



# Clean Core & SAP BTP

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Public





# **Why Clean Core**

**The world is changing faster  
than ever.**





**Paradigms shift.**

“In the new world,  
it is not the big fish which eats the small fish,  
**it's the fast fish which eats the slow fish”**

Klaus Schwab, Founder and Executive Chairman of the World Economic Forum



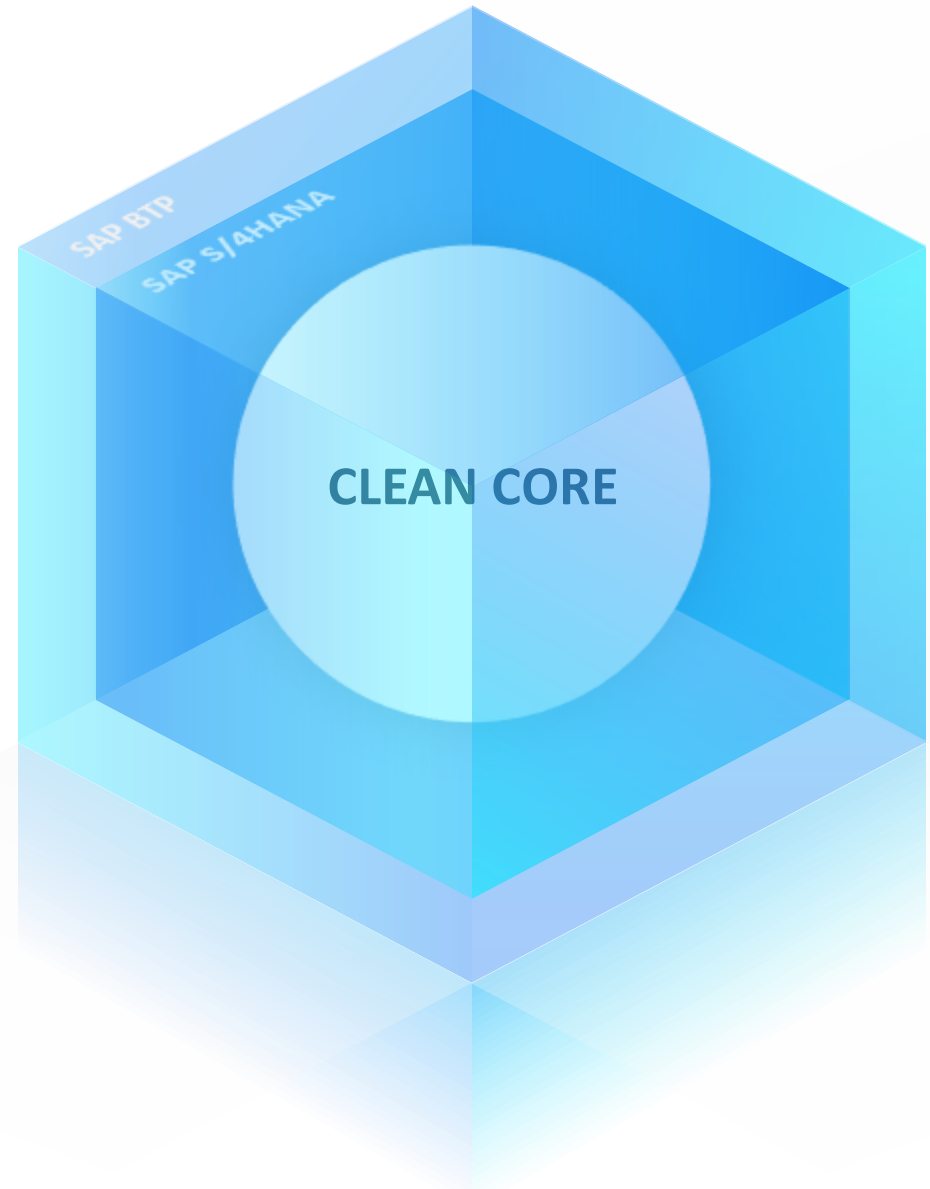


**How to be the  
fast one.**

# Be the **Fast One!**

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A clean core fosters agility  
and helps to compete in a  
fast-changing world.



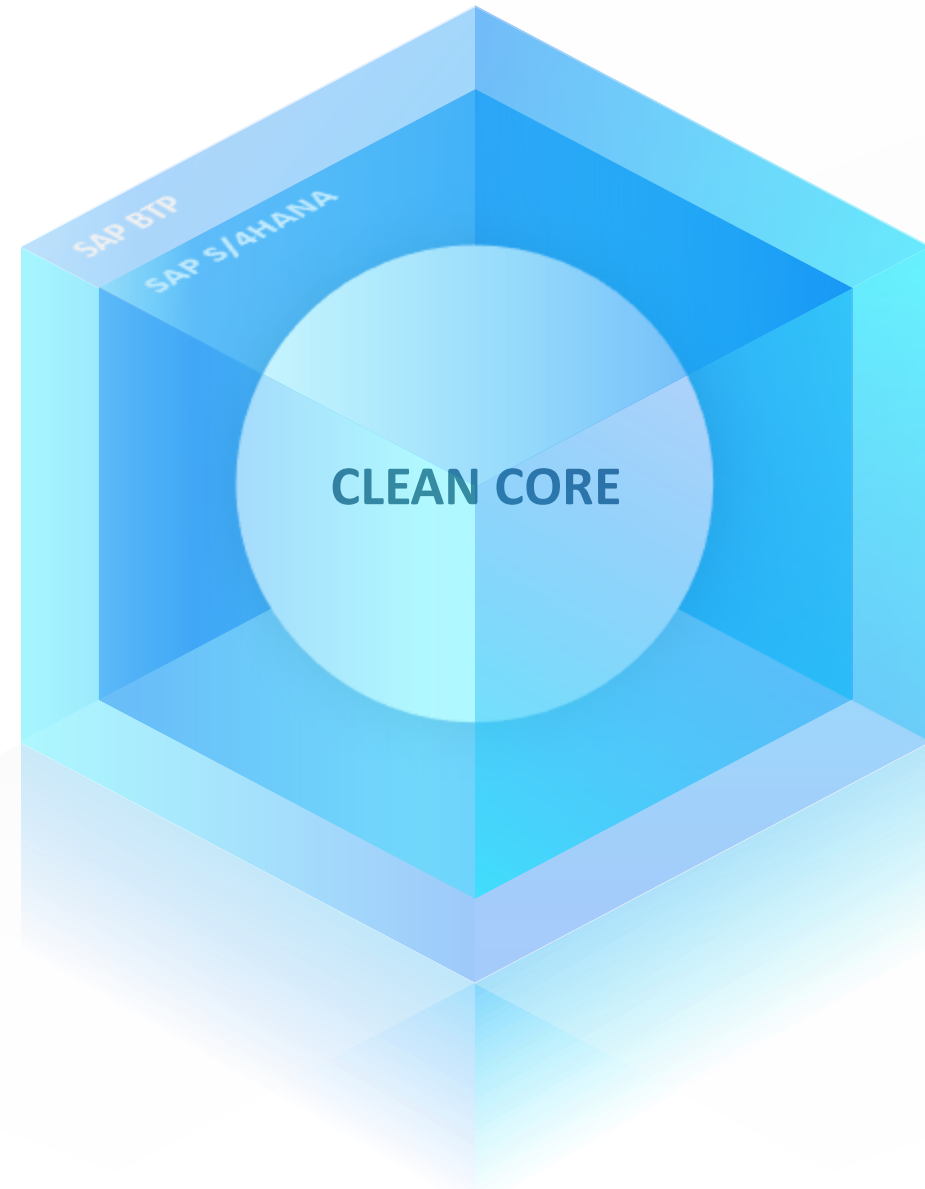
**Clean means up-to-date,  
documented, unmodified,  
consistent, efficient and  
cloud compliant.**

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Clean Core is relevant and applicable for **SAP S/4HANA Cloud Private Edition**.

