Extensions: In-App ~~versus~~ and Side-by-Side

Clean Core with Decoupled Extensions

Fouad Fahim, Solution Advisor Expert Center of Excellence of North American, SAP SE

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THE BEST RUN SAP

Agenda

Extensions
- Definitions and Background
- Extensibility Options
- Benefits / Disadvantages of Side-by-Side
- Concepts for Side-by-Side-Extensibility

The Big Picture for SAP
- Extension Patterns and Scenarios
- Extension Suite
- Example Use Cases

The Real World
- The Situation at our customers
- Lessons Learned and Best Practices
- Recommendations

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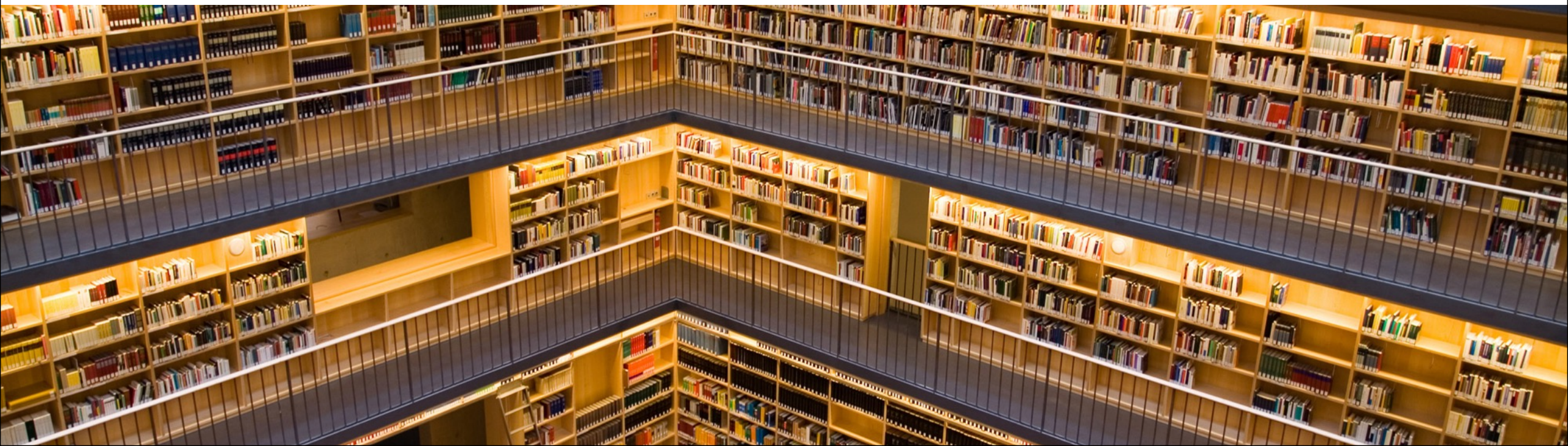
Extensions

