A Collaboration of **SAP** and **SAP**insider

SAP Enterprise Architect
Global Summit
Virtual Event - March 1-3, 2022

Low-Code/No-Code

Process Automation, Application Development and User Engagement with BTP

Sebastian Schrötel – VP, Head of Low-Code/No-Code Products SAP

Critical Digitalization Challenges
Organizations Fail to Innovate at the Speed the Business Demands

Rapidly evolving customer requirements accelerating demand for cloud solutions

"The pandemic is accelerating cloud demand, with 59% of enterprises expecting cloud use to exceed plans due to COVID-19."[1]

Limited development resources, inhibiting digitalization

"Lack of skills was cited as the number-one challenge in a recent Gartner Research Circle survey, and CIOs identified the 'lack of skills and resources' as the biggest barrier to success."[2]
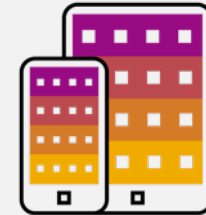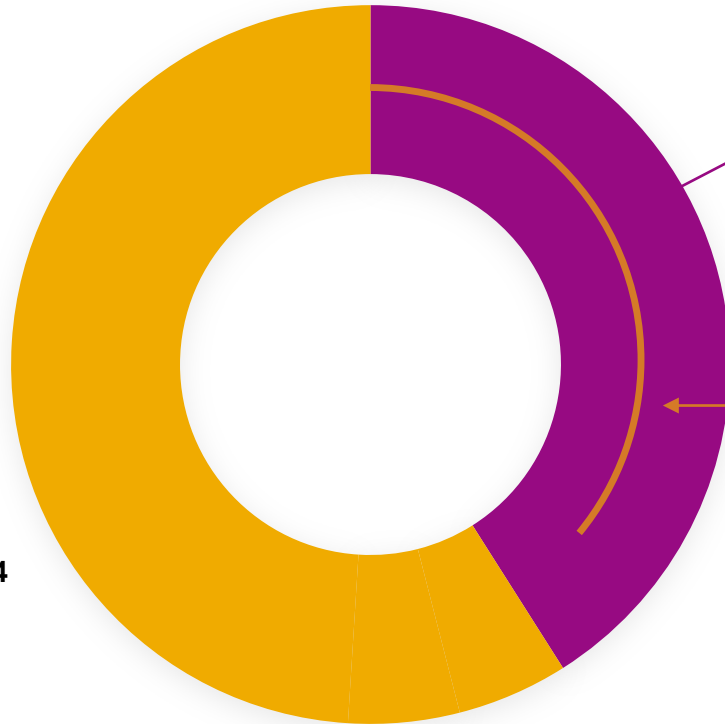
Complex IT landscapes, with a growing number of applications maintained by companies

Large companies maintain 129 different applications on average, with the total number increasing by 68% since 2015.[3]

1. "Maximizing the Impact of Technology Investments in the New Normal," CIO Insider, Deloitte, 03 February, 2021, Khalid Kark, Jagjeet, Gill, and Tim Smith.
2. "Forecast Analysis: Low-Code Development Technologies," 22 January 2021, Fabrizio Biscotti, Paul Vincent, Jason Wong, Laurie Wurster. GARTNER is the trademark and service mark of Gartner Inc., and/or its affiliates and has been used herein with permission. All rights reserved.
3. "Employees Are Accessing More and More Business Apps, Study Finds," The Wall Street Journal, 07 February, 2019, Angus Loten.

Low-Code/No-Code Unleashes Untapped Workforce in Companies
Enabling Citizen Development in Organizations to Increase Business Resilience

"In the 2021 Gartner Reimagining Technology Work Survey, respondents indicated that — on average — **business technologists** make up **41%** of their organization's workforce." [4]

Gartner®, 2021

"About **80%** of these users are **citizen technologists** who create technology output as part of (or in addition to) their full-time roles (…). These non-IT personas can independently use **low-code and no-code** technologies to improve business efficiency, efficacy and agility." [4]
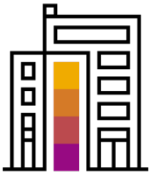
Gartner®, 2021

IT Technologists [4]
Gartner®, 2021

Low-Code/No-Code increases the number of people in an organization that can deliver new apps and extensions and tackle business challenges
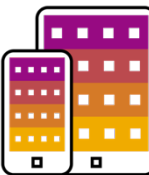
Accelerate Development by Supporting a Low-Code/No-Code Approach

Application Development is Evolving with the Rising Popularity of Low-Code/No-Code Tools

"By 2025, **over 50% of midsize to large enterprises will have adopted an LCAP** as one of their strategic application platforms."[5]

Gartner®, 2021

And "**70% of new applications** developed by enterprises will **use low-code or no-code technologies**."[6]

Gartner®, 2021

5. Magic Quadrant™ for Enterprise Low-Code Application Platforms, 20 September 2021, Jason Wong, Kimihiko Iijima, Adrian Leow, Akash Jain, Paul Vincent.
6. "Gartner Forecast Analysis: Low-Code Development Technologies," 22 January 2021, Fabrizio Biscotti, Paul Vincent, Jason Wong, Laurie Wurster.
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Enable every enterprise to become an **intelligent, sustainable enterprise**

Intelligent, sustainable enterprise

Industry-specific end-to-end processes

Business process management

Enterprise resource management
Spend management
Human capital management
Customer relationship management