SAP S/4HANA Cloud Public Edition is clean per definition.

Capabilities of the core depend on the implemented software-stack.

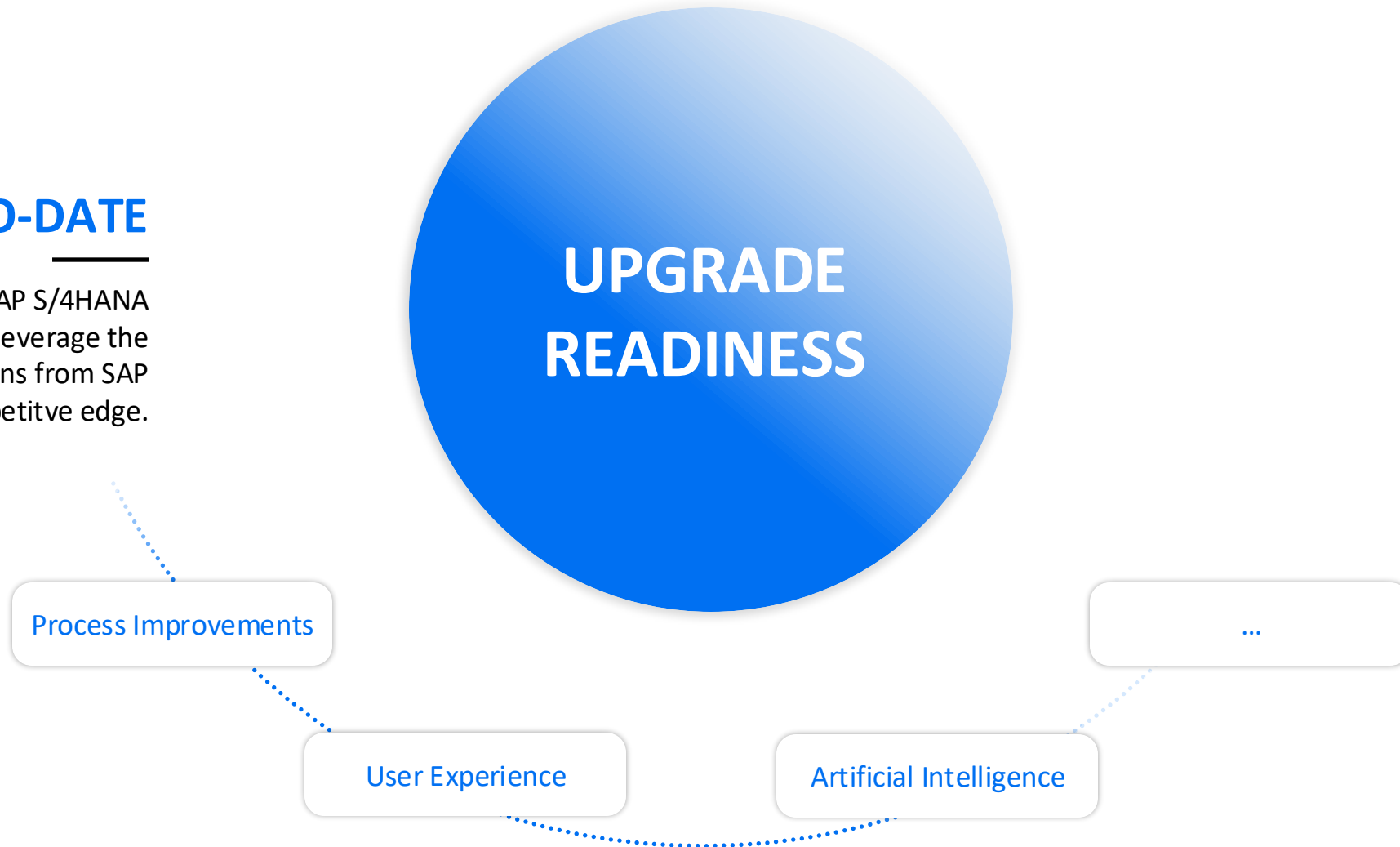




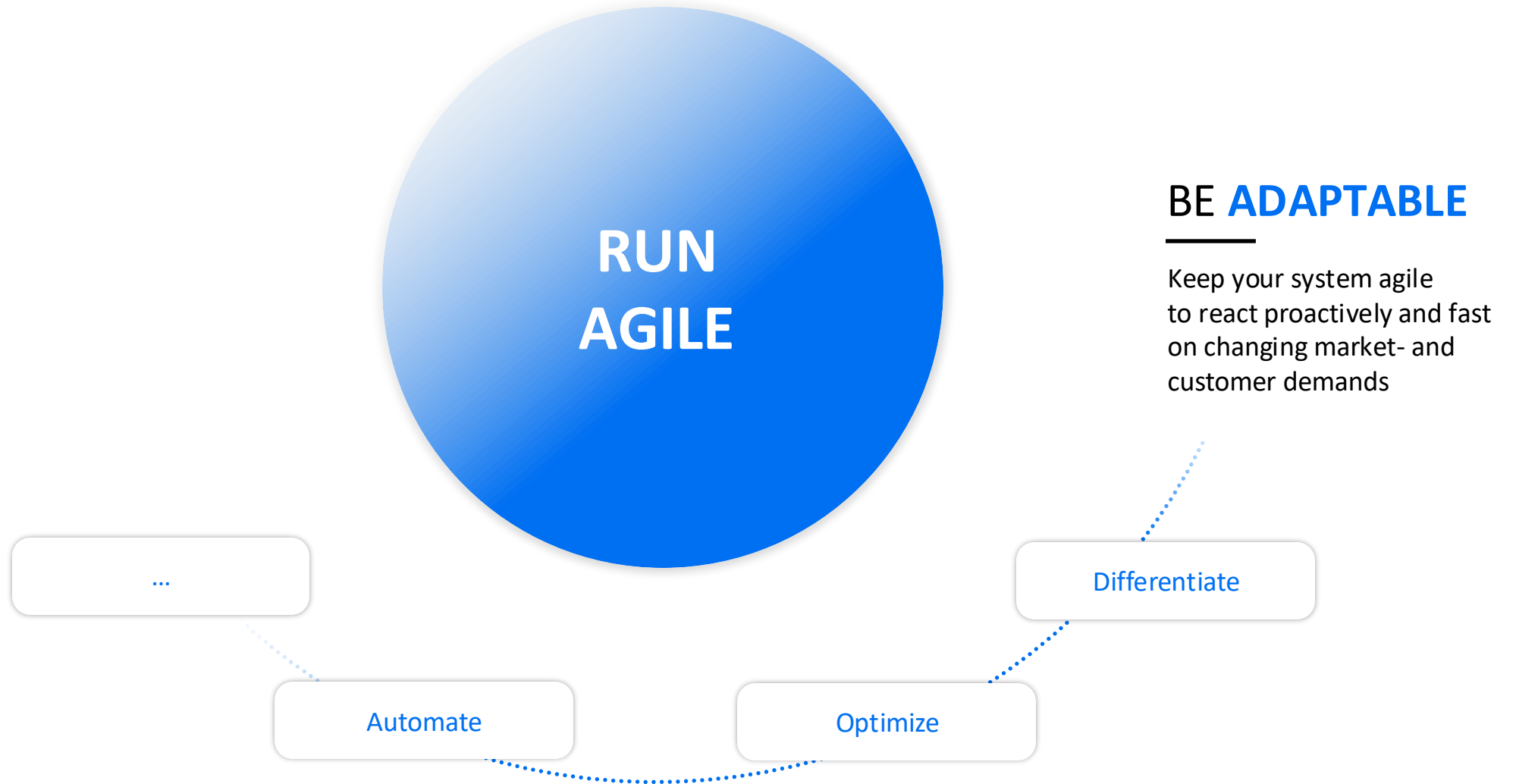
# How to be the Fast One

## BE **UP-TO-DATE**

Keep your SAP S/4HANA up-to-date to leverage the latest Innovations from SAP and gain competitive edge.



# How to be the Fast One



# How to be the Fast One

## BE **UP-TO-DATE**

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Keep your SAP products up-to-date to leverage the latest Innovations from SAP and gain competitive edge.

**UPGRADE  
READINESS**

**RUN  
AGILE**

## BE **ADAPTABLE**

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Keep your system agile to react proactive and fast on changing market- and customer demands

standardization is key

# How to be the Fast One

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standardization is key

**STANDARDIZATION**

**VS**

**DIFFERENTIATION**

# Clean Core: Customer Example

Accelerated SAP S/4HANA Cloud upgrade cycles | shortened project times | lowered costs

**HITACHI**  
Inspire the Next

 Hitachi High-Tech Corporation

**94% fewer**

SAP ERP add-ons decreased  