Definitions, Background, Options

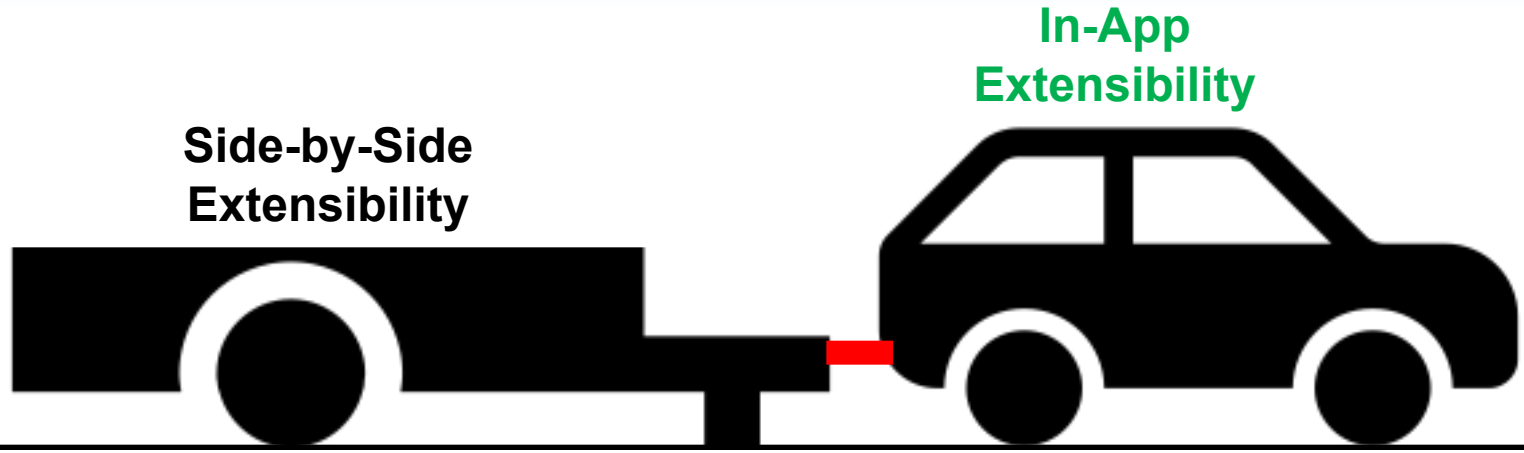


Extensions

What are Extensions?

Enhancements without impairing existing system functions

Addition or modification of **functionality**



Extensibility allows you to extend the functional scope of applications without negative impacts on the regular system operations and upgrades.

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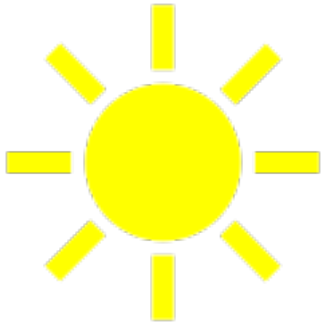
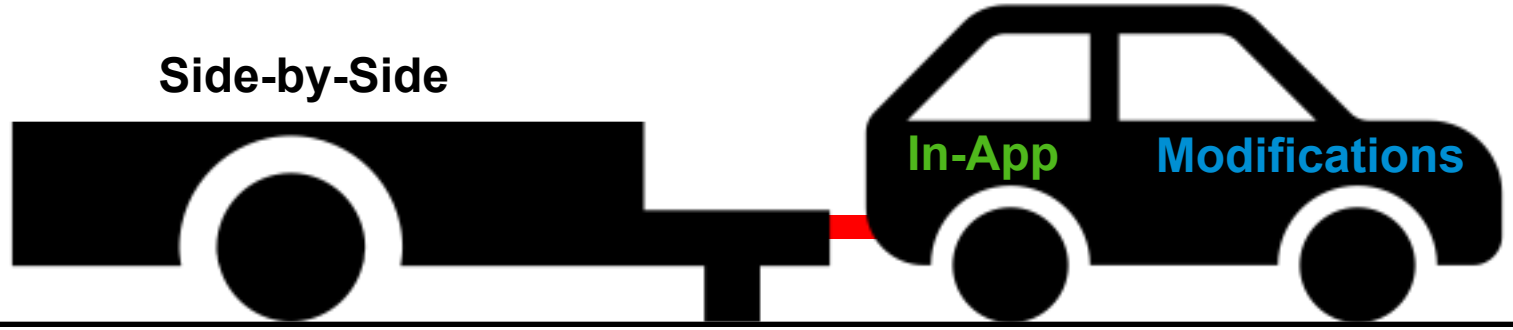
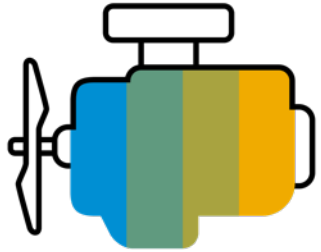
Extensibility Options: Examples





