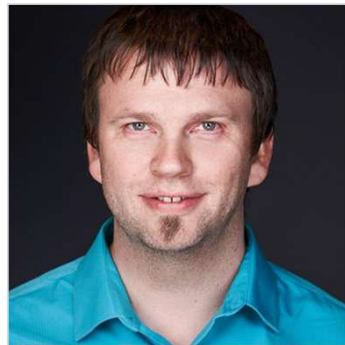


We help customers **execute change** to **add value**
by intelligently **connecting People, Things and Business.**





Stian Windsland
Senior SAP Consultant



Adrian Dengusiak
Full-stack Fiori Developer



- Introduction to S5 Consulting
- Accelerate business outcomes with integration, data to value, and extensibility with SAP Business Technology Platform
- Rapidly build and enhance applications, processes, and experiences across your value chain with SAP Extension Suite
- S/4HANA, SAP Cloud as a center of innovative SAP solutions
- Simplify development using Business Technology platform
- Real-life examples
- QA

Introduction to S5 Consulting

27 Consultants

3 offices in 2 countries - HQ in Lysaker, offices in Stavanger and Poland (Wrocław)

S5 Partners

- Consulting partners (Competence, Capacity, Costs)
- Technology and Packaged Solutions (retail, logistics, EAM, tools, HW)

SAP® Recognized Expertise
User Experience

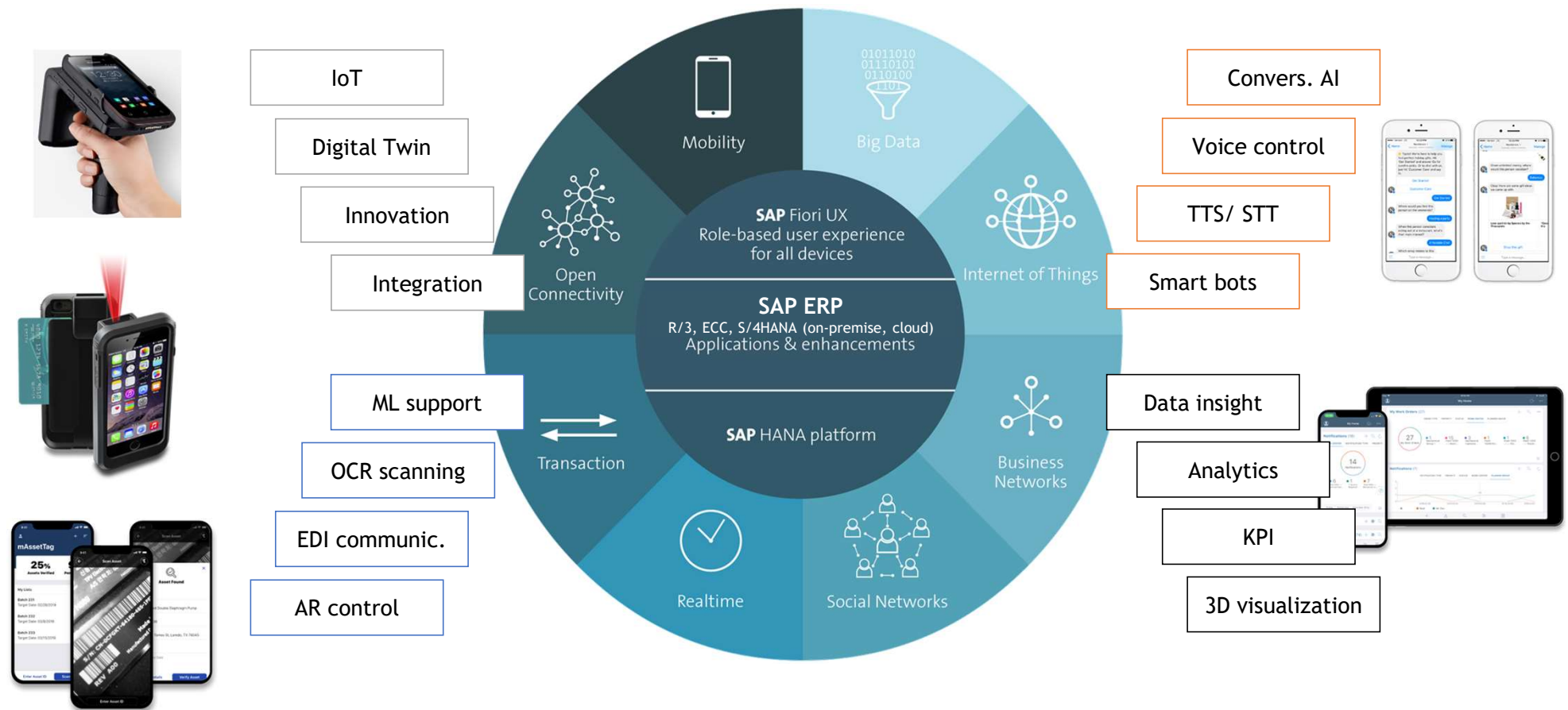


Technology partners



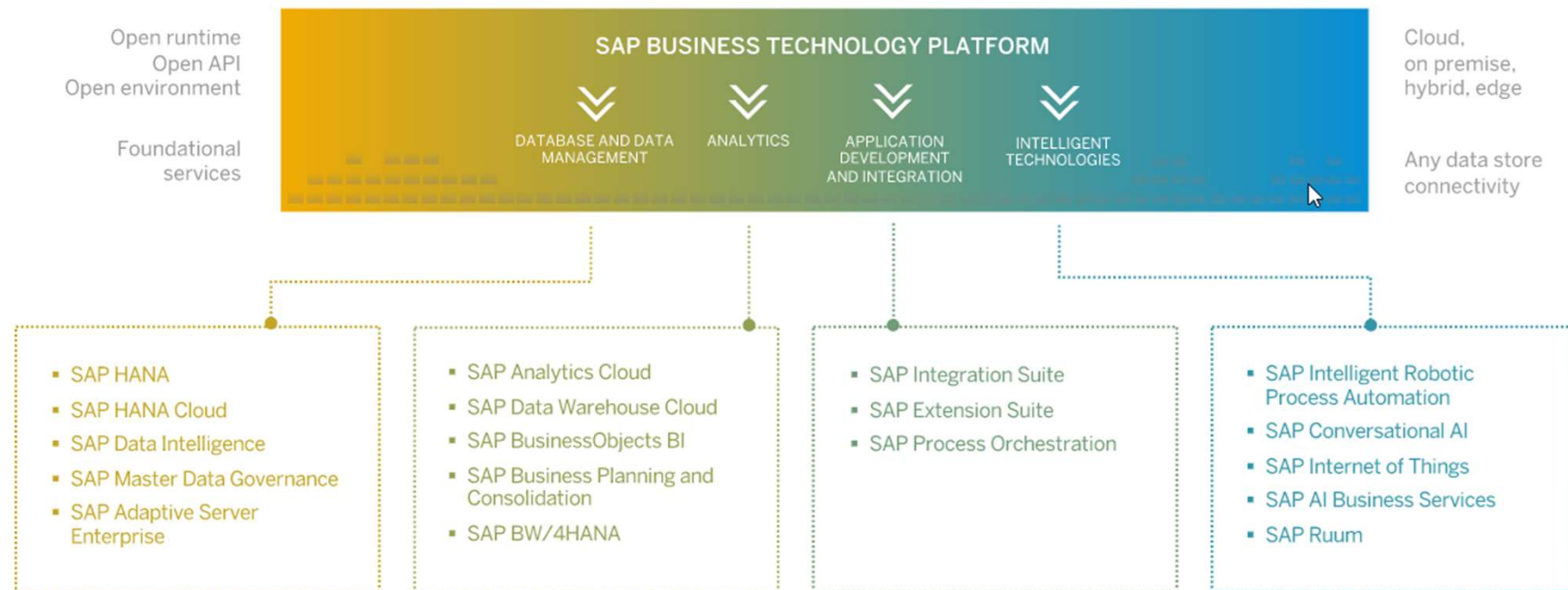
Consulting partners





Simplify development using
Business Technology platform

SAP Business Technology Platform





Power connected end-to-end business processes

- SAP BTP is embedded in SAP applications such as Intelligent Suite (e.g. SAP S/4HANA) and Industry Cloud so customers can optimize cross-line of business processes and achieve competitive differentiation