from over 9,000 to 520

**1 Month**

Time spent on upgrading  
ERP versions cut from  
one and a half years to  
approx one month

“We previously upgraded SAP ERP version **every five years**, taking about a **year and a half from preparation to implementation**,”  
says Yuri Yasuda.

“However, we’re now able to perform major upgrades of SAP S/4HANA Cloud for our domestic group yearly and minor **upgrades twice a year**. We’ve also cut the time from **preparation to switchover** to around **one month**.”

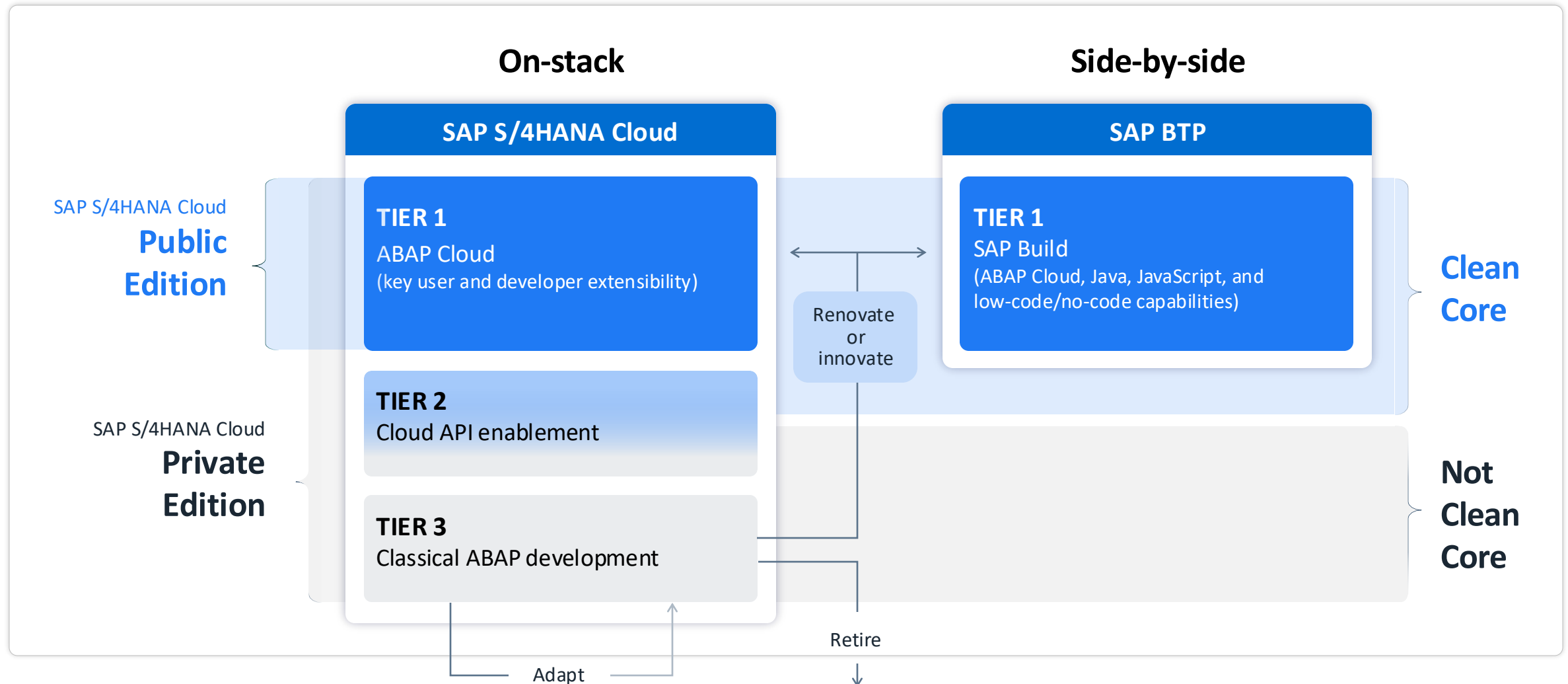
[→ Read the full Customer Success Story](#)

**How to address  
a clean core.**

# Addressing clean core and the individual dimensions

|                    |  |   |
|--------------------|--|---|
| BUSINESS PROCESSES | Keep <b>competitiveness</b> while <b>reducing complexity</b> . | 1 |
| EXTENSIBILITY      | <b>Decouple extensions</b> from standard.                      | 2 |
| DATA               | Control data according to <b>latest standards</b> .            | 3 |
| INTEGRATION        | Keep the landscape <b>reliable and flexible</b> .              | 4 |
| OPERATIONS         | Keep the operations <b>effective and efficient</b> .           | 5 |