Side-by-Side

In-App



Modifications

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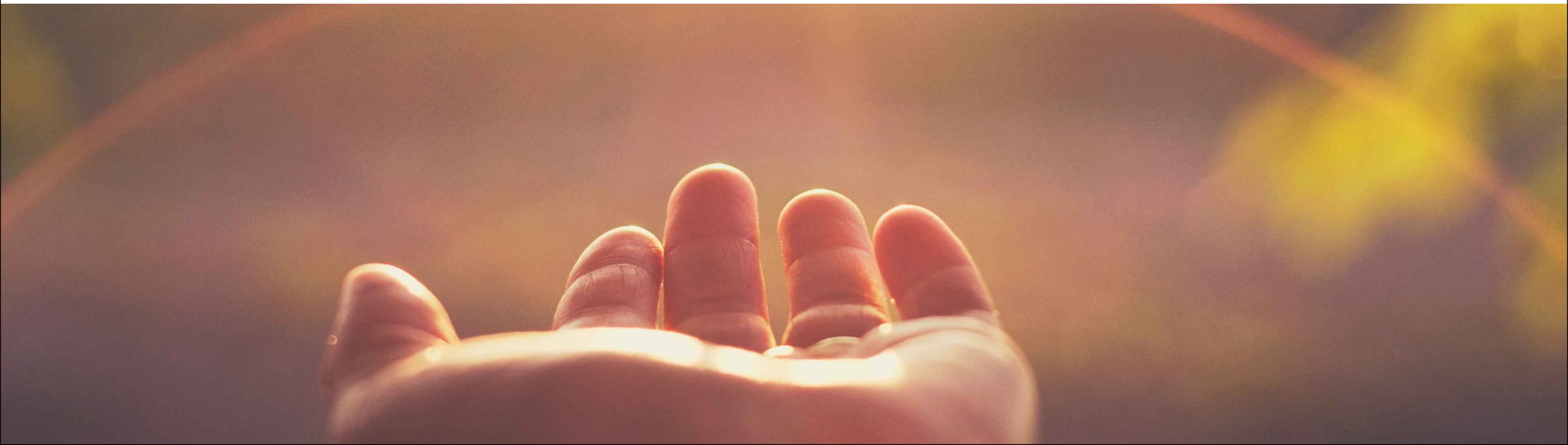
Side-by-Side Extensions



Advantages of side-by-side extensibility

Business

- **Extend reach** to new user groups
- **Extend scope** with custom solutions
- **Complement data and business services** from different backends (and 3rd party vendors)
- **Business agility** by reduced time-to-market
- Build **reusable and shareable** business capabilities
- Extensions could run **independent of backend** availability

Technology

- Digital **core remains clean and focused** (“Keep the Core Clean”)
- **More developers** are enabled
- Innovative by leveraging new technology services in the cloud
- Allows for **new kind of applications**