Business network   Industry cloud   Experience management   Planning

Business technology platform
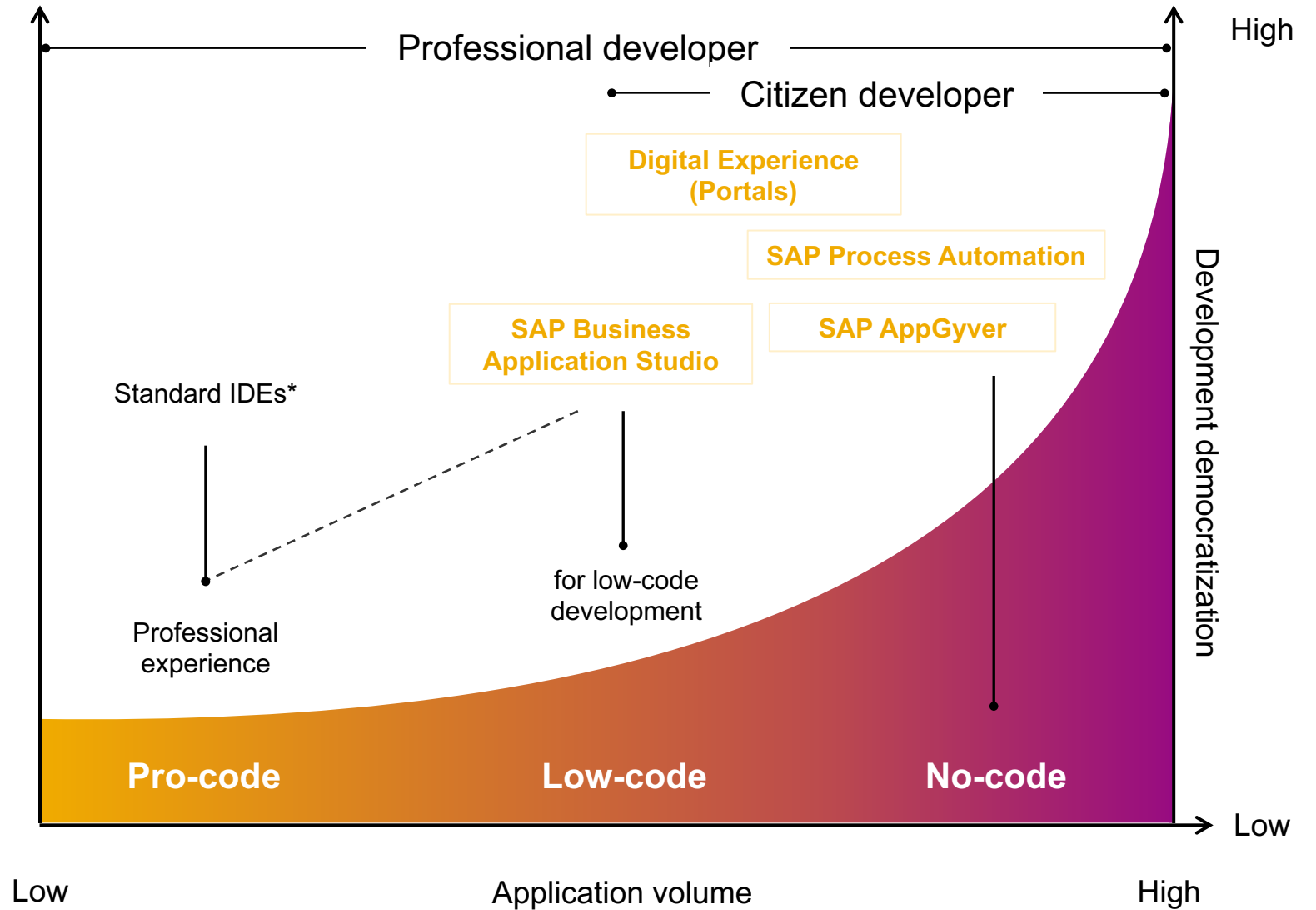
App Dev   Automation   Integration   Data and analytics   AI
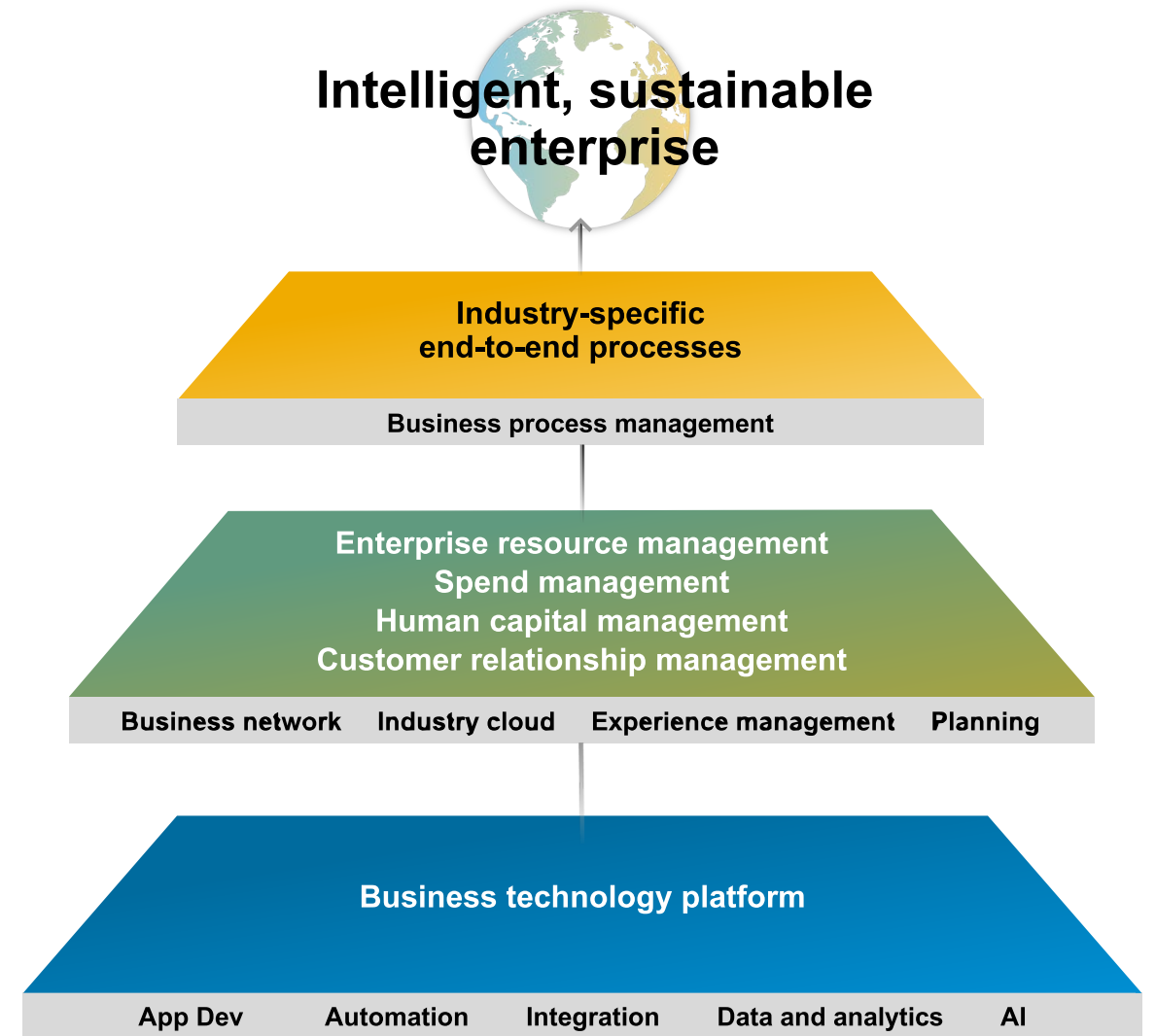
Low-Code/No-Code offering to tackle today's market challenges