Multi-cloud openness

- Run SAP BTP in any hyperscaler cloud environment for flexibility and customer choice



Rapid implementation and fast time to value

- Go live quick, reduce payback period, monetize investment, fund subsequent high-value use cases



Holistic business and technology platform

- Database & Data Management, Analytics, Application Development & Integration, and Intelligent Technologies (embedded) that provide Data-to-Value, Integration, and Extension customer outcomes



Integrate across your value chain

- 1,800+ prebuilt integration packs
- 160+ connectors to SAP and third-party systems
- Extensive cloud-to-cloud and cloud-to-ground integrations



Differentiate outcomes with SAP's partner ecosystem

- Access to 15,000 partners across 25 industries
- Deliver digital content and business workflows
- Implement best practices



Expand value with cloud extensions

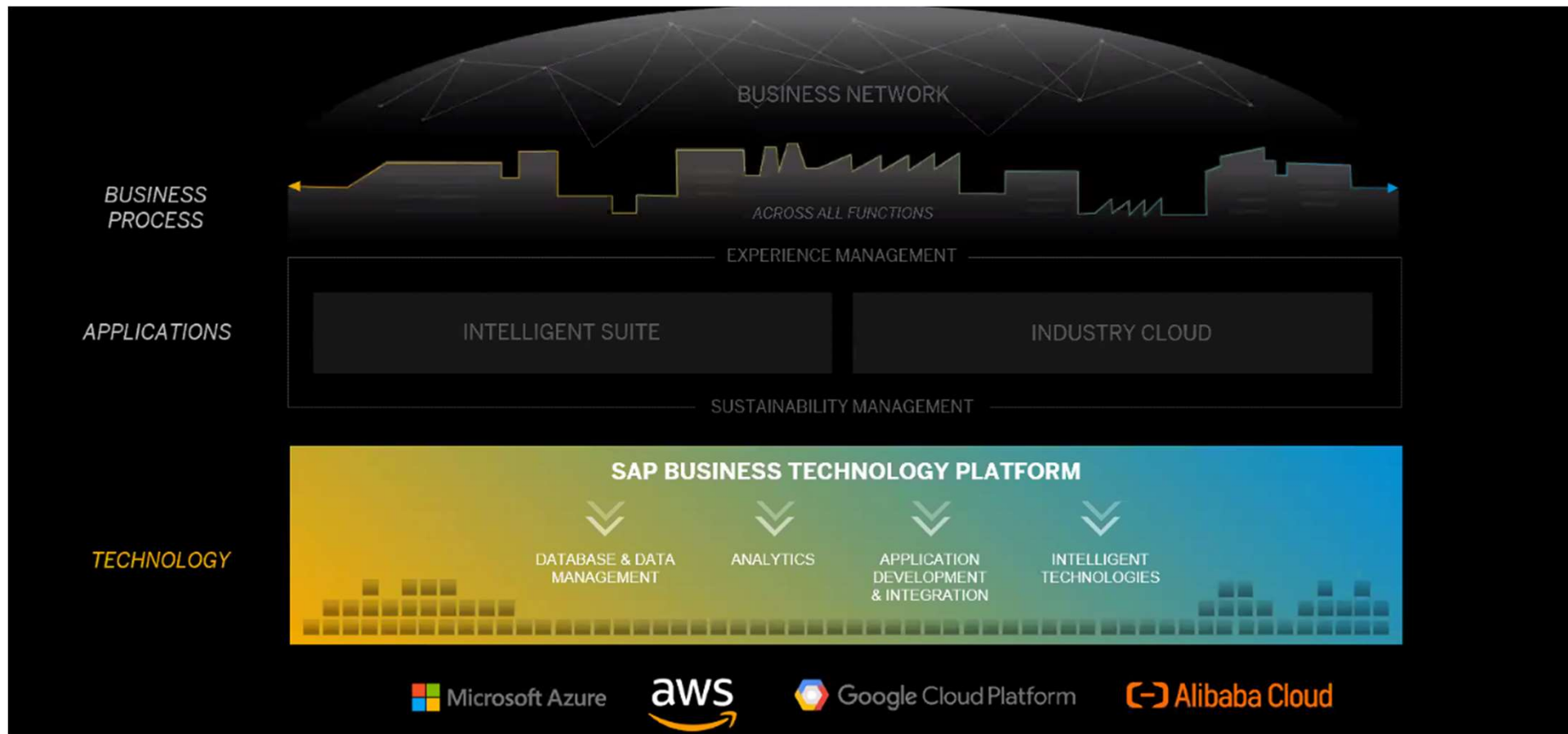
- Guided contextual experiences
- Pre-built industry content and process workflows
- Orchestrate and automate across your ecosystem



Analytics Line of Business and industry

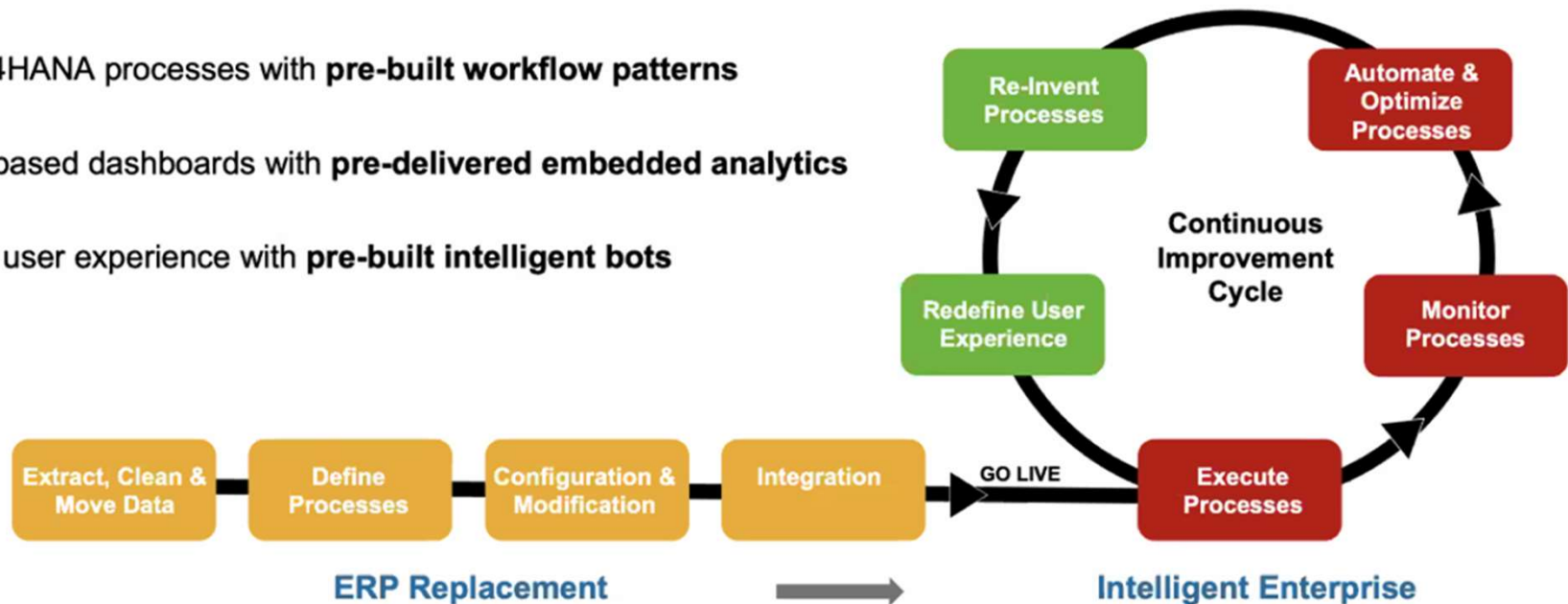
- Over 100 pre-built content packages
- Available for all SAP Analytics Cloud customers
- Achieve data-to-value and become an Intelligent Enterprise