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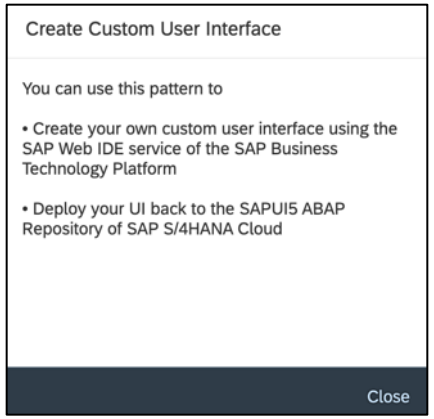
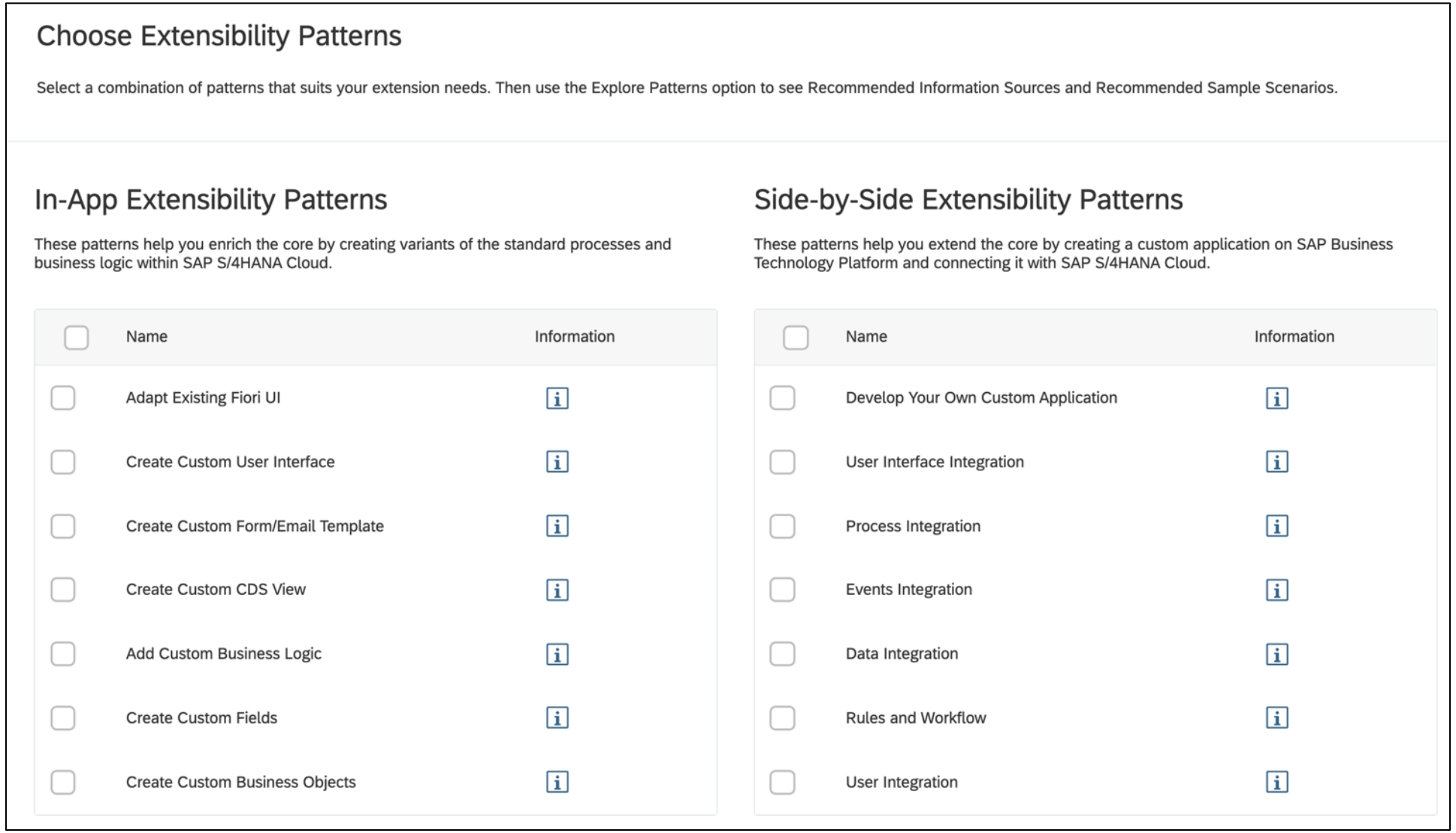
The Big Picture for SAP

