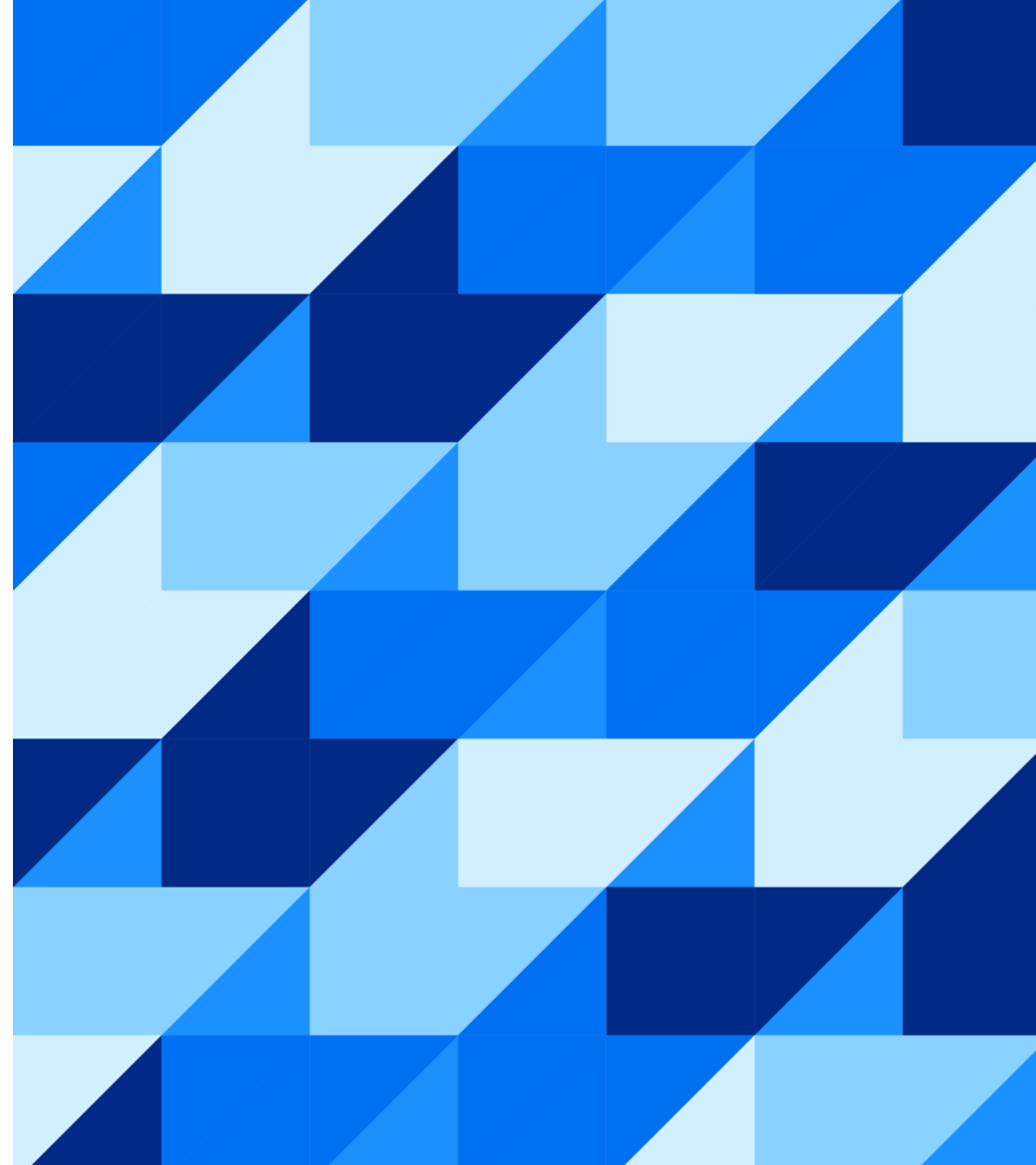# How to optimize Application Development & Automation with SAP BTP