SAP Business Technology Platform

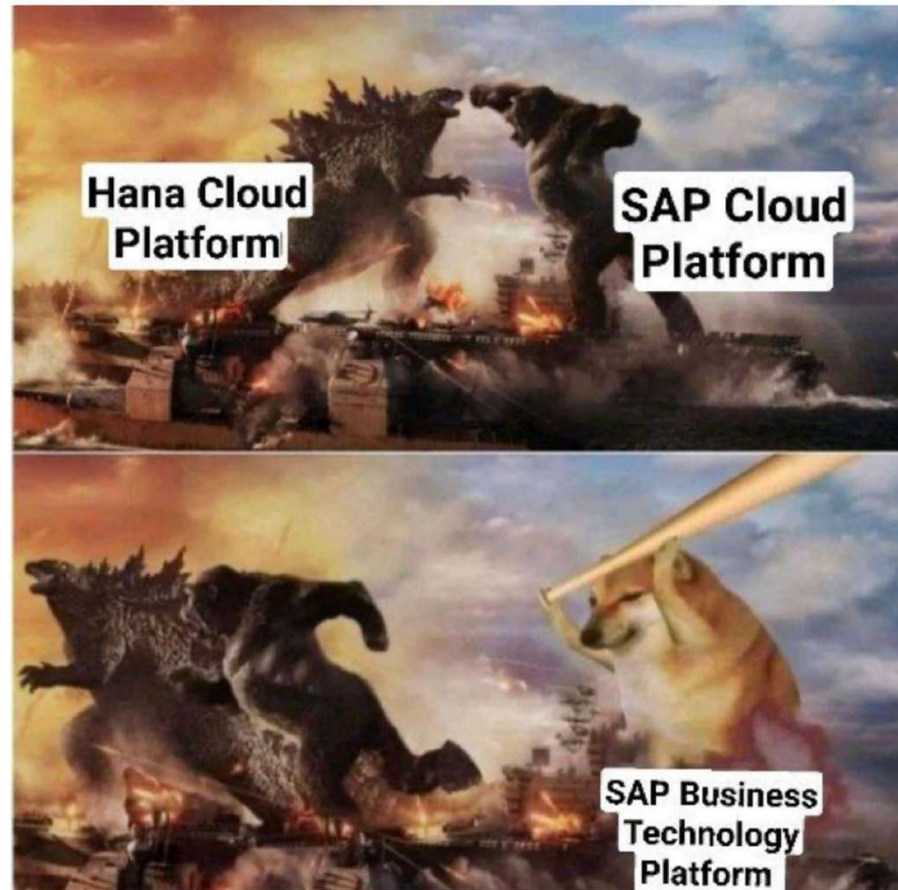


BTP is purpose built for the S/4HANA Journey

- Convert data & code with **pre-built conversion services**
- Integrate to SAP & 3rd Party Systems with **pre-defined integration flows**
- Automate S/4HANA processes with **pre-built workflow patterns**
- Create Role based dashboards with **pre-delivered embedded analytics**
- Redefine the user experience with **pre-built intelligent bots**



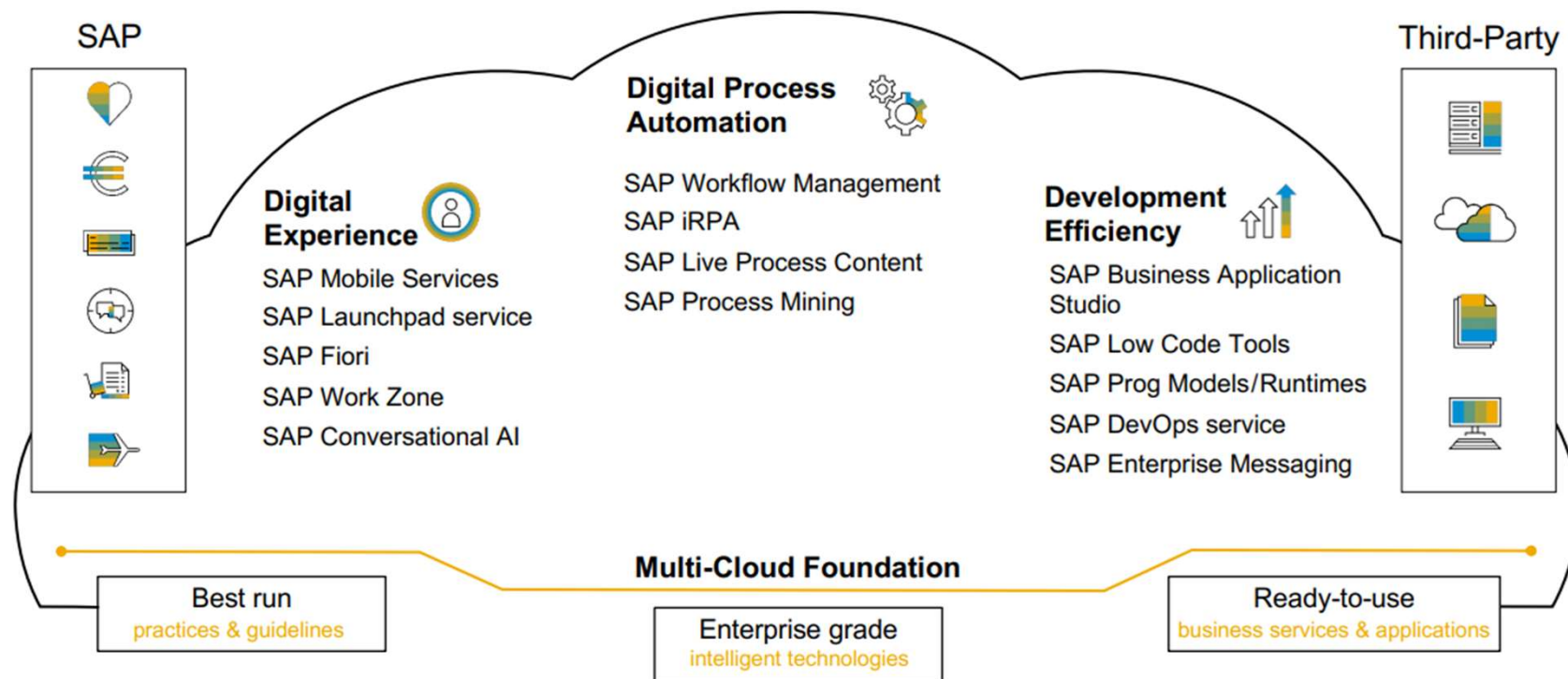
What is SAP Business Technology Platform?