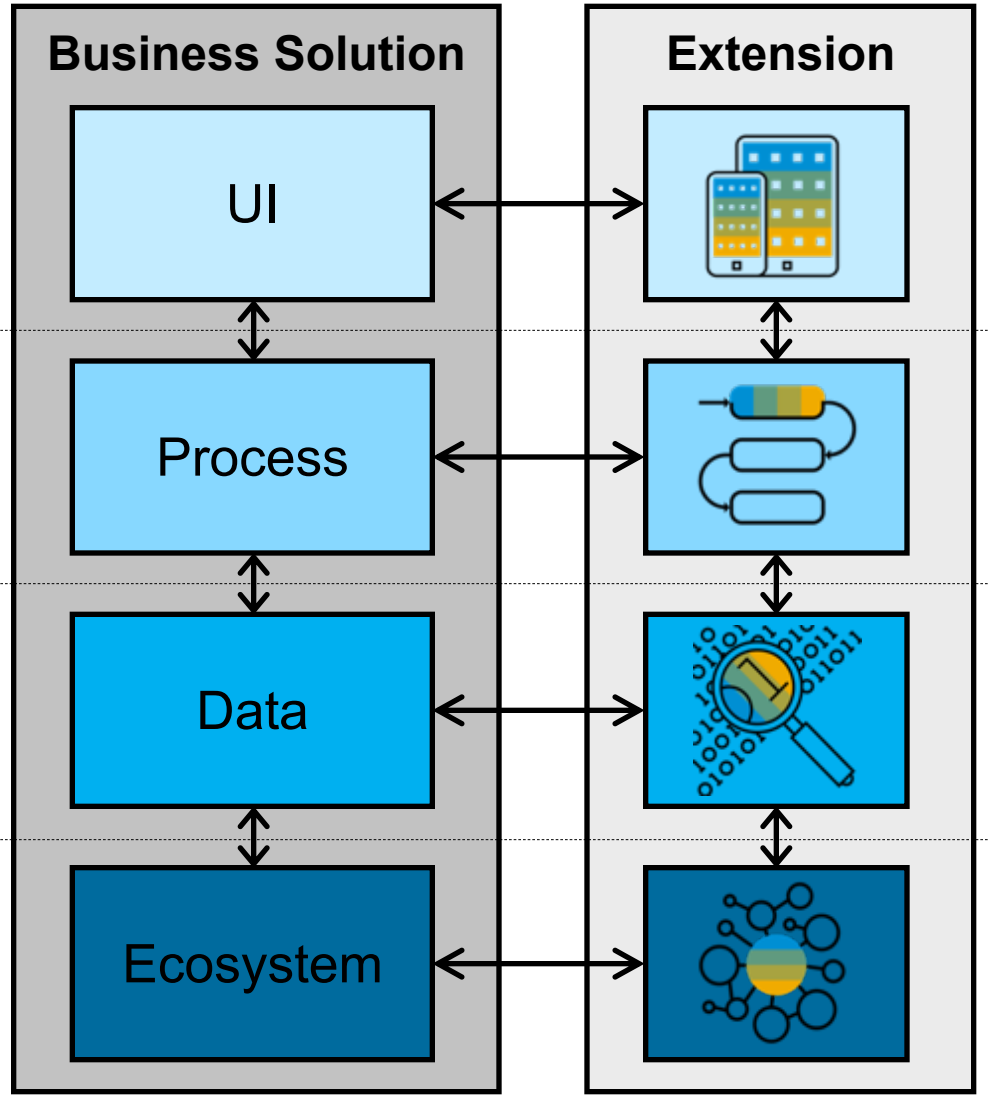
Extension Scenarios

S/4 Cloud Key User Extension Patterns according to SAP Extensibility Explorer





Side-by-Side Extension scenarios for SAP



Extend user experience of existing processes and provide controlled **access for additional user groups**.

Extend business process with additional steps for business process optimization or innovation.

Extend data insight by consolidating and combining data in one central place.

Extend ecosystem by creating and operating a SaaS application

Ideas for Side-by-Side Extension Use Cases

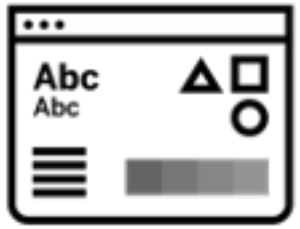
ECC to S/4 Migration

Data from Backends/Services

New User Groups

Quick Innovations

External Development



User Interface

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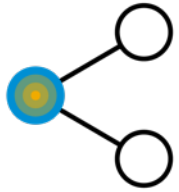
The Big Picture for SAP Extension Suite

Extensions Step by Step

Provides an integrated toolkit for extending and enhancing standard SAP solutions efficiently and economically

Connect
on-premise and cloud systems to SAP BTP to extend standard SAP solutions.

