assignments, including internal account classification, sales segment, market segment, and so on

### After: Value-Driven Results

- **Better experiences** and **increased efficiency** for shared-services center agents – freeing up time for higher-value tasks
- More **accurate and complete account data** in SAP Master Data Governance and receiving systems

“SAP Intelligent RPA helps me collect data from different sources quickly, which helps me make informed decisions about data change requests. I can be sure I'm getting **high-quality data quickly – right when I need it.**”

Sayyed Hassan Naghib, Data Expert, SAP SE

“SAP Intelligent RPA is helping us bridge the gap between a long-term software implementation with a fast and simple solution. Our users see **immediate automation benefits**. It also helps us see areas we can improve across business processes.”

Christopher Reimann, Intelligent Data Operations Lead, SAP SE

**33%**

Faster account creation process

**~2,000**

Hours per year saved for shared-services staff

SAP SE  
Walldorf, Germany  
[www.sap.com](http://www.sap.com)

Industry  
High tech

Products and Services  
Enterprise application software

Employees  
>99,700

Revenue  
€24.47 billion

Featured Solutions  
SAP Intelligent RPA

THE BEST RUN 

# SAP runs SAP – Data Management with SAP Intelligent RPA

## Improving Data Management with SAP® Intelligent Robotic Process Automation

### Before: Challenges and Opportunities

- Process data change requests more efficiently and transparently
- Reduce time spent on repetitive, manual tasks by employees in shared-services centers
- Eliminate data errors due to manual data entry
- Increase the amount of time that staff can spend on high-value tasks

### Why SAP

- Rapid deployment of bots within a few days, enabling quick wins
- Intuitive functionality, enabling staff to rapidly gain bot-building skills
- Support for intelligent workplace processes for shared-services center employees

### After: Value-Driven Results

- Enhanced customer service with faster response times
- Better employee experience with significantly less manual work
- Increased efficiency, with thousands of hours shifted to higher-value tasks
- Improved data quality, providing more accurate, consistent, and compliant information for use in enterprise processes



“It used to be time-consuming, inconvenient, and inefficient to make data changes. But now, automation bots created quickly and easily using SAP Intelligent Robotic Process Automation **save us time and effort.**”

Tatevik Tadevosyan, Operations Associate, SAP SE

**2x–8x**

Faster processing of  
data change requests

**11,000**

Hours saved and used  
for higher-value tasks

# Results Data Management with SAP Intelligent RPA

## Delivering Rapid Results to Help Meet Strategic Goals

### Delivering efficiency gains

With five productive use cases, the data strategy and operations team has freed up 11,000 hours of manual work that it has reinvested in higher-value tasks. Depending on the use case, data change requests are also processed between two and eight times faster than before.

### Enhancing data quality

Use cases cover a broad range of activities, including customer data enrichment, material data management, and the creation of consent forms. By automating tasks, the team has been

able to improve on key data-quality indicators such as completeness, accuracy, consistency, and conformity.

### Improving employee experiences

The response from employees in the shared-services centers has been extremely positive. Hundreds of manual switches between applications and thousands of copy-paste steps and clicks are no longer necessary. In this way, staff time is freed up to focus on the shift from reactive to proactive data maintenance by spending more time in key programs with business stakeholders.

“Every initiative that the data strategy and operations team pursues contributes to our core strategic goals around **experience, efficiency, and data quality**. RPA proved to be **the perfect fit** for us to achieve **tangible results in a short period of time**.”

Bastian Finkel, Head of Intelligent Data Experience, SAP SE

# 100%

Accuracy for data management tasks completed by automation bots

# 1,000

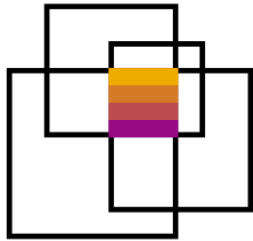
Clicks eliminated for a single task, improving the employee experience

MORE TO KNOW & KEY TAKE AWAY

# Why SAP Intelligent RPA

- Unrivaled ability to drive **SAP applications**, not only from technology but also from content perspective e.g. SAP S/4HANA Best Practices
- Strong and proven **Technology**, e.g. connectors to business applications and Office tools
- Our ability to **enhance the user experience** allows to work on the **added value**, not only on the saving
- Design & run SAP IRPA bots for both **attended & unattended** use cases in the same environment
- Provide a **complete** solution to **industrialize** the robotic approach
- Consumption based & simple **pricing** model to **ease** the adoption

# How do we drive the roadmap vision



The best **integrated**  
RPA solution for  
automating SAP  
applications



**Stable** and **efficient** RPA,  
reducing implementation  
time and maintenance  
efforts



Expanding **AI** presence  
by embedding it in  
RPA core

HOW TO LEARN MORE & GET MORE  
INFO?

# Community Enablement & Social Media

## SOCIAL MEDIA



### [SAP Intelligent RPA Community](#)

**12,400**

members in total

**2,800**

internal members



### [Twitter](#)

**2,000**

follower



### [LinkedIn](#)

**17,800**

follower



### [YouTube](#)

**1,300**

subscribers

## VIRTUAL ENABLEMENT BY openSAP COURSES

### [SAP Intelligent RPA in a Nutshell](#)

(course provided in Sep/Oct 2019 – now available in self-paced mode)

**22,300**

learners

### [How to build Bots with SAP Intelligent RPA](#)

(course provided in Nov/Dec 2019 – re-launch in Mar/Apr 2020)

**17,500**

learners

[Re-launch Q2 2020](#)

**8,400**

learners

### [Business Process Automation in SAP S/4HANA with SAP Intelligent RPA](#)

(course provided Feb/Mar 2020 – now available in self-paced mode)

**16,600**

learners

### [What's New with Bot Building in SAP Intelligent RPA](#)

(course will be launched in May 2020)

**4,300**

enrollments



# If you want to learn even more about SAP Intelligent RPA

## Externally available sources

- SAP.com presence:  
<https://www.sap.com/products/robotic-process-automation.html> aka [sap.com/rpa](https://www.sap.com/rpa)
- SAP Community page:  
<https://community.sap.com/topics/intelligent-rpa>
- [Product Documentation](#)
- SAP S/4HANA predefined content bots on [Intelligent RPA Store](#)
- [Technical Webinars on YouTube](#)
- [Learning Journey](#)
- Series of blog posts:  
<https://www.digitalistmag.com/tag/intelligent-rpa-series>



# APPENDIX

## WHAT IS SAP INTELLIGENT RPA?

# Why Intelligent Robotic Process Automation?

Your employees have a **high potential** but they spend more time doing **Copy/Paste?**

---

## Because ...

- You have legacy systems
- Disintegrated entropic applications
- Complex processes to execute using multiple solutions

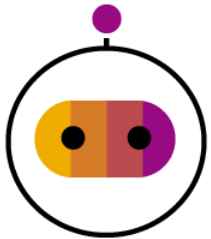
## Now you can ...

- Not let IT becoming a constraint for end to end process execution
- Improve your operations
- Free your resources from tedious tasks



## Empower your best assets

- Augment human resources on your high value core business
- Focus more on added value operations
- Build up on your previous investments
- Do more with your current IT infrastructure



SAP Intelligent RPA offers you to **empower your people** to focus on **meaningful** work by **automating repetitive tasks** with software bots emulating humans