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SAP

Public

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What is Clean Core and why does it matter?
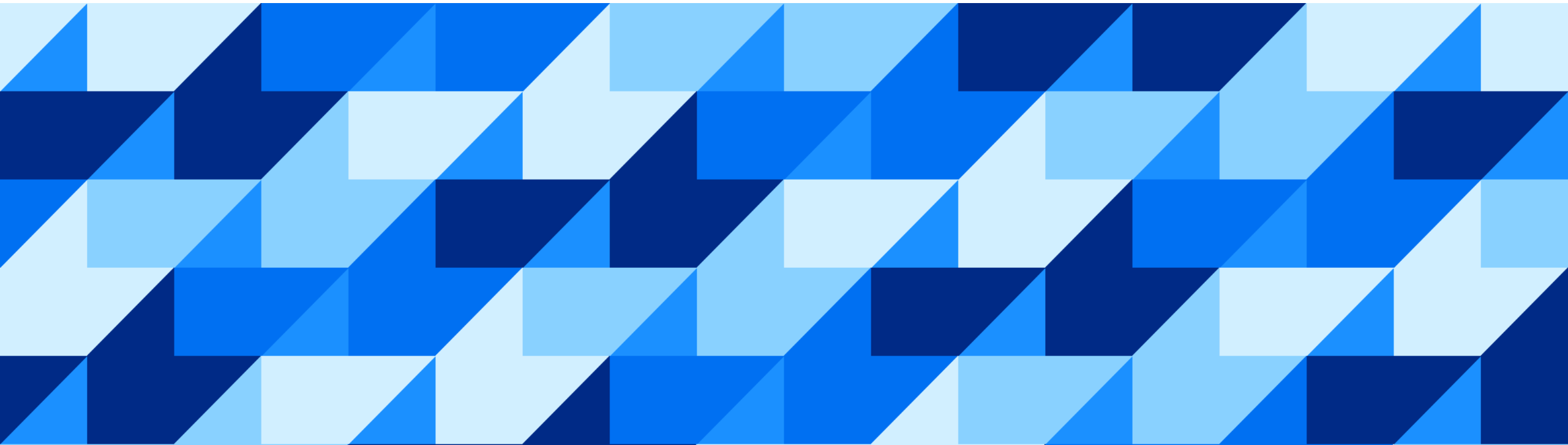
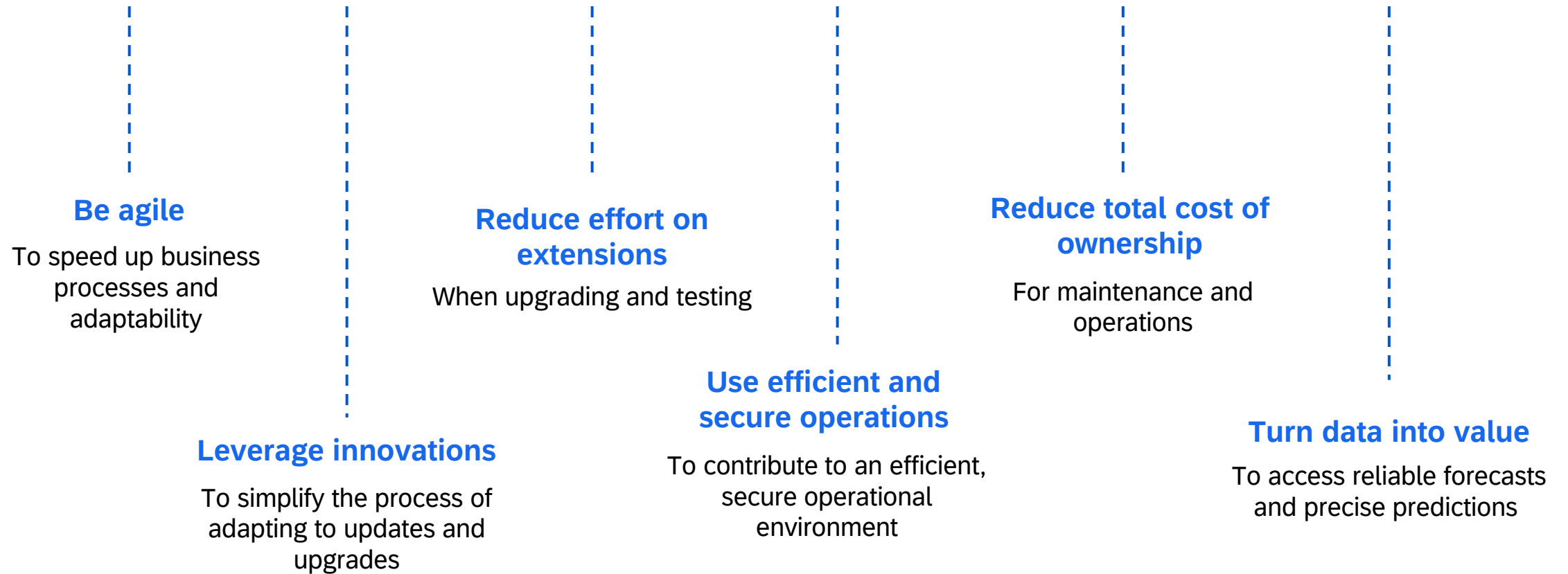# Clean Core means modern, flexible and cloud-ready ERP