App development, process automation and digital experience

Business Processes

Enterprise Resource Planning

Supply Chain

Customer Experience

Human Resources

BUSINESS USER

Digital Experience

- SAP Work Zone
- My Home & SAP Mobile Start
- SAP Launchpad service

POWERING SAP BTP

Low-Code/No-Code Capabilities

Business Process Intelligence
Signavio • SAP Process Insights

Customer Insights
Qualtrics

CITIZEN DEVELOPER

Automation

- SAP Process Automation

PRO DEVELOPER   **CITIZEN DEVELOPER**

Application Development

- SAP Business Application Studio
- SAP AppGyver

DevOps
Application Lifecycle Management

Marketplace & Content Stores (API Business Hub)
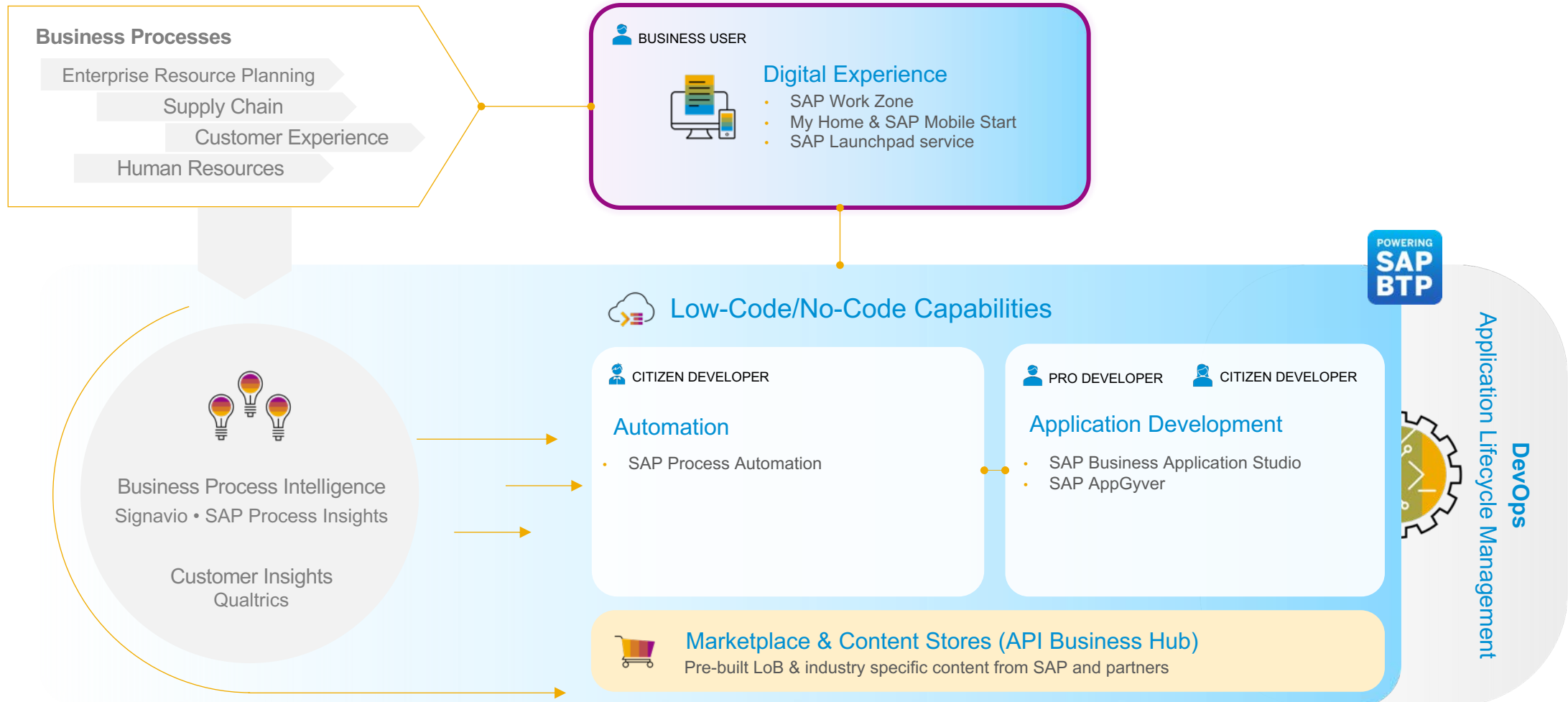
Pre-built LoB & industry specific content from SAP and partners