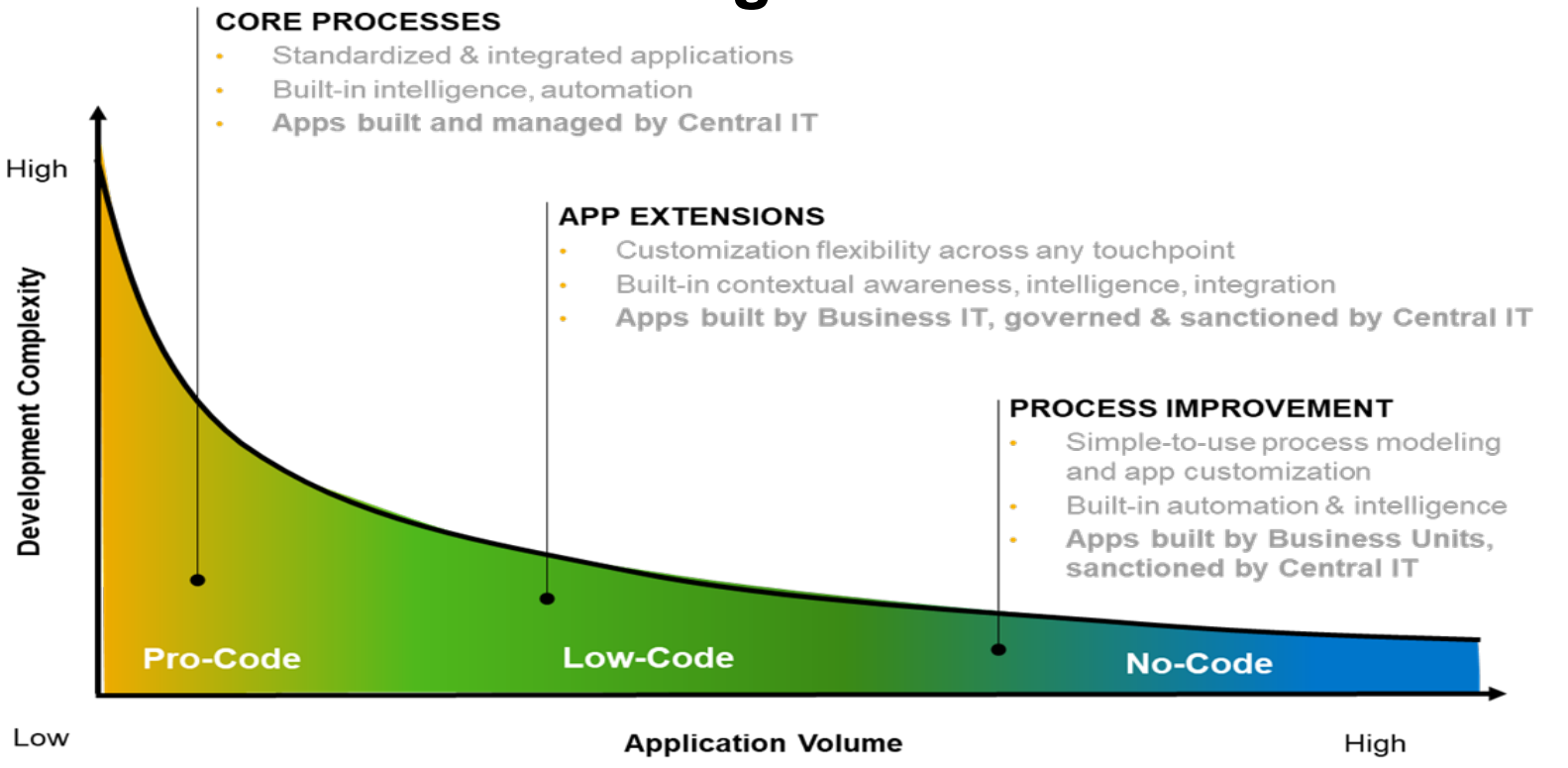
Create endpoint
extension applications based on your existing skillset.



Add channels
Web, mobile, conversational, others.

Deploy & operate
in your organization.

One Extension Suite Delivering it all



Connect
on-premise and cloud systems to SAP Extension Suite and Integration Suite to extend standard SAP solutions.