Clean Core is an approach where the core system remains as standard and untouched as possible.
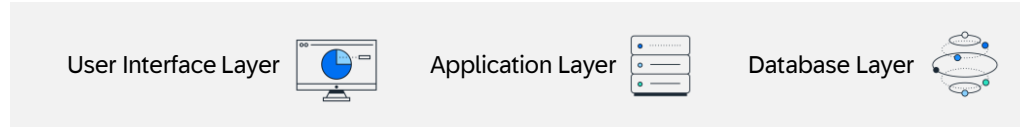
Extensions and custom functionalities can be developed **on-stack or side-by-side on SAP BTP**.

With a **Clean Core**, upgrades are easier, requiring less manual effort for testing and adapting existing structures.
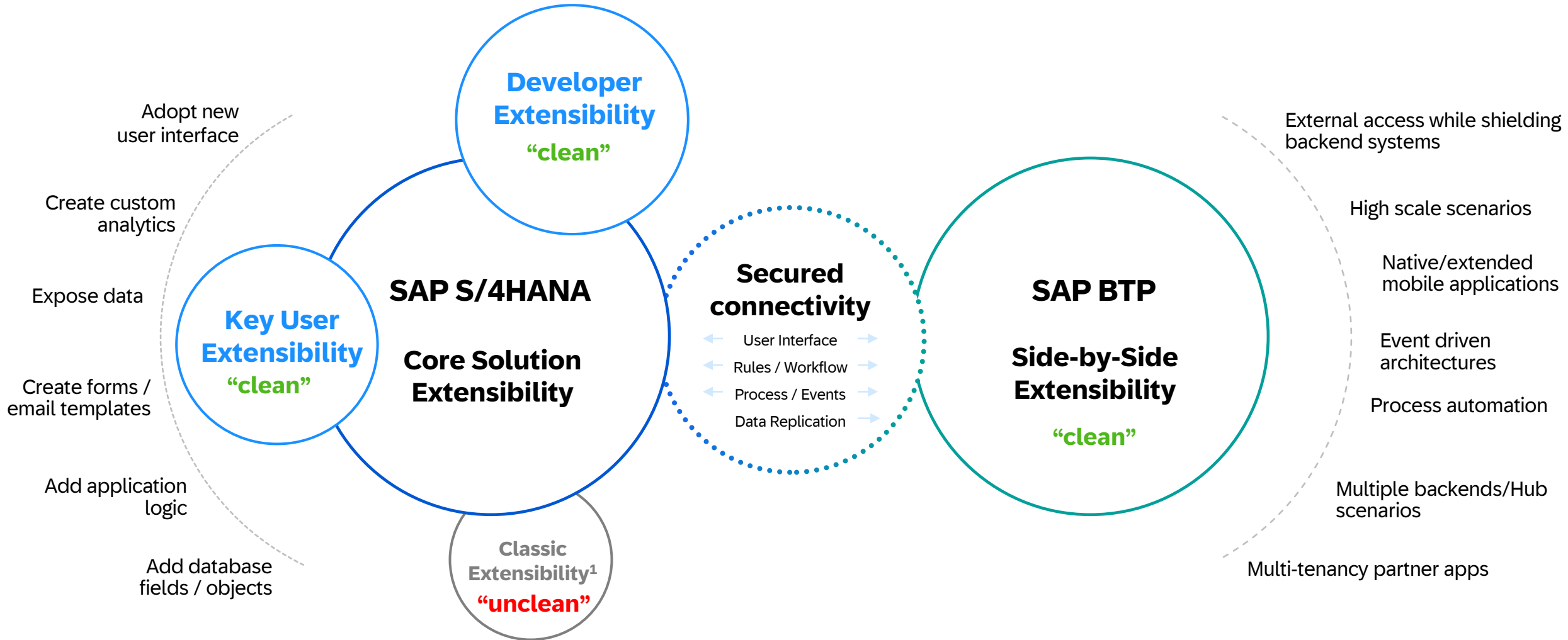
A clean core makes it possible to adapt the system to changing business requirements
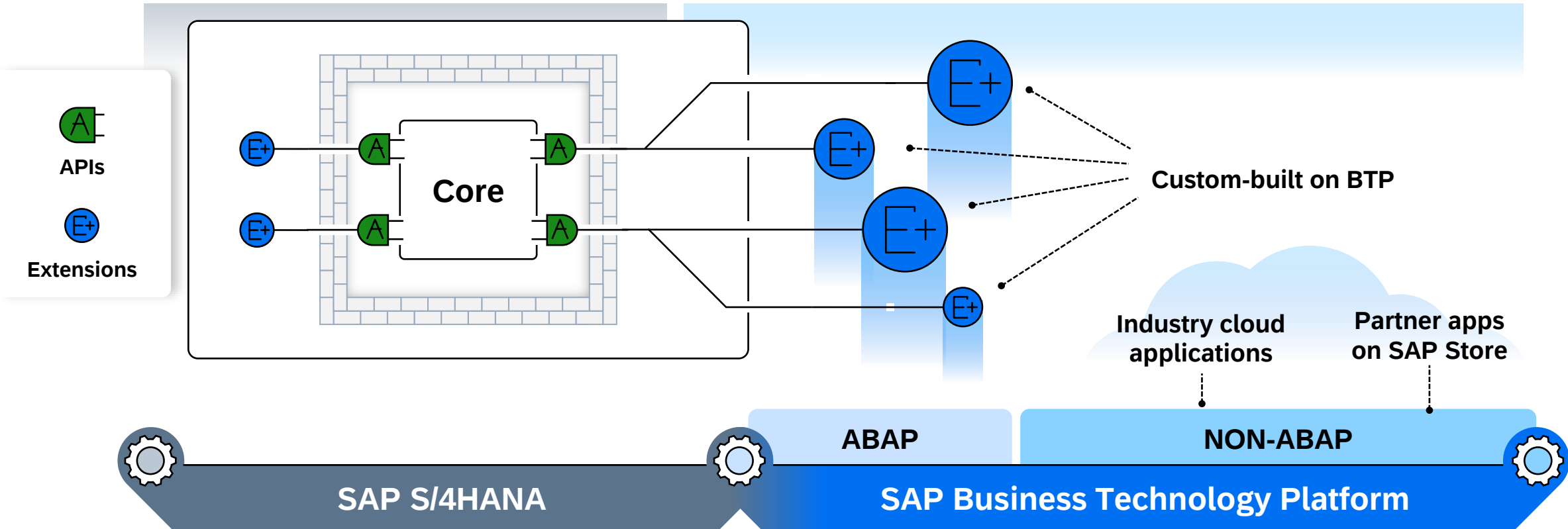
Be agile

To speed up business processes and adaptability

Leverage innovations

To simplify the process of adapting to updates and upgrades

Reduce effort on extensions

When upgrading and testing

Use efficient and secure operations

To contribute to an efficient, secure operational environment

Reduce total cost of ownership

For maintenance and operations

Turn data into value

To access reliable forecasts and precise predictions

SAP S/4HANA Extensibility

User Interface Layer	Application Layer	Database Layer

Core Solution Extensions ← ⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯ → **Side-by-Side Extensions**

Developer Extensibility
"clean"

Adopt new user interface

Create custom analytics

Expose data

Key User Extensibility
"clean"

SAP S/4HANA
Core Solution Extensibility

Create forms / email templates

Add application logic

Add database fields / objects

Classic Extensibility[1]
"unclean"