Create a **unified developer experience** that allows every developer to build apps fast, no matter the skill level

Professional developer

Citizen developer

High

Development democratization

Digital Experience (Portals)

SAP Process Automation

SAP Business Application Studio

SAP AppGyver

Standard IDEs*

for low-code development

Professional experience

Pro-code

Low-code

No-code

Low

Low   Application volume   High

*i.e. VS Code + extensions

7

Low-Code/No-Code offering to tackle today's market challenges

A seamless digital experience

Business Processes

- Enterprise Resource Planning
- Supply Chain
- Customer Experience
- Human Resources

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POWERING SAP BTP

DevOps
Application Lifecycle Management

Digital Experience Services: SAP Work Zone & SAP Launchpad Service

Improving productivity by connecting processes, apps and data into seamless digital experiences

Mobile experience: SAP Mobile Start

Desktop (web) experience

Content packages by LoB / Industries

Low-Code/No-Code Digital Experiences
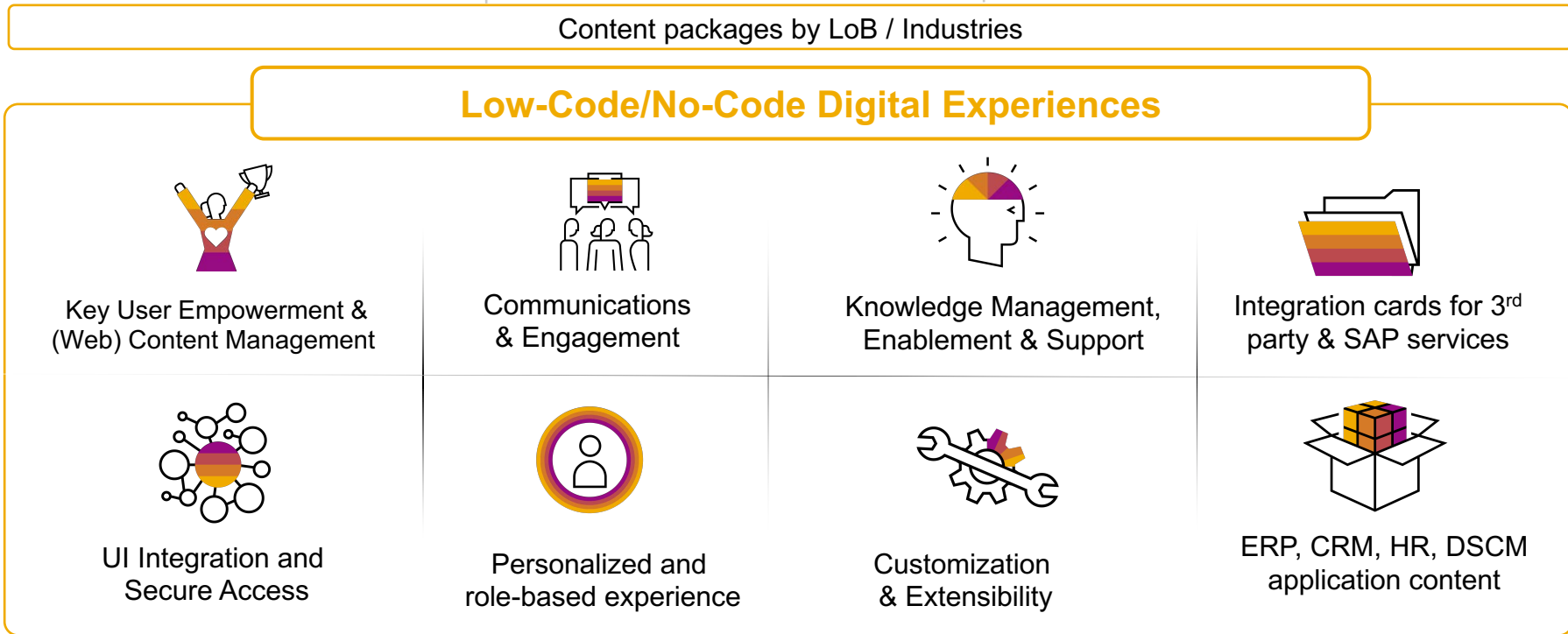
My Home
(central entry point)

SAP Launchpad service
(foundation)

SAP Work Zone
(premium capabilities)

Key User Empowerment & (Web) Content Management

Communications & Engagement

Knowledge Management, Enablement & Support

Integration cards for 3rd party & SAP services

UI Integration and Secure Access

Personalized and role-based experience

Customization & Extensibility

ERP, CRM, HR, DSCM application content

Business (Key) users

Content Managers & Administrators

(Citizen) Developers

- Central access to SAP and custom-built apps & extensions, as well as third-party solutions (cloud / on-premise)
- Personalized, role-based user experience with search, tasks, notifications, cards, micro-experiences, and more.
- Engaging digital workplace & employee portal experience blending business data with unstructured information (docs, news, video, etc.)
- Empower business users with self-services for information sharing & enablement (knowledge base, forum, wiki)