- **Build** and integrate innovative business applications
- **Personalize** the user experience for fast adoption and effectiveness
- **Extend** solutions with prepackaged integration and connectivity
- **Gain** access to solution partners

Extension Suite



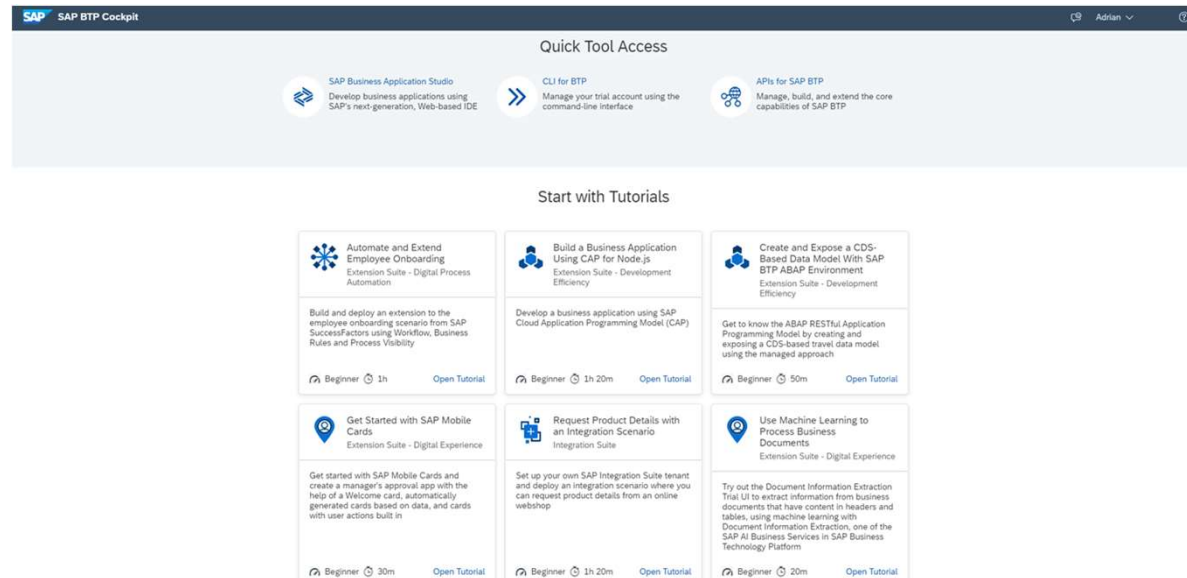
Multi-Cloud Foundation

Cloud Foundry
Environment

Kyma
Environment

ABAP
Environment

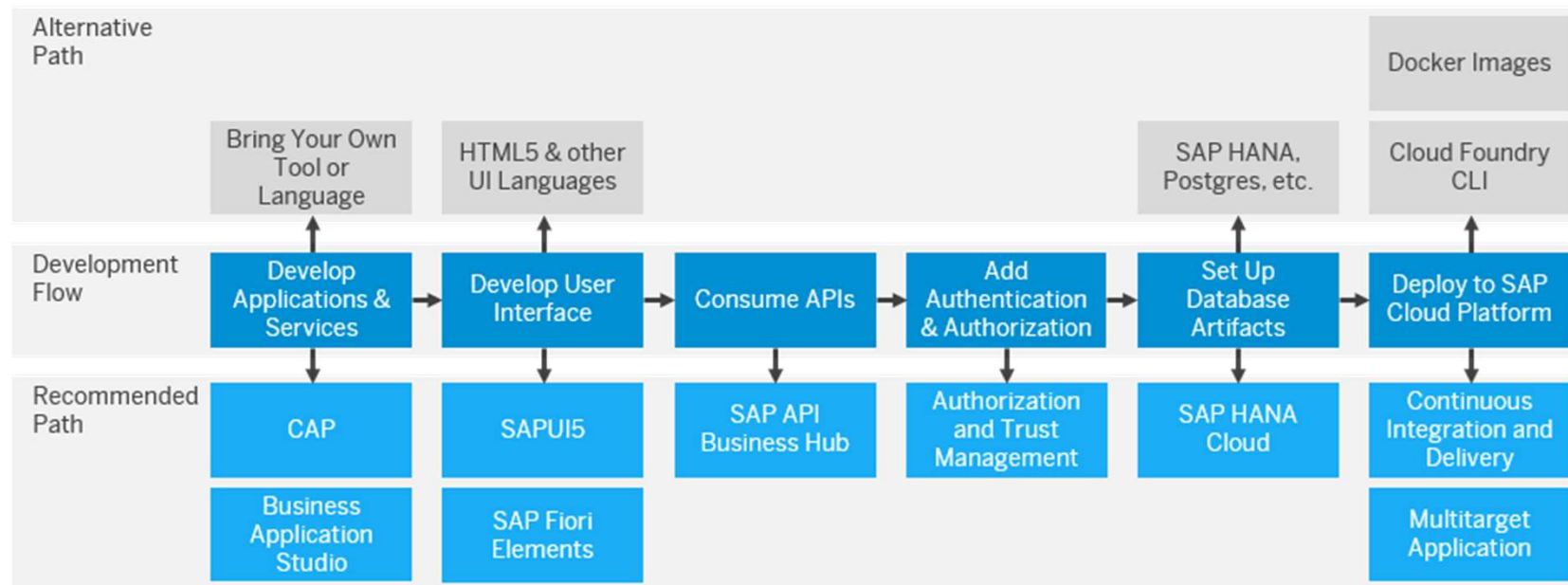
SAP Cloud Foundry as a heart of the Platform



The screenshot displays the SAP BTP Cockpit interface. At the top, the header shows the SAP logo and 'SAP BTP Cockpit' on the left, and a user profile 'Adrian' on the right. Below the header, the 'Quick Tool Access' section features three icons: 'SAP Business Application Studio' (Develop business applications using SAP's next-generation, Web-based IDE), 'CLI for BTP' (Manage your trial account using the command-line interface), and 'APIs for SAP BTP' (Manage, build, and extend the core capabilities of SAP BTP). The 'Start with Tutorials' section below it contains six tutorial cards arranged in a 2x3 grid. Each card includes an icon, a title, a brief description, and a 'Beginner' badge with a duration icon.