Secured connectivity

← User Interface →
← Rules / Workflow →
← Process / Events →
← Data Replication →

SAP BTP
Side-by-Side Extensibility
"clean"

External access while shielding backend systems

High scale scenarios

Native/extended mobile applications

Event driven architectures

Process automation

Multiple backends/Hub scenarios

Multi-tenancy partner apps

[1] SAP S/4HANA private cloud and on premise only; **not** "clean core"

The Concept of a Clean Core is the Essential Key to Boundless Extensibility

| Business Entity Extensions | > | Business Logic Extensions | > | API Composition | > | Web and Mobile Apps | > | Cross Application Processes & Automation |

APIs

Extensions

Core

Custom-built on BTP

Industry cloud applications

Partner apps on SAP Store

ABAP

NON-ABAP

SAP S/4HANA

SAP Business Technology Platform

Simplify extension development with SAP Build

Build enterprise-grade extensions	Accelerate time-to-market	Collaborate securely
Extend innovation while protecting the core	**Deliver extensions faster, and foster rapid creativity**	**Leverage diverse expertise to win the competition**
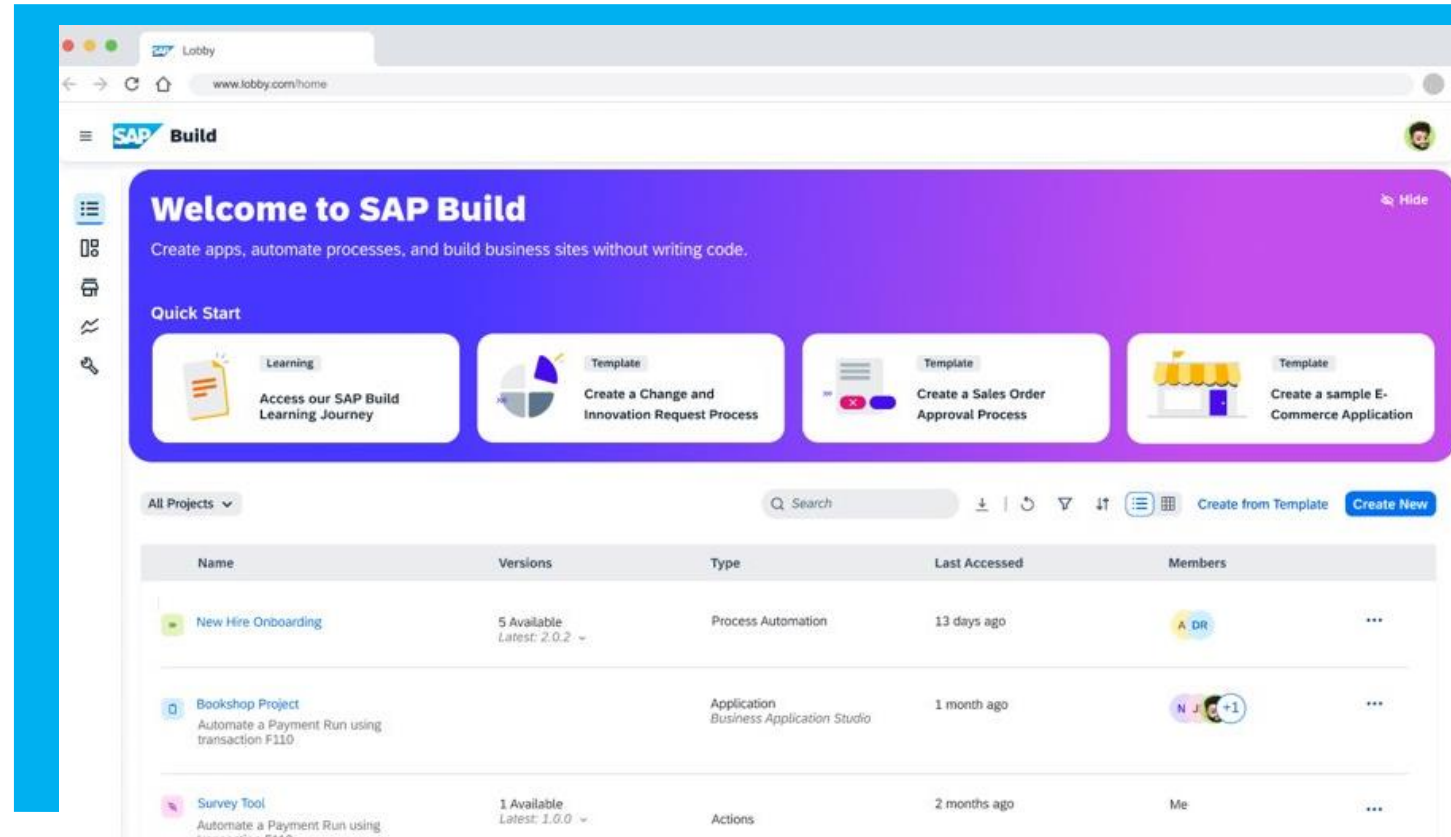
Collaborate in Fusion Teams, merging pro-code efficiency with low-code simplicity