# Extensibility model for SAP S/4HANA – Decoupling SAP and custom code is key



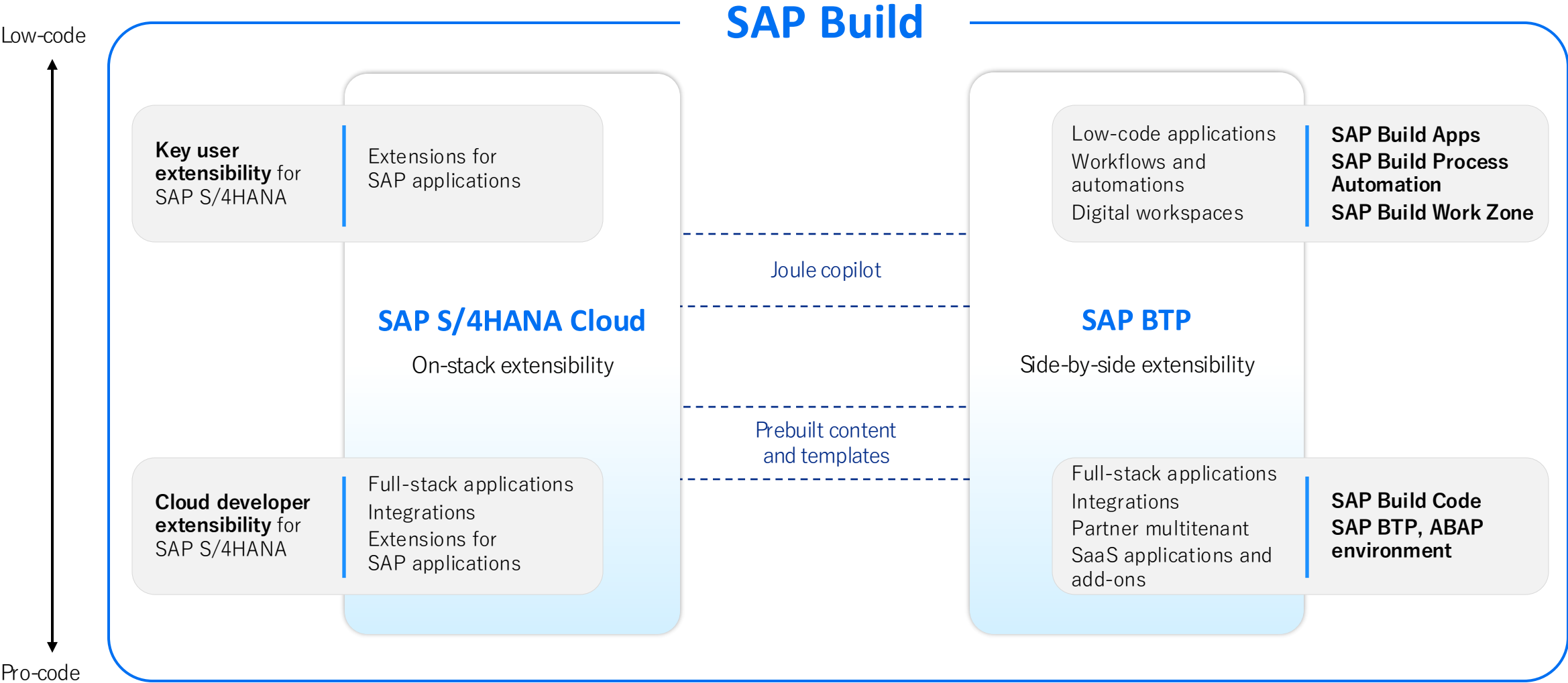








# Extensibility Portfolio for SAP S/4HANA Cloud



# Key User Extensibility for SAP S/4HANA

The screenshot displays the SAP Custom Fields and Logic interface. The top navigation bar includes the SAP logo and the title 'Custom Fields and Logic'. Below this, there are tabs for 'Custom Fields', 'Data Source Extensions', and 'Custom Logic'. The 'Custom Fields' tab is active, showing a list of 6 custom fields. A search bar at the top right of the list contains the text 'package'. The list has columns for 'Label', 'Identifier', 'Business Context', 'Type', and 'Status'. One row, 'Package Colour' with identifier 'YY1\_PackageColour' and business context 'Sales: Sales Document', is highlighted with a red border. Below the list, the 'Field Properties' section is visible, showing details for the selected field: Business Context (Sales: Sales Document), Label (Package Colour), Identifier (YY1\_PackageColour), Tooltip (Package Colour), Type (Text), and Length (5). A progress bar for 'Business Context Capacity' shows 75%. At the bottom, there are buttons for 'Create', 'Create and Edit', and 'Cancel'.

**Custom Fields (6)**

| Label             | Identifier             | Business Context      | Type     | Status        |
|-------------------|------------------------|-----------------------|----------|---------------|
| ext_test_001      | YY1_ext_test_001       | Work Package          | Text     | Not Published |
| Package Colour    | YY1_PackageColour      | Shipping: Delivery    | Text     | Not Published |
| Package Colour    | YY1_PackageColour      | Sales: Sales Document | Text     | Not Published |
| Settlement Object | YY1_SettlementObjectDe | Work Package          | Text     | Published     |
| Subcontract       | YY1_Subcontract1       | Work Package          | Checkbox | Published     |
| zwjtest_customer3 | YY1_zwjtest_customer3  | Work Package          | Text     | Published     |

**Field Properties**

Business Context: \* Sales: Sales Document

Label: \* Package Colour

Identifier: \* YY1\_PackageColour

Tooltip: \* Package Colour

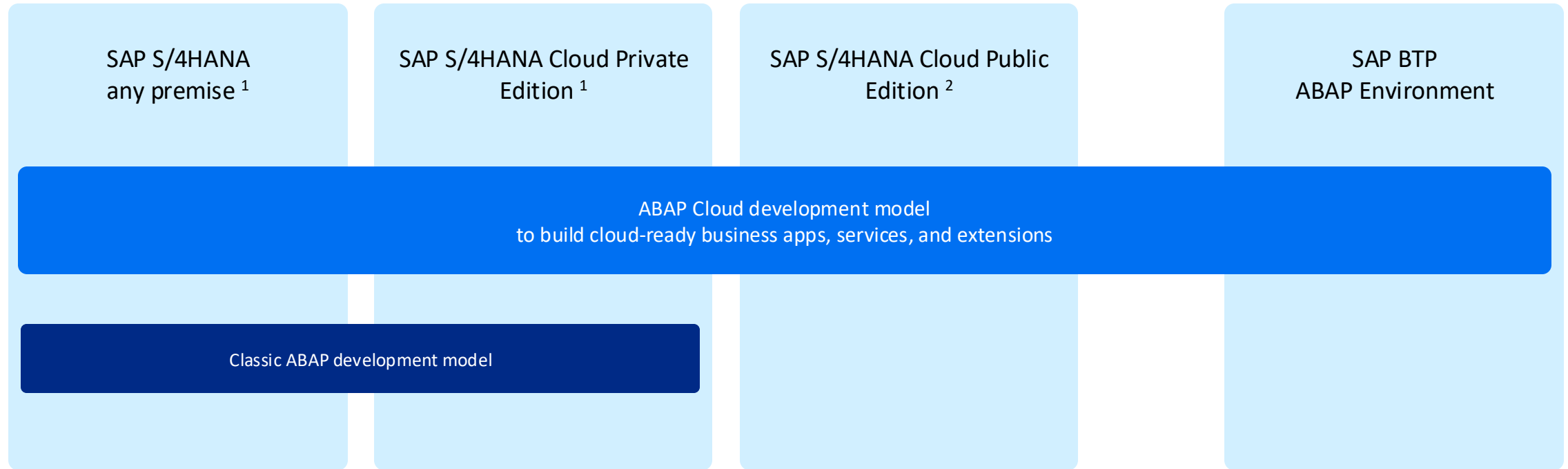
Type: \* Text

Length: \* 5

Business Context Capacity: 75%

Create Create and Edit Cancel

# ABAP Cloud – One development model for SAP S/4HANA and SAP BTP



<sup>1</sup> SAP S/4HANA any premise or SAP S/4HANA Cloud Private Edition release ≥ 2022

<sup>2</sup> SAP S/4HANA Cloud Public Edition release ≥ 2208, 3-system landscape required