Digital Experience Services Common Use Cases
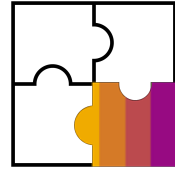
Integration of custom apps, extensions and third-party solutions
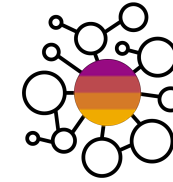
UX Integration: unified access to SAP apps, tasks and processes

Create sites blending business data and unstructured information

Collaborative Knowledge Sharing & Enablement

Digital Workplace & NextGen Portal

Customer Stories: Cross-industry and Line of Business
Customers are seeking a unified access point blending applications & content:

Eintracht FRANKFURT

Creating a Sustainable and More Competitive Sports Club with SAP Work Zone

SAP Work Zone provides a contemporary and independent working environment which collects and propagates collective knowledge on and off the pitch. **50% fewer requests** to Coach Enablement and Development as content access is now self-service based.

More information

Royal Mail

Transforming the Learning Experience with SAP SuccessFactors

Utilizing **SAP SuccessFactors Work Zone**, a user-centric digital personal development platform was implemented. It provides a **centralized access point** to different previously not paired technologies with "consumer grade" user experience.

More information

Rhein-Neckar-Kreis

Enforcing Regional Networks to Connect Migrants with Vital Services

Utilizing **SAP SuccessFactors Work Zone**, Landratsamt Rhein-Neckar-Kreis – a county in Baden-Württemberg, Germany - create a **digital communication and collaboration platform to** connect authorities and volunteers across the region. The so-called "Integration Portal" would serve as a one-stop shop for the coordination of support services for migrants and refugees
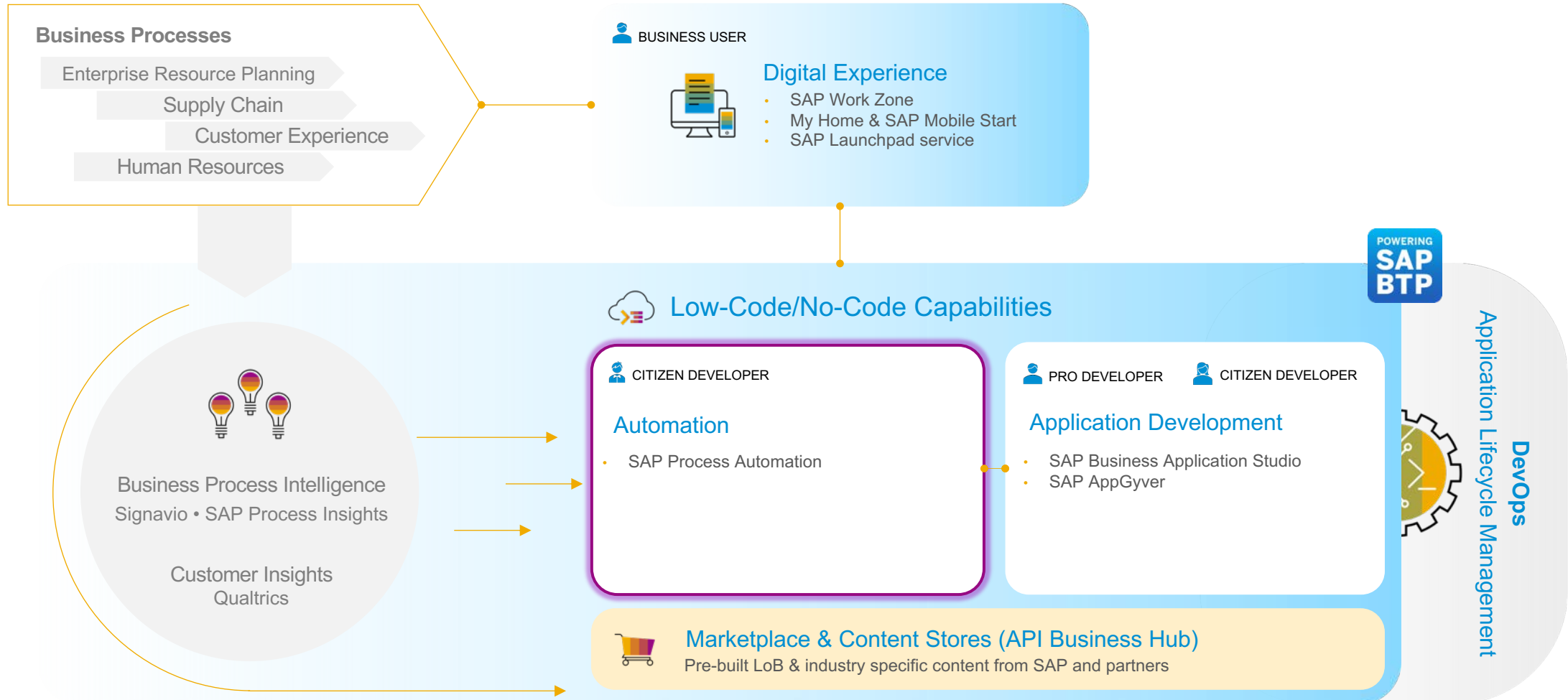
More information