Fusion teams: developers, key users, business analysts/experts — **one unified team, with shared outcomes.**

The lobby area of SAP Build facilitates fusion development, enabling consumption of components created with SAP Build Code in SAP Build

Integrated solutions enabled by generative AI

SAP Build: Develop applications, automate workflows, and create business sites using the tools of your choice

← LOW-CODE → ← PRO-CODE →

SAP Build   **SAP Build Code**
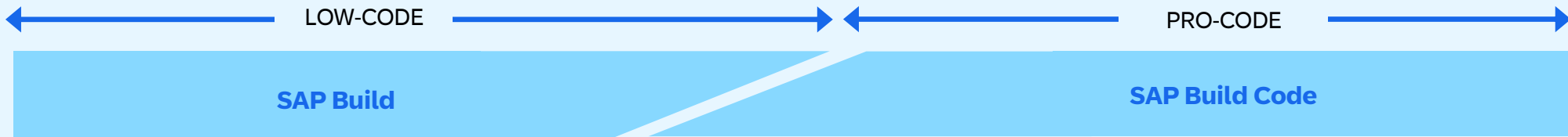
SAP Integration Suite: Integrate all applications and systems across cloud and on-premises

| SAP & Non-SAP Integration | API Management | Event Mesh |

← **Generative AI-powered developer productivity** →

Deeply integrated with SAP Applications

| **Cloud ERP** | **Human Capital Management** | **Spend Management and Business Network** | **Supply Chain Management** | **Customer Relationship Management** |

SAP Build for Low-Code Visual Programming on SAP BTP
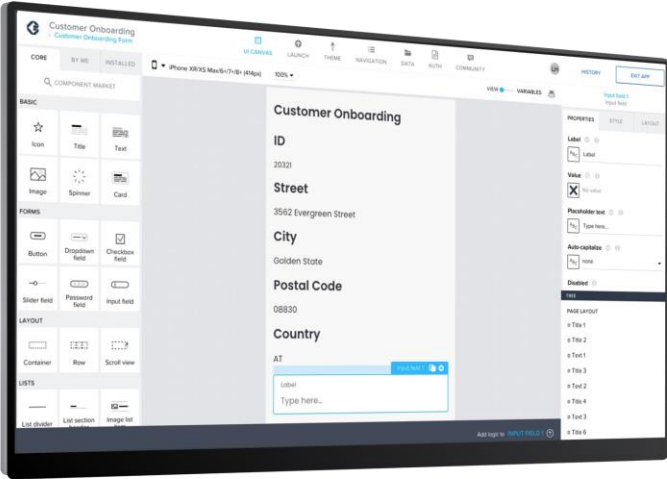
Compose apps

Automate processes
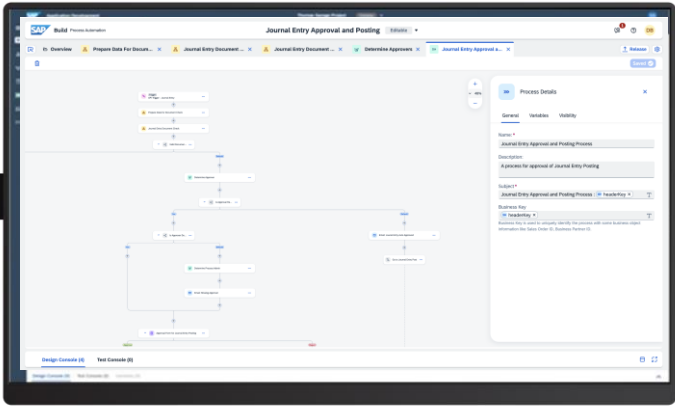
Design business sites