# ABAP Cloud – IDE and API examples

## Custom ABAP on SAP S/4HANA Cloud

ABAP development tools in Eclipse  
Cloud-optimized ABAP language

## Access to public SAP APIs ONLY – otherwise, syntax error!

No access to old Dynpro APIs  
No direct select on SAP table MARA

## Local APIs from SAP S/4HANA

SELECT products from  
SAP S/4HANA tables using the public I\_Product  
CDS view

```
1 CLASS zcl_using_public_apis DEFINITION
2   PUBLIC
3   FINAL
4   CREATE PUBLIC .
5
6   PUBLIC SECTION.
7
8   INTERFACES if_oo_adt_classrun .
9   PROTECTED SECTION.
10  PRIVATE SECTION.
11 ENDCLASS.
12
13
14 CLASS zcl_using_public_apis IMPLEMENTATION.
15
16   METHOD if_oo_adt_classrun~main.
17
18     SELECT FROM I_CountryText FIELDS CountryName
19           WHERE Language = @sy-langu ORDER BY CountryName INTO TABLE @DATA(lt_countryname).
20     LOOP AT lt_countryname REFERENCE INTO DATA(cref) .
21       out->write( cref->CountryName ).
22     ENDLOOP.
23
24     CALL FUNCTION 'POPUP_TO_CONFIRM'.
25     SELECT FROM mara FIELDS COUNT( * ) INTO @DATA(lv_mara_count).
26
27     SELECT FROM I_Product FIELDS ProductExternalID
28           ORDER BY ProductExternalID INTO TABLE @DATA(lt_externalid).
29
30     LOOP AT lt_externalid REFERENCE INTO DATA(xref) .
31       out->write( xref->ProductExternalID ).
32     ENDLOOP.
33   ENDMETHOD.
34
35 ENDCLASS.
```

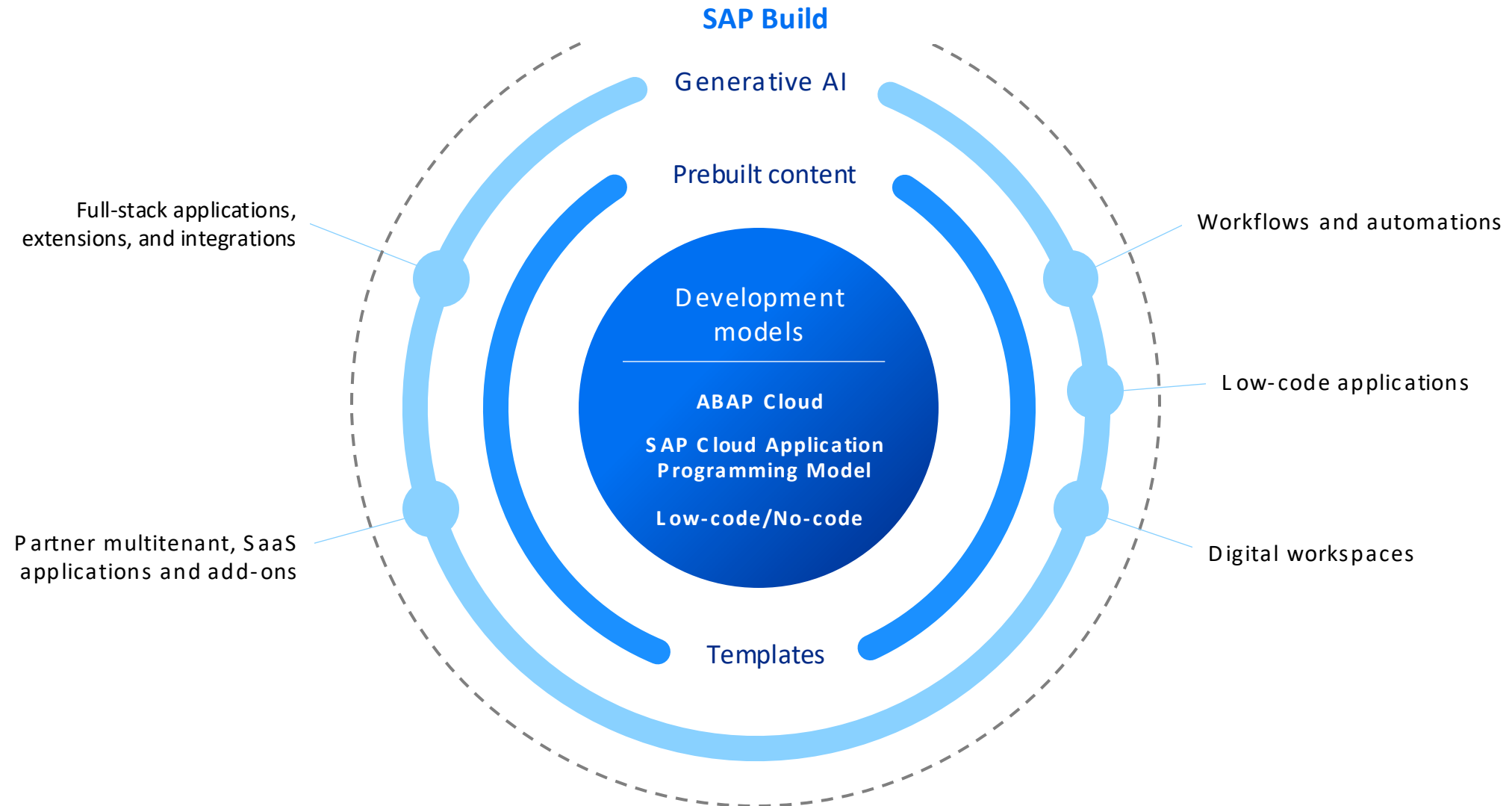
Global Class | Class-relevant Local Types | Local Types | Test Classes | Macros

Problems | Properties | Templates | Bookmarks | Feed Reader | Transport Organizer | Search | Console

2 errors, 0 warnings, 0 others

| Description   | Resource                     | Location | Type                    |
|---|------------------------------|----------|-------------------------|
| Errors (2 items)  |                              |          |                         |
| The use of Function Module POPUP_TO_CONFIRM is not permitted.                 | zcl_using_public_apis.aclass | line 25  | ABAP Activation Problem |
| Use of Table MARA is not permitted. See object documentation for replacement. | zcl_using_public_apis.aclass | line 26  | ABAP Activation Problem |