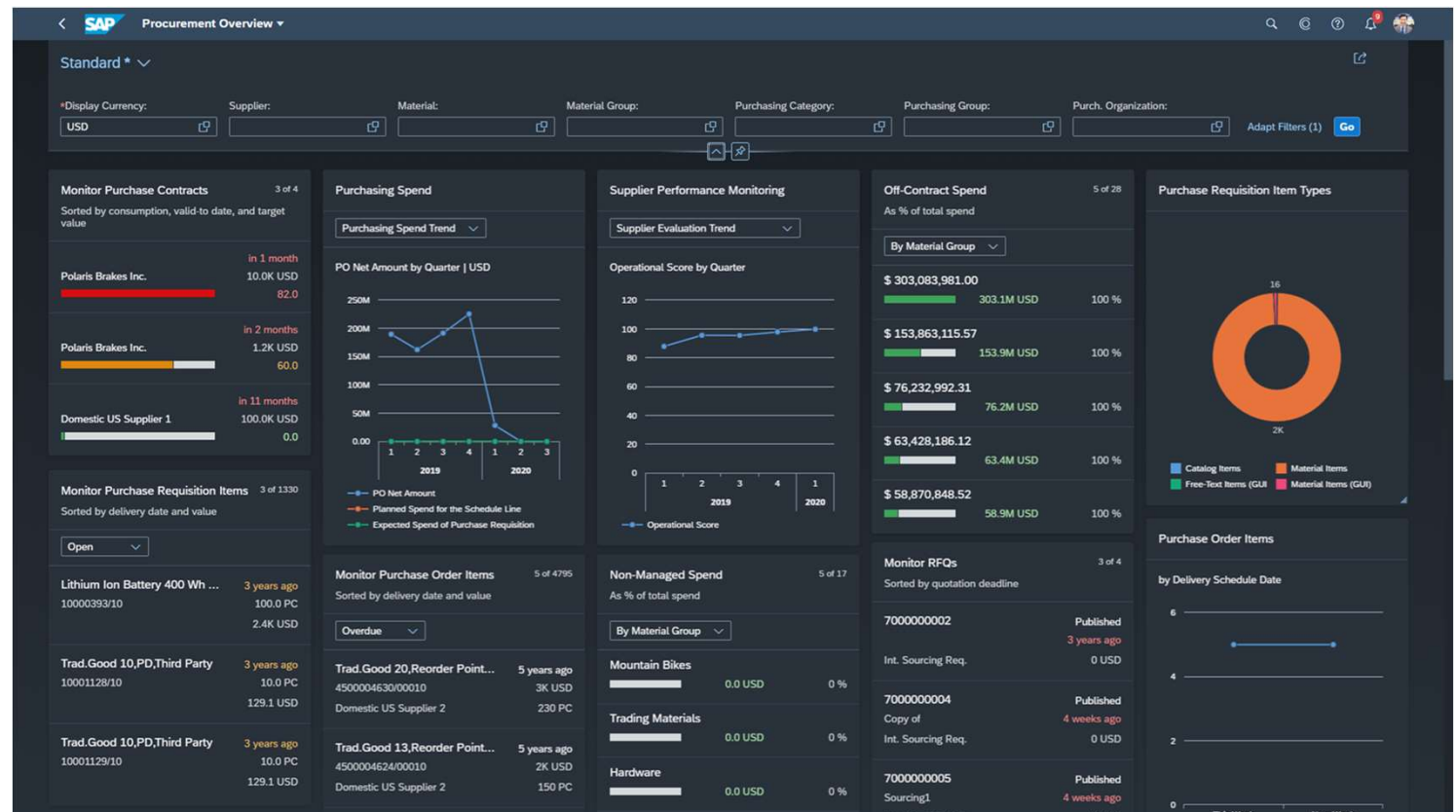
Tutorial Title	Extension Suite	Beginner	Duration	Action
Automate and Extend Employee Onboarding	Digital Process Automation	Beginner	1h	Open Tutorial
Build a Business Application Using CAP for Node.js	Development Efficiency	Beginner	1h 20m	Open Tutorial
Create and Expose a CDS-Based Data Model With SAP	Development Efficiency	Beginner	50m	Open Tutorial
Get Started with SAP Mobile Cards	Digital Experience	Beginner	30m	Open Tutorial
Request Product Details with an Integration Scenario	Integration Suite	Beginner	1h 20m	Open Tutorial
Use Machine Learning to Process Business Documents	Digital Experience	Beginner	20m	Open Tutorial

Develop using Cloud Foundry Environment

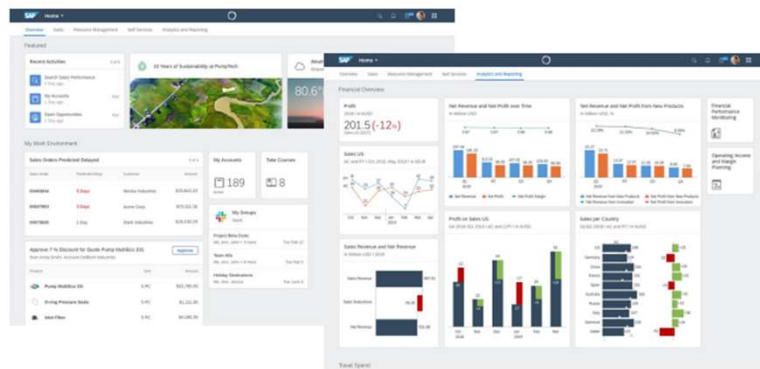


Digital Experience – SAP Fiori

- SAP Fiori 3,
- Design-Led Development Process,
- Rapid Activation.