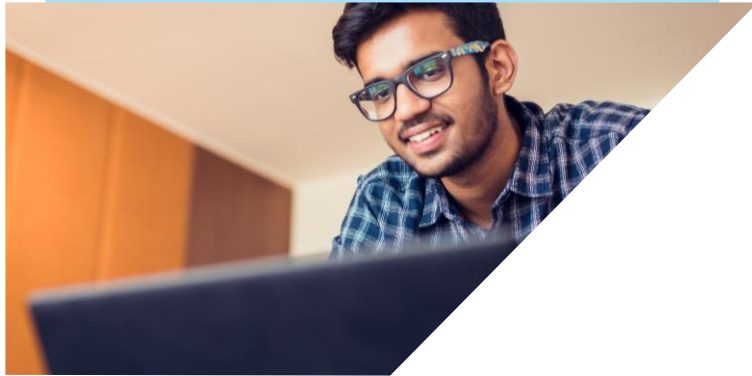SAP Build Apps

SAP Build Process Automation
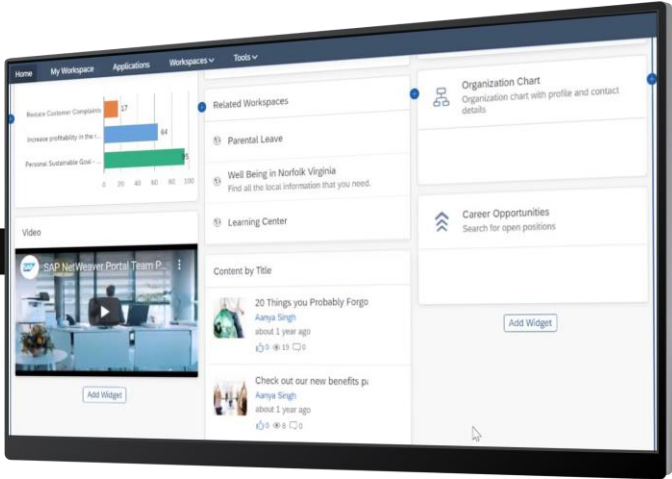
SAP Build Work Zone

SAP Business Technology Platform

SAP Build Code

AI Code Generation with Joule Copilot, Optimized for Java and JavaScript Application Development

Build rapidly with AI code generation	Gain tailored functionality for SAP solution development	Enhance fusion development

Generative AI–powered app development	Prebuilt integration with SAP and third-party solutions	More-secure collaboration between professional and citizen developers
Turnkey environment for coding, testing, integrations, and application lifecycle management	Trusted, enhanced security for authentication, authorization, and data protection	App composability across SAP Build and ABAP-developed solutions
Guided experiences and prebuilt templates to quickly build full-stack, back-end, and mobile apps	Extensibility for SAP S/4HANA and other solutions	Unified governance and simplified application lifecycle management

SAP Build Code: What you need to follow, best practices of SAP

SAP Build

- SAP Build Apps
- SAP Build Process Automation
- SAP Build Work Zone

SAP Build Code

Business Application Studio
Code and visual editors for data models, services, and web and mobile development

Generative AI–supported application services

Cloud application programming model

UI development
SAPUI5 | SAP Fiori elements | UI5 Web Components

Mobile services
Mobile development kit | SDKs for iOS and Android

Document management

Runtime services

Continuous integration and delivery

Authorization and trust management

Event broker service

Application autoscaler service

Alert notification service

Cloud logging service

Audit log service

Connectivity service

Destination service

Feature flag service

Runtime on SAP BTP

SAP HANA database

SAP BTP, ABAP environment

SAP Integration Suite

Become a part of SAP Build Community

Join the fun, stay ahead, and ride the innovation wave

Pro-code savvy

Low-code savvy

Follow us

THE BEST RUN **SAP**