# SAP Build: A unified, AI-enabled solution for extending cloud ERP and other cloud solutions from SAP efficiently

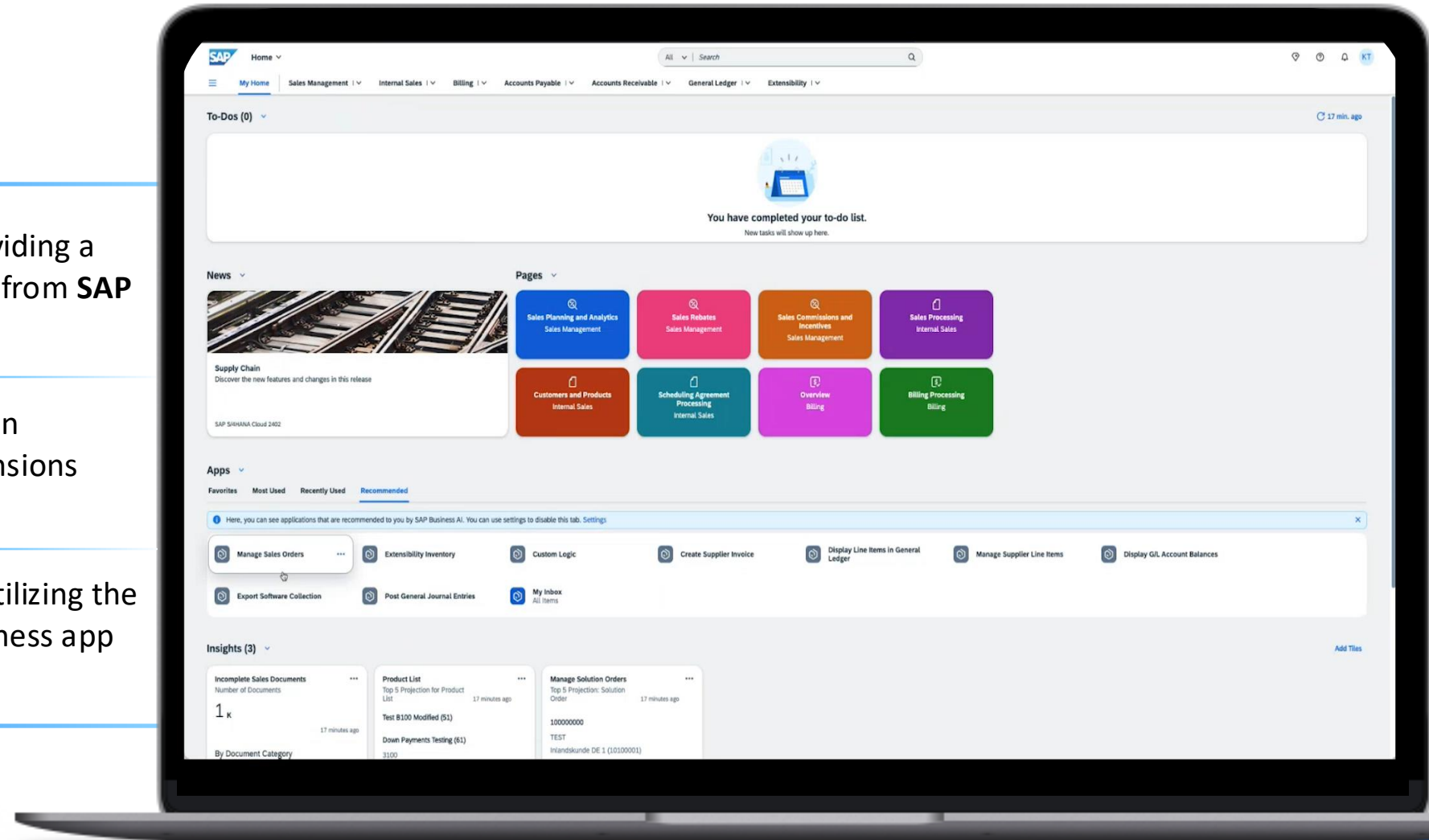


# Simplify ERP extension building with the **extensibility wizard**

Simplifies extension creation by providing a **guided wizard** and direct navigation from **SAP S/4HANA to SAP Build**

Supports both **on-stack** extensions on SAP S/4HANA and **side-by-side** extensions in SAP BTP (SAP Build)

**Accelerates extension creation** by utilizing the business context of the starting business app





# Adapt rapidly with AI built into your processes in SAP Build Process Automation

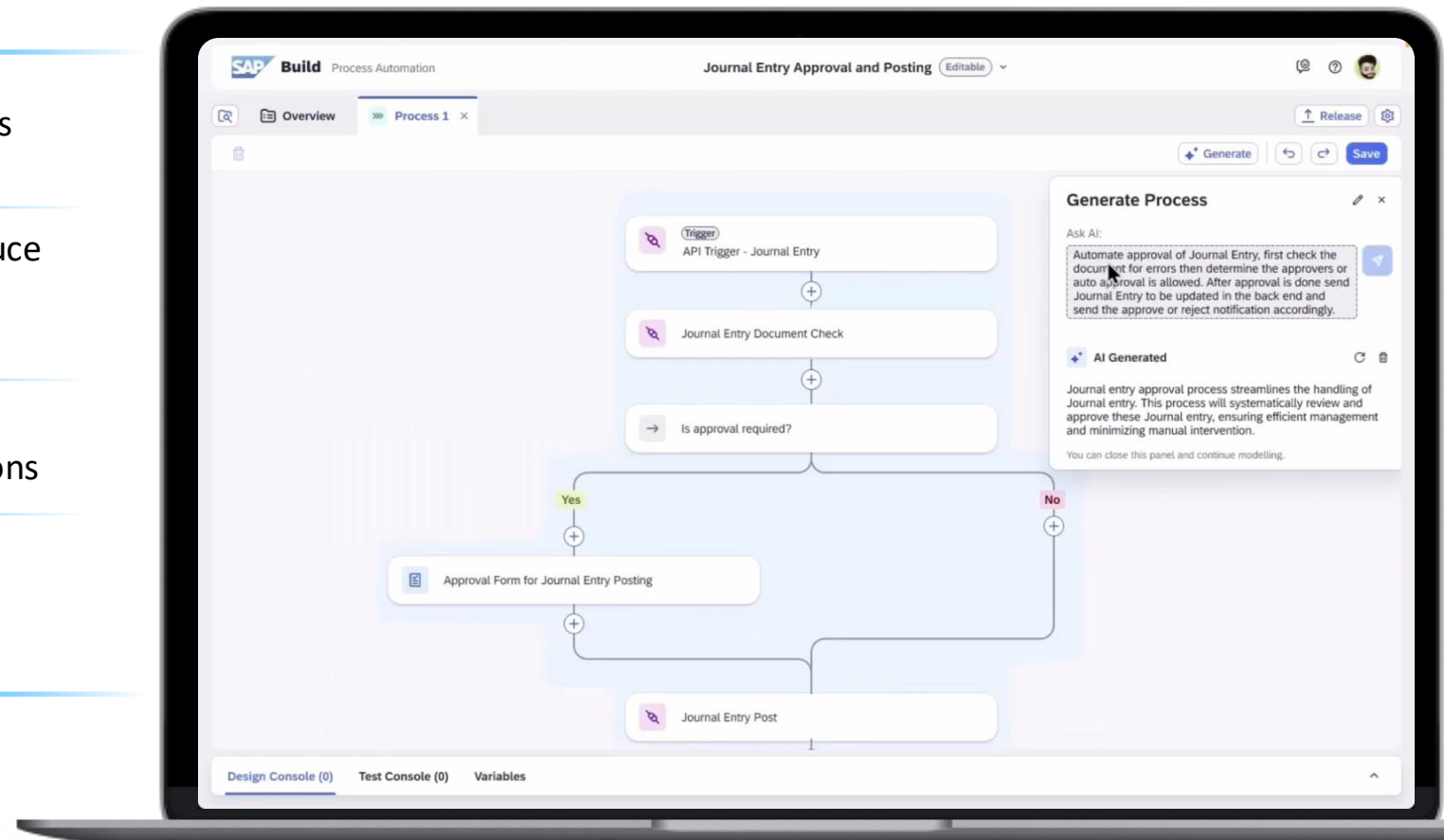
Business experts can benefit from AI-powered **process creation**, **make better decisions** with AI insights, and **reduce repetitive tasks** with AI-driven document processing.