How to get started

SAP Community
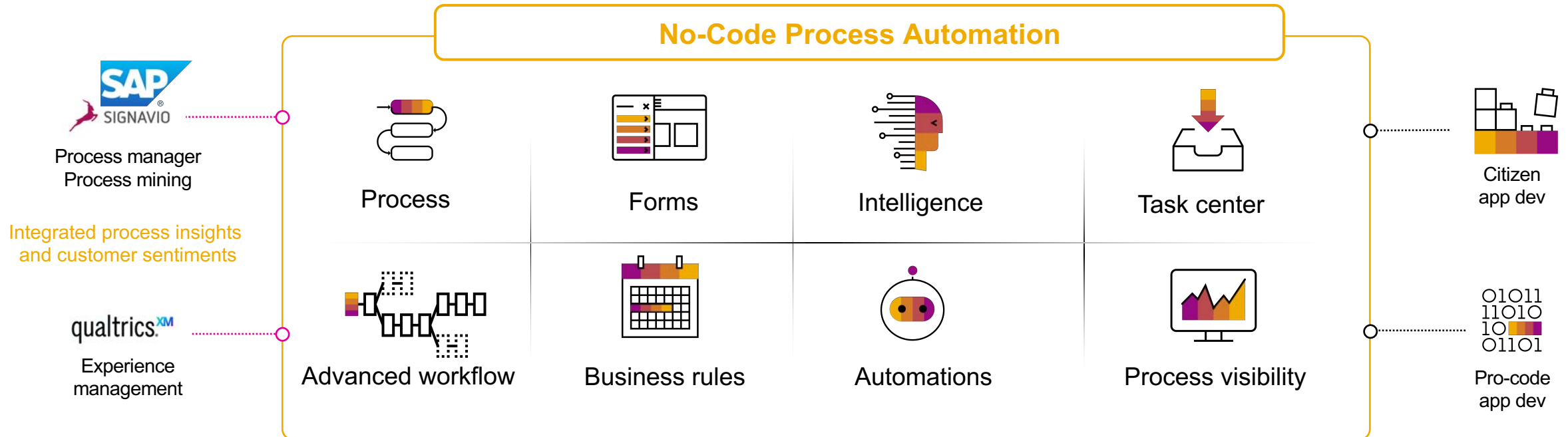
Free Tier

Follow Digital Experience
 on Social Media

Low-Code/No-Code offering to tackle today's market challenges
Enhanced efficiency through automation

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POWERING
SAP BTP

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Pre-built LoB & industry specific content from SAP and partners

DevOps
Application Lifecycle Management

Introducing SAP Process Automation
Capabilities: Citizen automation for line-of-business builders

SAP SIGNAVIO
Process manager
Process mining

Integrated process insights and customer sentiments

qualtrics XM
Experience management

No-Code Process Automation

- Process
- Forms
- Intelligence
- Task center
- Advanced workflow
- Business rules
- Automations
- Process visibility

Citizen app dev

Pro-code app dev

- New **citizen automation user experience** (process builder, forms builder)
- All **advanced workflow management** capabilities available (rules, process visibility, process flexibility, AI)
- Embedded **RPA capabilities** to readily combine bot automations with workflows
- Content and **reusable artifacts** (such as bots, workflow components, process steps, actions)
- **Unified launchpad and task center** for citizen developer applications and automations
- **Integrated** with SAP applications, leveraging SAP **application development tools for extensions** (LCNC to pro-code)

SAP Process Automation

Combining workflow management and RPA capabilities with a no-code citizen developer experience
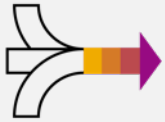
Combined **capabilities** from SAP **Workflow Management** and SAP **Intelligent Robotic Process Automation** services**.**

Intuitive citizen developer experience to **automate workflows and processes** using visual features that require no coding expertise.

Increased capacity to drive process automation by **empowering business experts to become citizen developers**.

Leveraging the power of no-code, citizen developers can build, adapt, improve, and innovate business processes with minimum assistance from scarce IT resources.

SAP Process Automation

A simpler and faster way to enhance business efficiency and agility with confidence
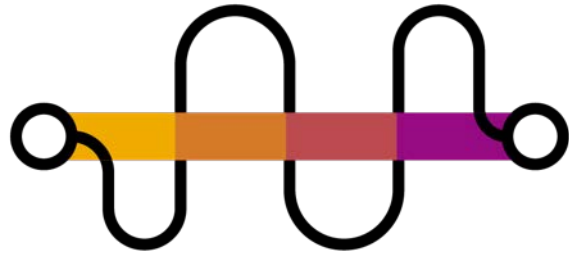
Build with Simplicity

Simplify automation with visual drag-and-drop tools and industry specific content

Automate Faster

Automate faster with business context in a unified workflow management and robotic process automation solution