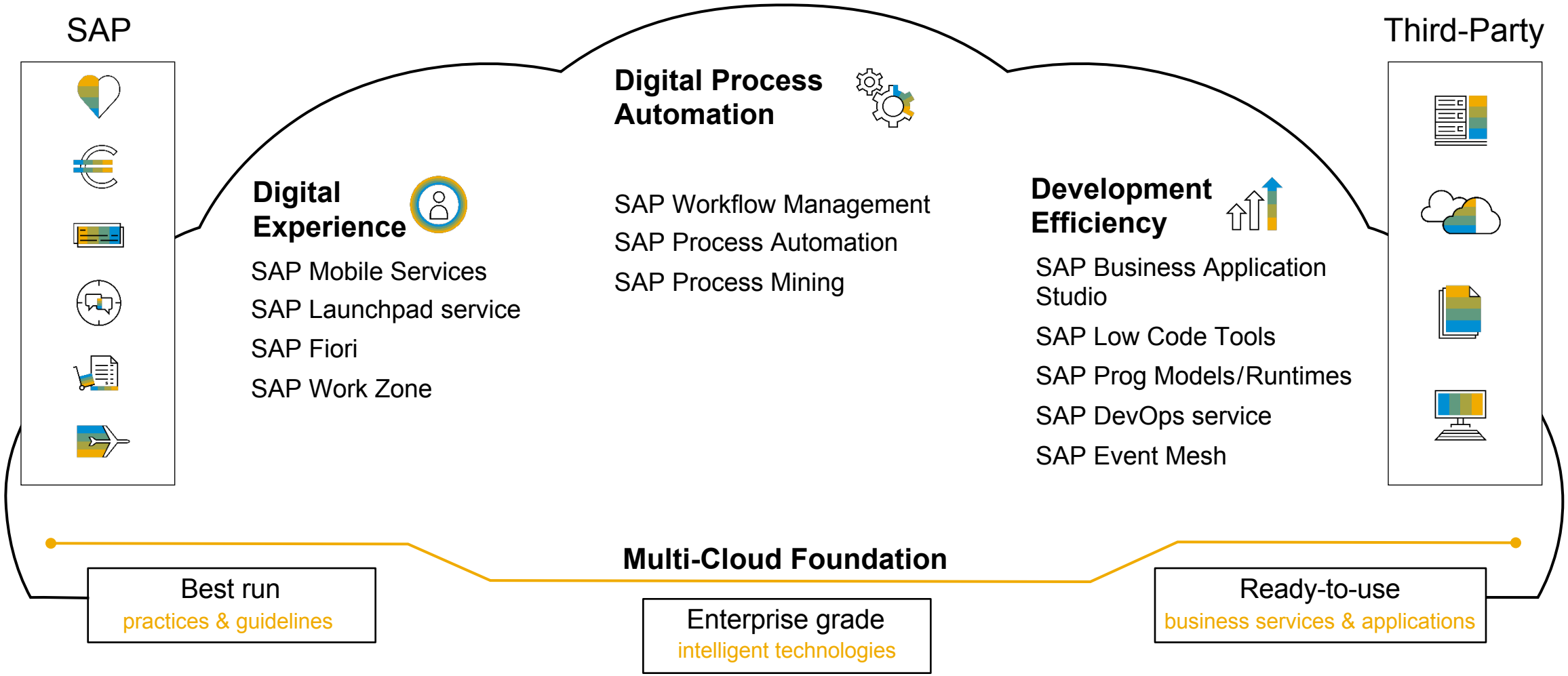
Create endpoint
extension applications based on your existing skillset.

Add channels
Web, mobile, conversational, others.

Deploy & operate
In your system landscape

SAP Extension Suite

Simplify development of your application extensions



SAP Extension Suite at a Glance

SAP® S/4HANA

SAP ECC

SAP Customer Experience

SAP® S/4HANA Cloud

SAP Ariba

SAP SuccessFactors

SAP Concur

SAP Fieldglass

SAP Business One

3rd Party Solutions

CONNECT

Connectivity
(incl. Cloud Connector)

SAP Integration Suite

Smart Data Integration

SAP Landscape Transformation

Replication Server

API Business Hub

SAP Graph

Event Mesh

BUILD ENDPOINT

Workflow Management
Workflow
Business Rules
iRPA, …

Cloud Application Programming Model (CAP)
Business Application Studio

ABAP Restful Programming Model (RAP)

ADD CHANNELS

WEB
SAP UI5
Fiori Elements

Core AI

Mobile
Mobile Development Kit
SAP SDK for iOS
SAP SDK for Android
SAP Mobile Cards