SAP Fiori 3



Central Entry Pages

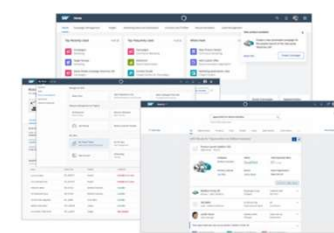
Consistent

Integrated

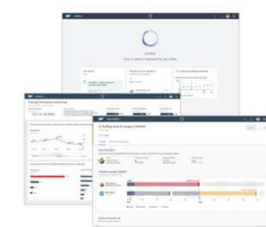
Intelligent



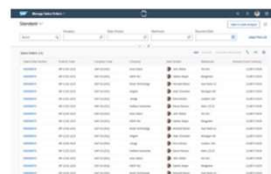
Central SAP CoPilot



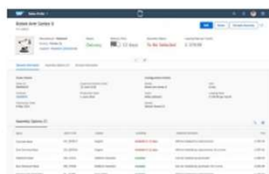
Central Search



Central Inbox



Coherent Apps



Embedded AI



Embedded Analytics



Dynamic Situations

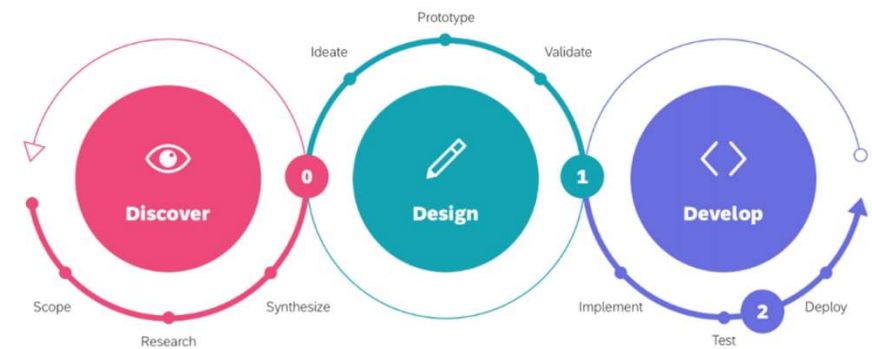
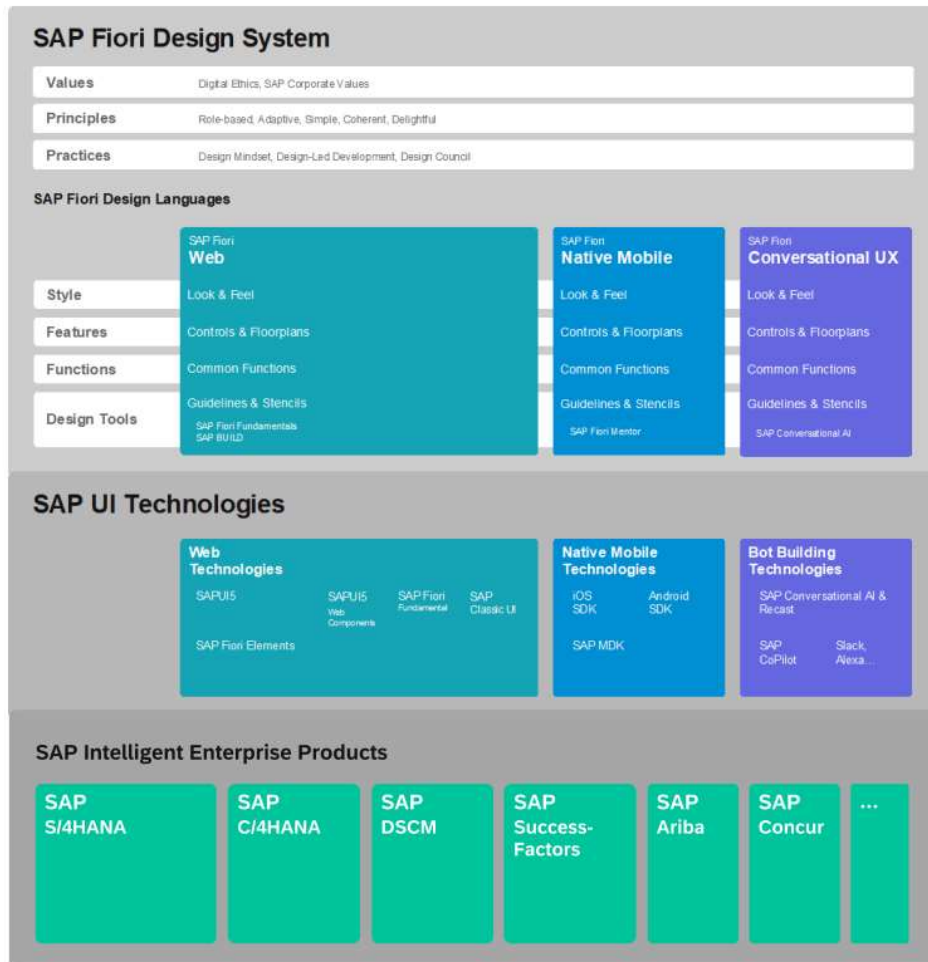


Professional Analytics

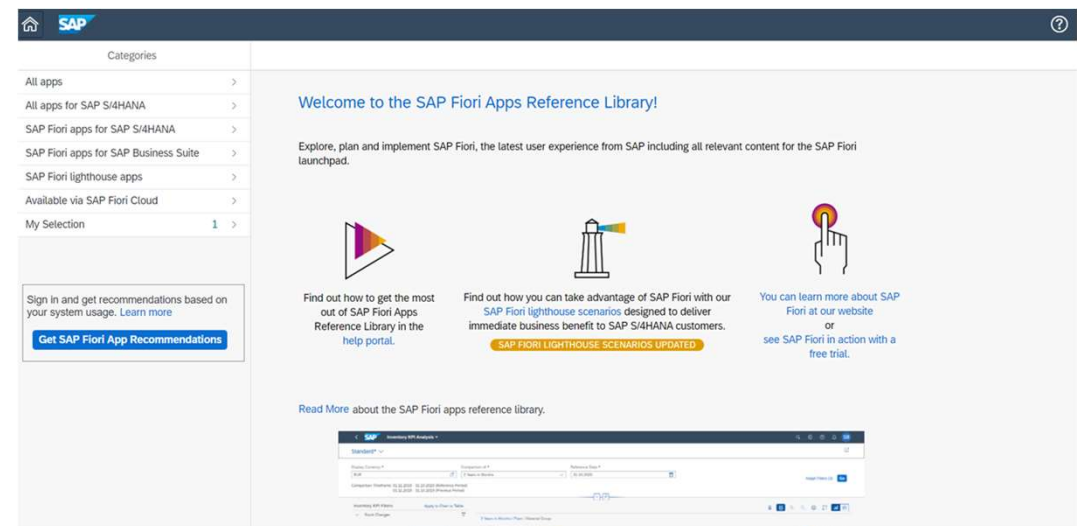
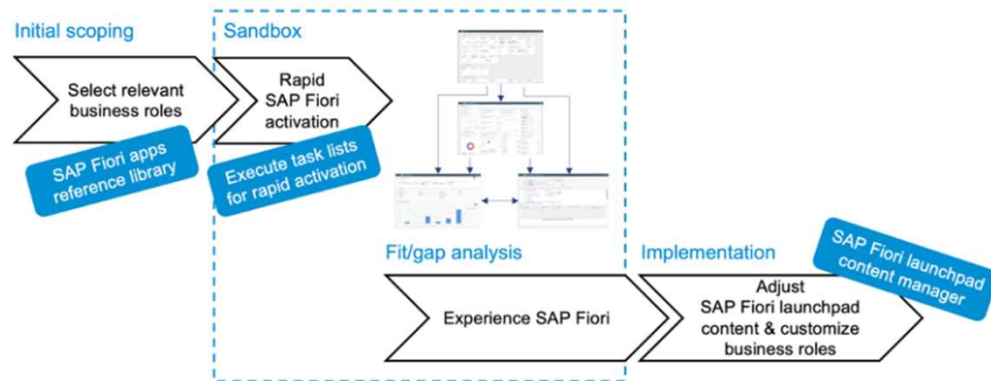


Powerful Workspace

SAP Fiori – Design System and Design-Led Development Process



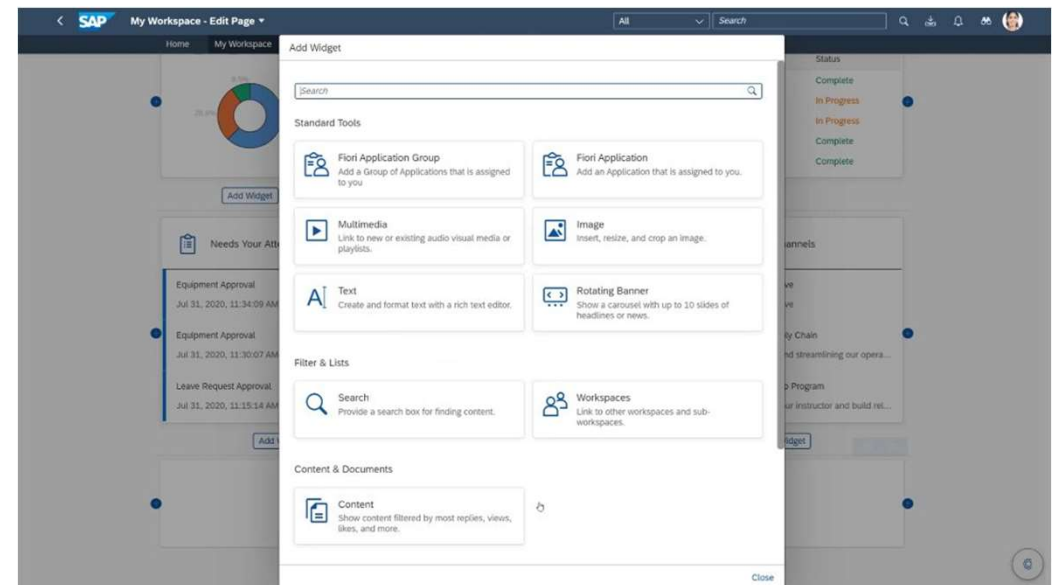
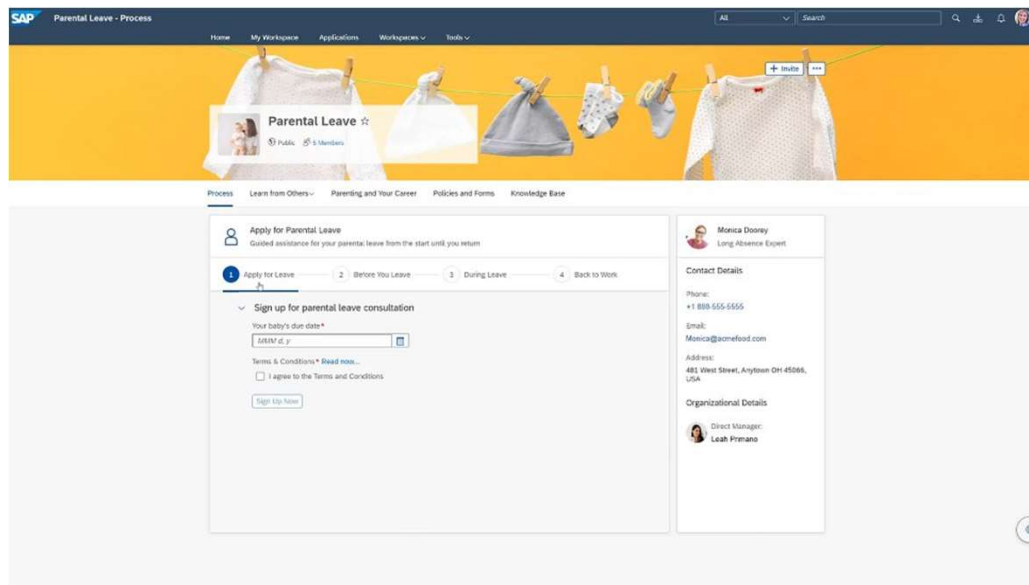
SAP Fiori Rapid Activation for S/4 HANA