Operate Confidently

Operate confidently on a trusted, enterprise-grade multi-cloud platform

Embedded Intelligence and Decision Support

Adding the value of AI in business process automation
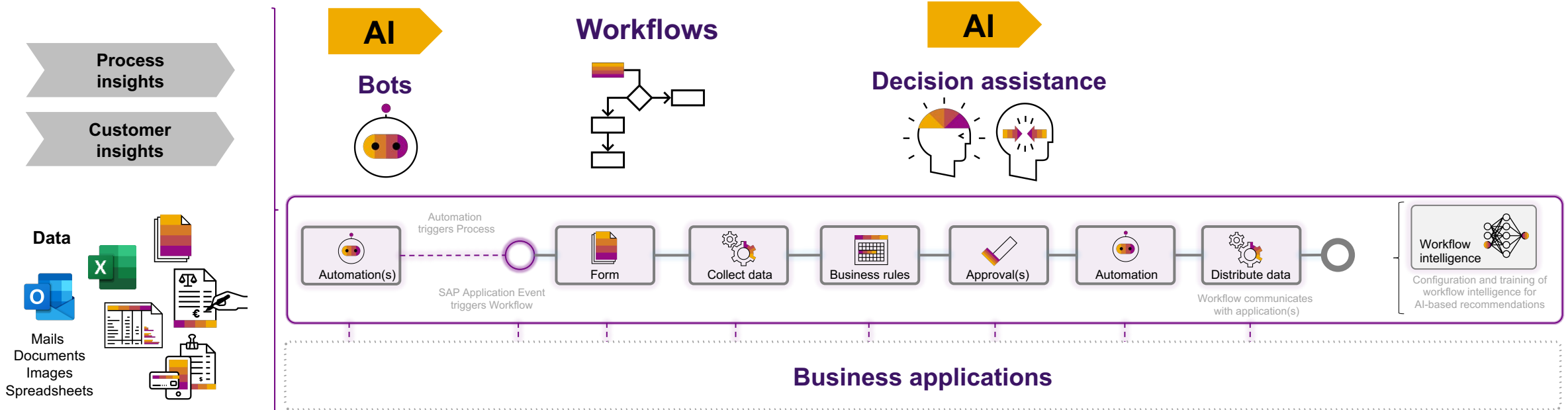
SAP Process Automation enables LoB experts **without additional cost** to

- Use machine learning for recommended actions based on workflow data correlation and attribute importance for the decision (**document attribute recommendation**)
- Configure and train machine learning explainability (MLX) for recommendations with confidence levels without any data science experience
- Leverage **document information extraction and classification** with bot automations
- **Classify** and **route business documents** to the right process, extract data from different sources and create records (such as sales order)

SAP Process Automation Use Cases
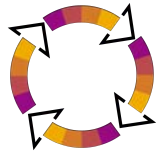
Automate manual, repetitive tasks
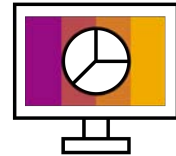
"Lights-out" automation of high volume process steps

Automatically aggregate data from multiple systems
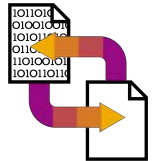
Digitalize manual & semi-automated processes
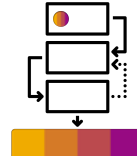
Extend and adapt standard application flows

Automate end-to-end cross-application workflows

Example Processes for Automation

Lead to Cash	Capital Expenditure Approvals	Invoice Approvals		Account Opening
Hire to Retire	Relocation	Visa Permits	HR Employee Self Services	Managing Contingent Workers
Design to Operate	Master Data Record Update		Document Approval	Lead Generation Workflows
Source to Pay	Return Order Process		Incident Management	Procurement Data Collection

The Voice of our Customers

Digitalize, optimize & focus

STADTWERKE GELSENKIRCHEN

Processes, bots & ideas

FREUDENBERG
INNOVATING TOGETHER

"SAP Process Automation will support many SAP customers in digitalizing their paper-based processes and optimizing transparency and cycle time. Integrating it with other SAP solutions offers the possibility for employees to get rid of repetitive tasks so that they can focus on higher value topics."

Stefan Schmidtke, SAP Application Manager, Stadtwerke Gelsenkirchen

„I actually had a lot of fun testing SAP Process Automation as I was able to build a process including a bot without any help in a very short time – and that without being a developer! I already have some concrete ideas what scenarios I can use the tool for in the future."

Katja Nawrath, SAP Business Process Expert, Freudenberg

The Path to SAP Process Automation

Move to process automation at your own speed or make a fresh start
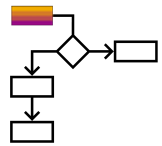
SAP Workflow Management

Starting from

- All workflow management capabilities, same runtime – no migration

- Workflow components, process steps, and business rules as reusable artifacts

- Side-by-side usage with reuse of existing content and workflow editor (LCAP)

Looking for

- Additional **citizen developer user experience** including native RPA/process builder

- **Live process content** plus growing new content artifacts (templates, skills)
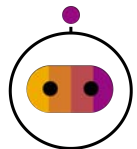
SAP Intelligent Robotic Process Automation

Starting from

- All automation capabilities, same runtime – no migration efforts

- Automation components, application, data, automations as reusable components

- Side-by-side usage with reuse of existing bot content

Looking for

- Additional **citizen developer experience** for automating **E2E business processes**

- **Additional artifacts** such as forms, business decision rules, and process visibility

- **RPA content** plus growing new content artifacts (templates, skills)

SAP Process Automation

New customers

- Explore **no-code process automations** with a **citizen developer experience**

- Build simple forms and **departmental process improvements**

- Benefit from a growing list of **prebuilt business content** and new skills

How to get started

SAP Community

Read our Solution Brief
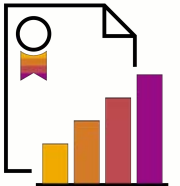
Follow SAP Process Automation on Social Media

Low-Code/No-Code offering to tackle today's market challenges

Accelerated time to value with low-code/no-code application development

Business Processes

Enterprise Resource Planning

Supply Chain

Customer Experience

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PRO DEVELOPER **CITIZEN DEVELOPER**

Application Development

- SAP Business Application Studio
- SAP AppGyver

POWERING **SAP BTP**

DevOps
Application Lifecycle Management

Marketplace & Content Stores (API Business Hub)
Pre-built LoB & industry specific content from SAP and partners

Introducing SAP AppGyver and SAP Business Application Studio
Boost Application Development with Low-Code/No-Code capabilities