Built-in AI accelerating AI adoption in your business processes

AI-driven document information extraction to reduce errors and empower employees to focus on higher-value tasks

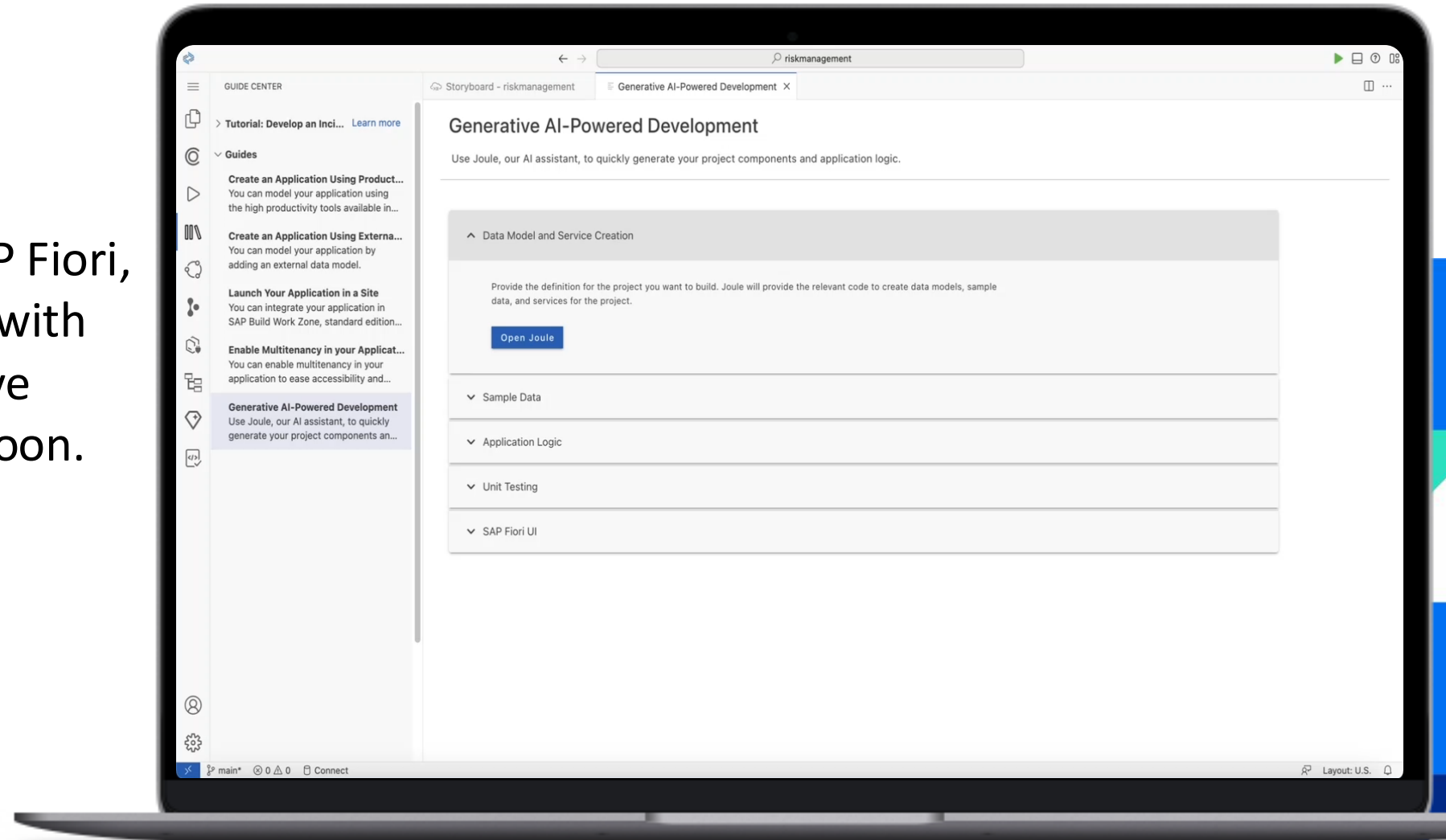
Increased data consistency and higher efficiency with AI-driven recommendations within automations

Development of process automation scenarios accelerated through process artifacts creation by generative AI



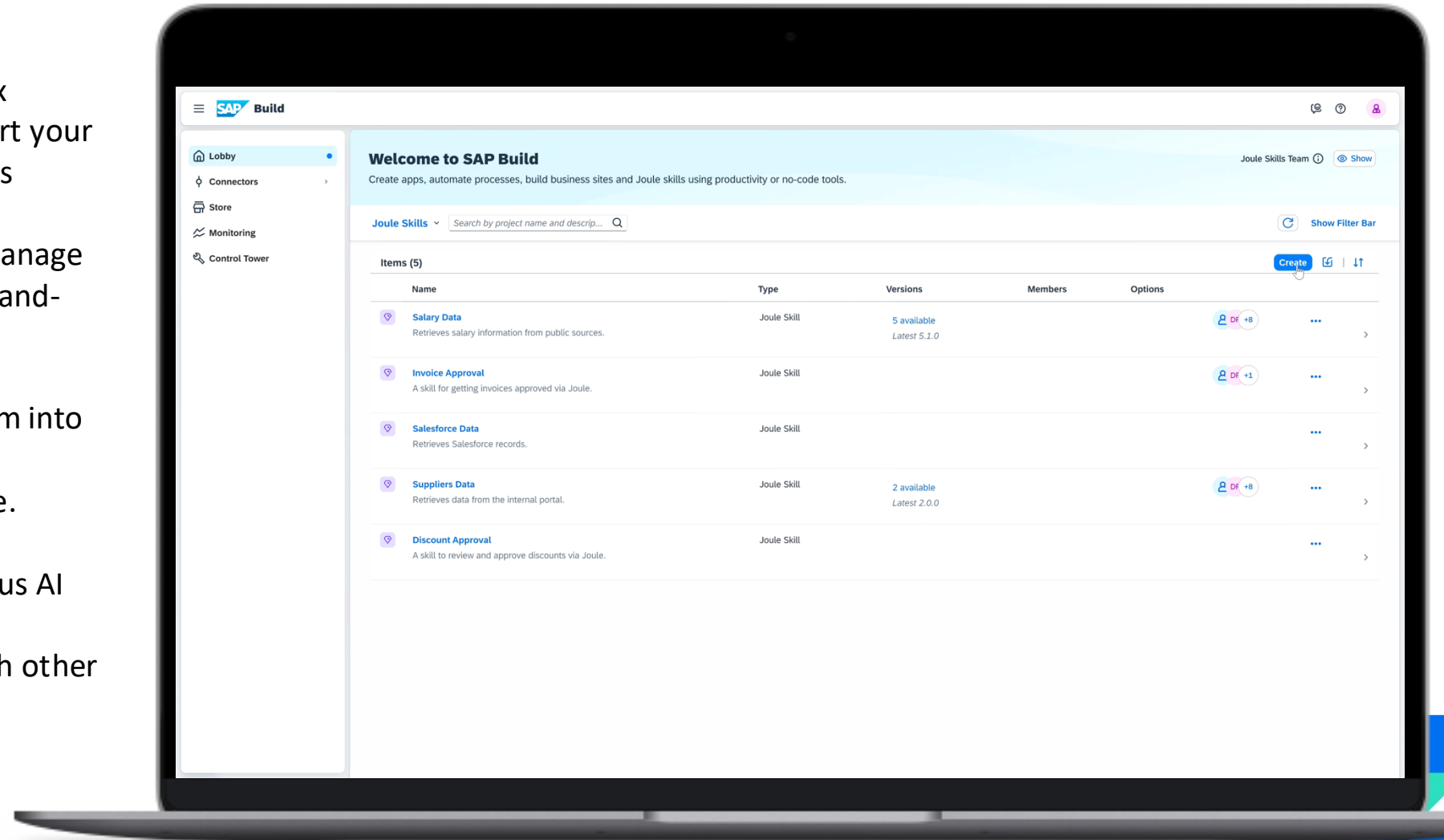
# Enhance Development with Joule in SAP Build Code

Joule supports CAP, SAP Fiori, and UI5 development, with mobile and HANA native development coming soon.