Digital Experience - SAP Work Zone

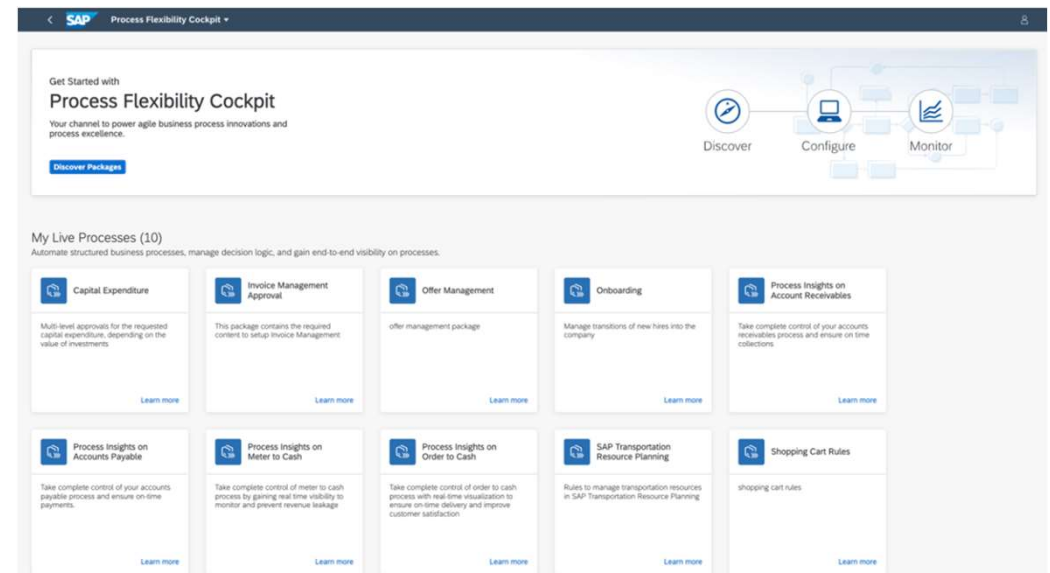
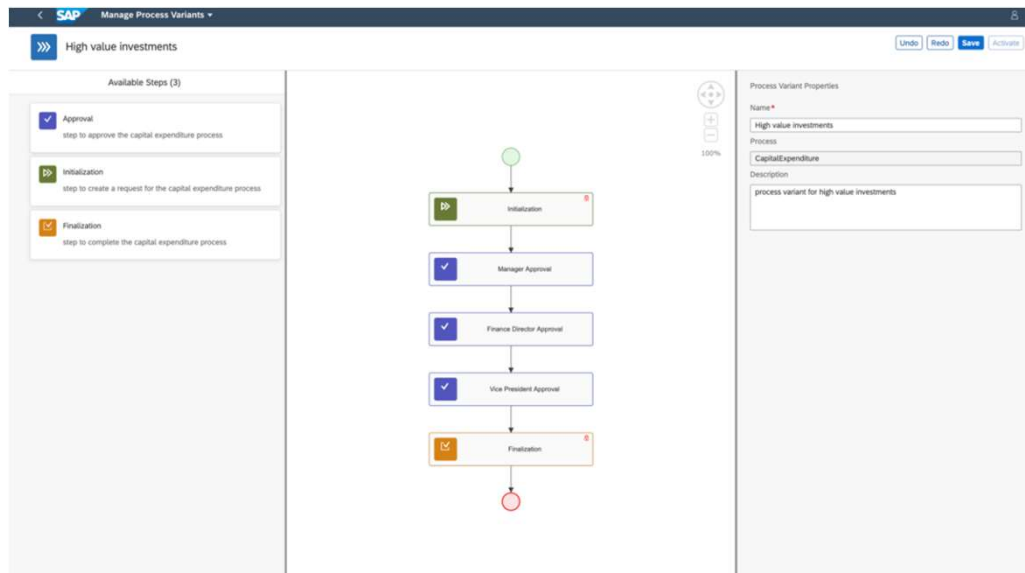


A central digital workplace solution to increase user productivity and engagement.



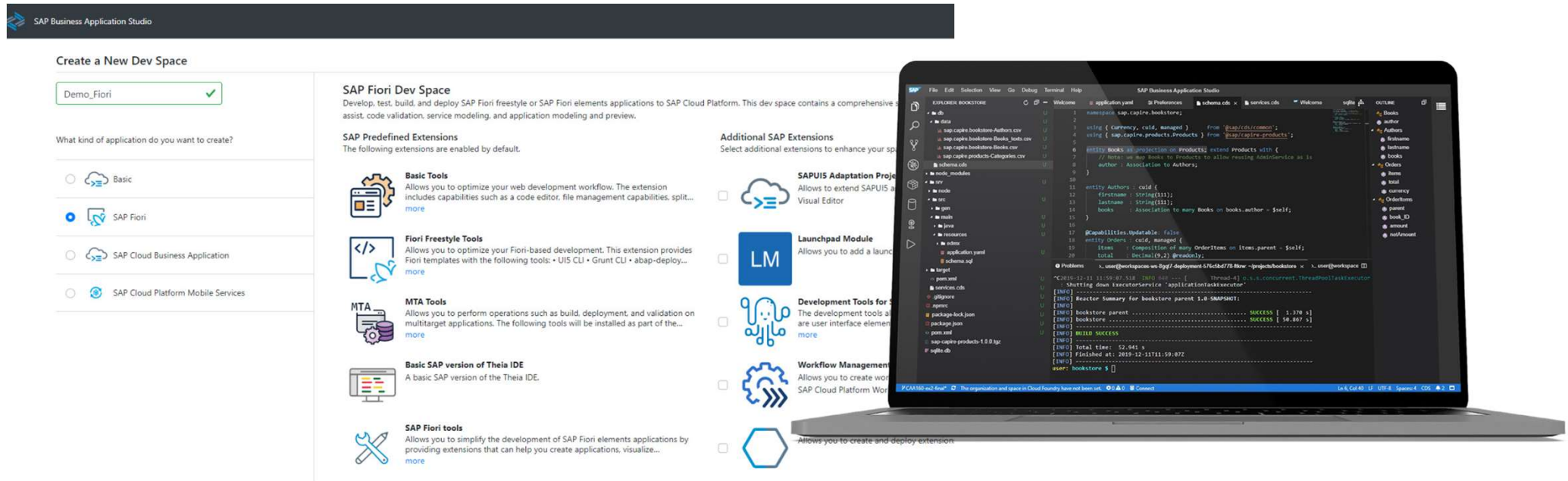
Digital Process Automation - SAP Workflow Management

- Digitize workflows,
- Manage decisions,
- Gain end-to-end process visibility,
- Configure processes in a low-code approach.