SAP AppGyver

Empowers citizen and professional developers to deliver pixel-perfect standalone apps and extensions in a full no-code composition environment

SAP Business Application Studio

Boosts development productivity with a low-code experience based on the SAP opinionated technology (CAP, Fiori, UI5, HANA and more)

Low-Code/No-Code Application Composition

Stand-alone and SAP App Extensions

Extensive UI Component, Theming and Layout, Fiori, native web

Service modeling w/ simplified cloud application programming model

Service center for API discovery & consumption
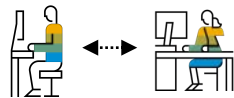
Development continuum Citizen Dev → Pro Dev

Multi-channel Support, Mobile & Web

Visual process management & Business Logic

Enterprise Grade DevOps governance on BTP
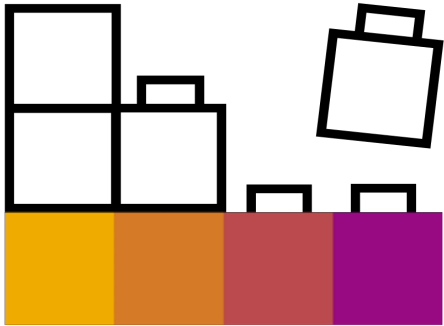
Why SAP AppGyver?
The No-Code Approach

Increase development efficiency while eliminating coding effort. Build apps intuitively for Web, iOS and Android.

- Simplified creation of UI's with **drag-and-drop functionality**

- Integration with external data using **predefined integrations** and custom connectors

- Ability to create any logic with **flow functions**
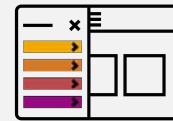
- Support for over **400 built-in formula functions**

- **Vast enablement opportunities and community** support to help no-coders get started to rapidly create and distribute sophisticated enterprise apps

- Trusted by Fortune 500 companies and **more than 300,000 users**

SAP AppGyver – Use Cases

Fast Mobile App Development

Easy Development of Web Applications
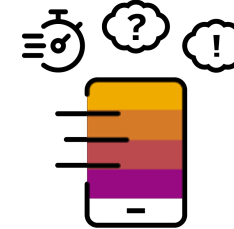
Rapid Prototyping and UI Testing
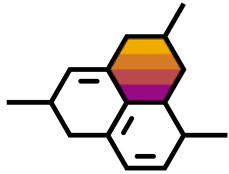
Extending Existing Apps and Systems
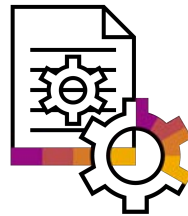
Developing Internal Business Apps for Operations
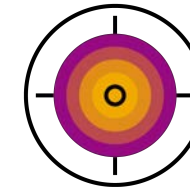
Meeting Software Demand in Niches

Examples from Production

Self Service Ticketing App integrated with SAP Service Cloud

Self-created Mobile App to Manage Damage Reports for Trailer Fleet

Multiple Business Apps for Manufacturing, Logistics and eCommerce (Configurator)

Boost Development Agility and Unleash Innovation
A unified developer experience from no-code to pro-code

SAP AppGyver

SAP Business Application Studio for Low-Code Development

SAP AppGyver	Question	SAP Business Application Studio
Front-end apps with custom functionality & design for stand-alone apps & LoB side-by-side extensions	**What type of applications can I create?**	Template-based Fiori apps, applications extensions, and backend services for SAP opinionated technology (e.g., CAP, UI5)
Integrate with REST APIs and OData	**How to integrate to other SAP solutions?**	SAP Integrations using APIs/events, cloud application programming (CAP), Fiori elements, mobile services
Everything done with no-code tools	**How to create apps and extensions?**	Low-code capabilities that can be expanded with pro-code tools
Multiplatform deployment, app stores, and web	**Where can I deploy to?**	Multiplatform deployment
Citizen and professional developer with no-code	**Who can create apps?**	Professional and advanced citizen developer with low-code, easily dive into pro-code
Extending applications	**When to use what?**	Professional and advanced citizen developer building and extending SAP applications on BTP & LoBs

2021 Gartner® Magic Quadrant™ for Multiexperience Development Platforms
SAP Business Application Studio is SAP's IDE to Deliver Seamless Multiexperience App Practices
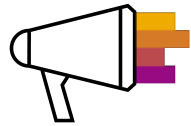
"Gartner Inc. has named SAP as a **Leader in Gartner Magic Quadrant** for Multiexperience Development Platforms for the second year in a row".[7]
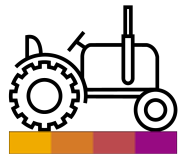
CLAAS, a global agricultural machinery manufacturer, uses SAP Business Technology Platform, which helped them to achieve a **95%** employee satisfaction, a **40% reduction** in development costs, and **faster** time to market.[8]

Figure 1: Magic Quadrant for Multiexperience Development Platforms

Gartner, "Magic Quadrant for Multiexperience Development Platforms" July 26, 2021. This graphic was published by Gartner, Inc. as part of a larger research document and should be evaluated in the context of the entire document. The Gartner document is available upon request from SAP.

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For further information, please see https://news.sap.com/2021/08/sap-positioned-leader-2021-gartner-multiexperience-development/.

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How to get started

SAP AppGyver

Community Edition
for no-code developers

**SAP Business
Application Studio**

Free Tier for low-code/
pro-code developers

Join our **SAP community** and
follow us on Social Media

Q&A

Thank you.

Sebastian Schroetel
VP, Head of Low-Code/No-Code Products
SAP

THE BEST RUN **SAP**

Follow us

THE BEST RUN **SAP**