Deploy & Operate

Targets
Central Entry Point
Standalone

Runtimes
ABAP Runtime
Cloud Foundry Runtime
Kyma Runtime
Serverless Runtime

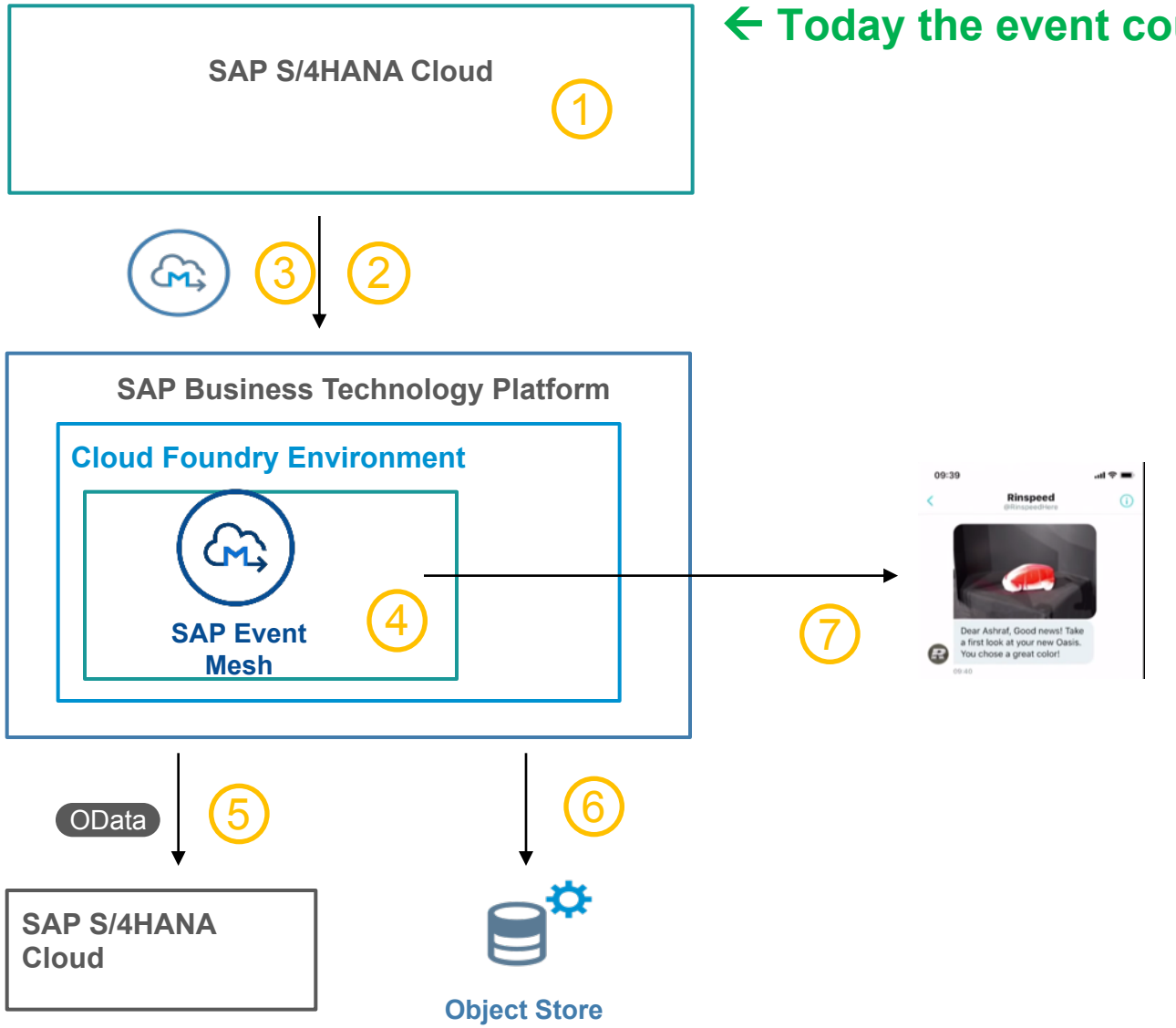
DevOps
Monitoring, Alerting, Scaling
CI/CD Services
Transport Management Service
Translation Service

Main Tools
Business Application Studio / ABAP Development Tools for Eclipse / Cockpit

The Big Picture for SAP

Example Use Cases

Extend Business Process



← Today the event could originate from ERP or S/4HANA oP as well

1. ProductionOrder updated in SAP S/4HANA.
2. Generates event Production Order.Confirmed
3. Event sent using Event Mesh to extension application where it triggers short-lasting function.
4. Function extracts data from event
5. Uses API call to retrieve Twitter data and customer name from SAP S/4HANA.
6. Calls Object Store to retrieve image.
7. Twitter Direct Message created and send

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Thank you.

Contact information:

Fouad Fahim

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