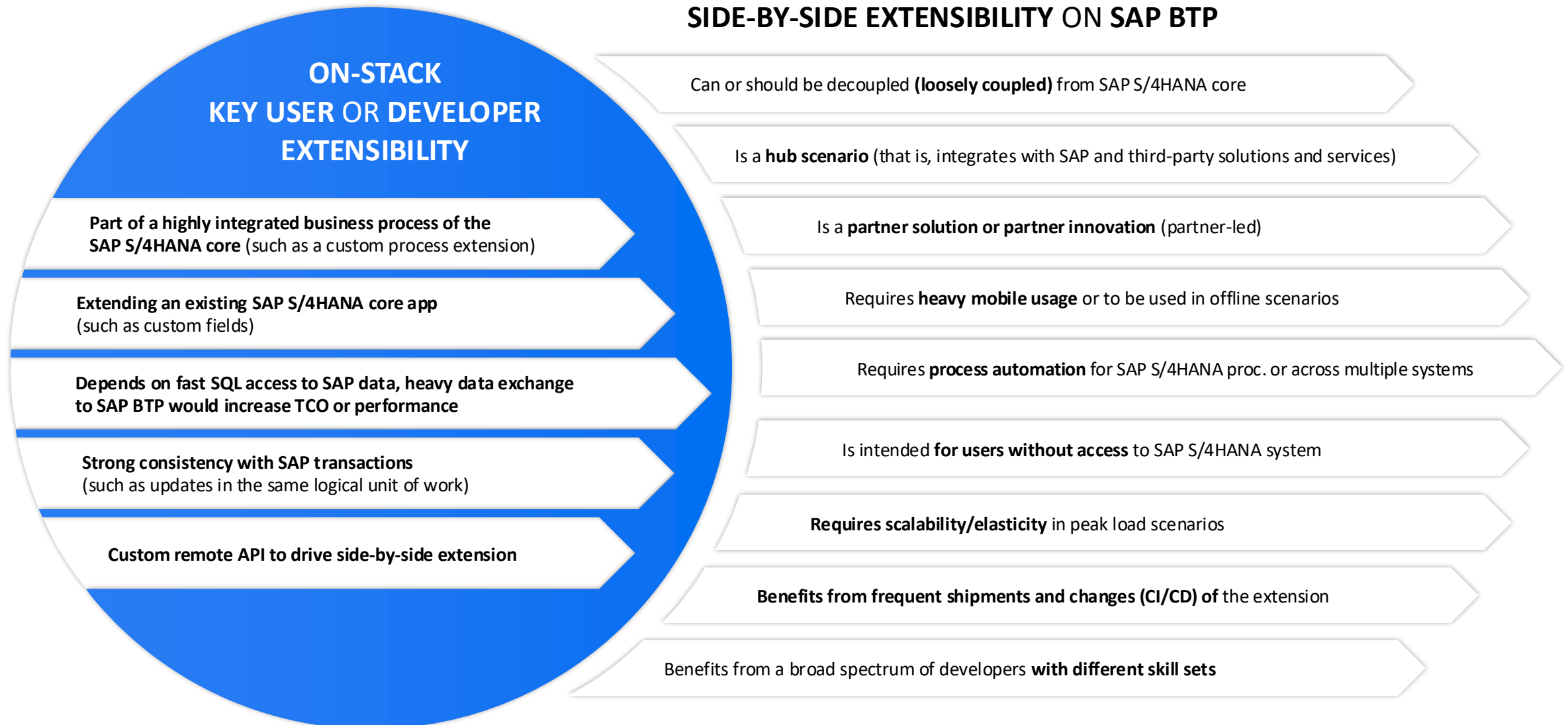


# Joule Studio in SAP Build — New Solution to Extend Joule

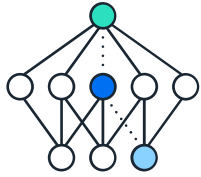
- Enhance Joule's out-of-the-box capabilities from SAP to support your organization-specific workflows
- Create, deploy, monitor and manage you own Joule skills with drag-and-drop simplicity
- Integrate any third-party system into Joule for an entirely integrated conversational user experience.
- Soon: Build custom autonomous AI agents that can solve complex workflows and collaborate with other agents in Joule



# When to use which extensibility option?



# Clean Core – Why SAP BTP?



## Meet diverse business needs efficiently with future-proof extensibility

- Supports all extension patterns with a focus on business application domain
- Consistent and enterprise-ready UX
- Protect investments in ABAP developments
- Best dev efficiency with Gen AI-powered\* wide set of dev tool choices
- Empower employees with a central entry point for multiple apps & common Inbox



## Unrivalled SAP integration and ready-to-use business content and applications

- Unmatched functionalities for seamless high performing extensions
- Jumpstart projects using [4400+ pre-built content](#)
- Optimize integrations for SAP S/4HANA
- Leverage AI business services & pre-built applications



## Reduce total cost of ownership (TCO)

- >500% ROI\* in three years for SAP S/4HANA customers
- Save months of efforts on design & implementation using pre-built content
- Flexible commercial models
- Minimize risk associated with underlying technology changes (e.g. hyperscalers)
- Avoid lock-in effect through abstraction layer

\*Learn More: [IDC BTP business value](#)

**Get started today  
with Clean Core**

# Clean Core is a journey

Establish a **strategy and governance** model that fosters clean core principles.



- **Unique** opportunity
- Follow **Clean Core principles** right from the beginning
- Establish **strong governance**



- Establish Clean Core principles for every **NEW** development
- **Plan your journey** towards a clean core and follow an iterative approach
- Clean Core does **not** happen over night

## Your Path to Clean Core [Get started today!](#)

1

### **Start**

with clean core  
concept and  
definition

2

### **Create**

customer specific  
clean core  
strategy

3

### **Analyze**

existing  
custom code

4

### **Adopt**

extension  
guidelines and  
methodologies

5

### **Build**

extensions

6

### **Establish**

clean core  
governance and  
operations



# Takeaways



Most of what all companies do is exactly the same. **The value is in differentiation.**

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Clean core is about **mindset, as much as it is about technology**

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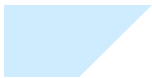
**Avoidance, back-to-standard, decoupling, and governance** are key pillars of the clean core strategy

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Focus on what makes you great to your customers and **standardize and automate the rest**

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**Clean Core is a journey** – accelerate by utilizing SAP solutions, services, and guidance

## Learn more about Clean Core Extensibility

Check out the Clean core extensibility for SAP  
S/4HANA Cloud : <https://url.sap/bc5e0h>



# Thank you



Fabio Westphal

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App Dev / Automation Expert

[Vernetzen](#)