Development Efficiency – SAP Business Application Studio

Desktop-like experience, Leading IDEs experience (VSC), Command Line, Optimized editors, Pre-Installed Runtimes (Dev Spaces)



SAP Business Application Studio

Create a New Dev Space

Demo_Fiori ✓

What kind of application do you want to create?

- ☐ Basic
- ☒ SAP Fiori
- ☐ SAP Cloud Business Application
- ☐ SAP Cloud Platform Mobile Services

SAP Fiori Dev Space
Develop, test, build, and deploy SAP Fiori freestyle or SAP Fiori elements applications to SAP Cloud Platform. This dev space contains a comprehensive set of tools to assist, code validation, service modeling, and application modeling and preview.

SAP Predefined Extensions
The following extensions are enabled by default.

- Basic Tools**
Allows you to optimize your web development workflow. The extension includes capabilities such as a code editor, file management capabilities, split...
[more](#)
- Fiori Freestyle Tools**
Allows you to optimize your Fiori-based development. This extension provides Fiori templates with the following tools: • UI5 CLI • Grunt CLI • abap-deploy...
[more](#)
- MTA Tools**
Allows you to perform operations such as build, deployment, and validation on multitarget applications. The following tools will be installed as part of the...
[more](#)
- Basic SAP version of Theia IDE**
A basic SAP version of the Theia IDE.
- SAP Fiori tools**
Allows you to simplify the development of SAP Fiori elements applications by providing extensions that can help you create applications, visualize...
[more](#)

Additional SAP Extensions
Select additional extensions to enhance your space.

- ☐ **SAPUI5 Adaptation Project**
Allows to extend SAPUI5 applications with a Visual Editor
- ☐ **Launchpad Module**
Allows you to add a launchpad module
- ☐ **Development Tools for SAP Fiori**
The development tools allow you to create user interface elements...
[more](#)
- ☐ **Workflow Management**
Allows you to create workflows for SAP Cloud Platform Workflows
- ☐ **Extension**
Allows you to create and deploy extensions

Code Editor

```
namespace sap.capire.bookstore;
import { Currency, cuid, managed } from '@sap/cdi-compiler';
import { sap.capire.products.Products } from '@sap/capire-products';

// Note: we use Books to Products to allow reusing AuthService as is
author : Association to Authors;

entity Authors : cuid {
  firstname : String(111);
  lastname : String(111);
  books : Association to many Books on books.author = $self;
}

@capabilities.updatable: false
entity orders : cuid, managed {
  items : Composition of many OrderItems on items.parent = $self;
  total : Decimal(9,2) @readonly;
}

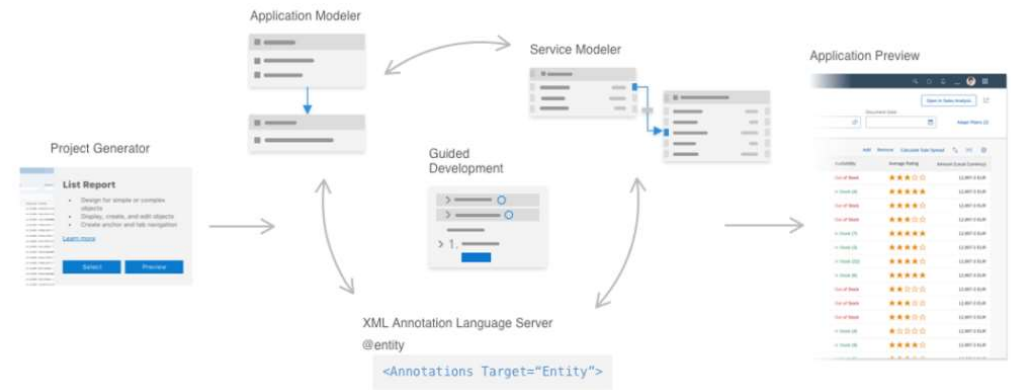
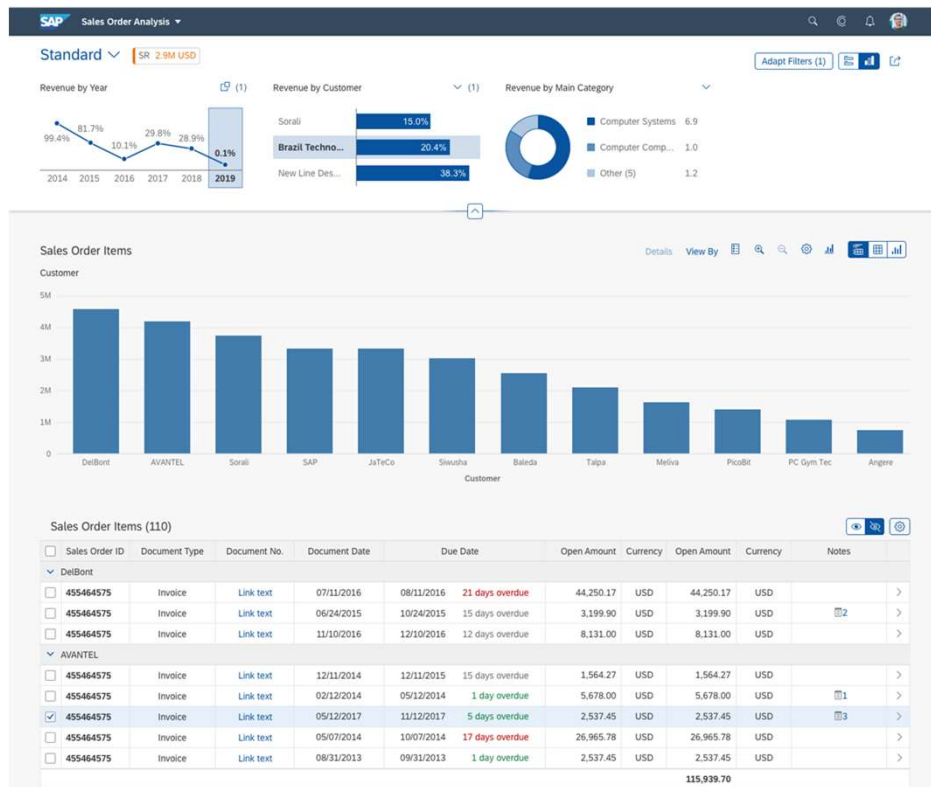
target
  pom.xml
  services.cds
  app.groovy
  package-lock.json
  package.json
  pom.xml
  sap-capire-products-1.0.0.tgz
  schema.cds
```

Terminal

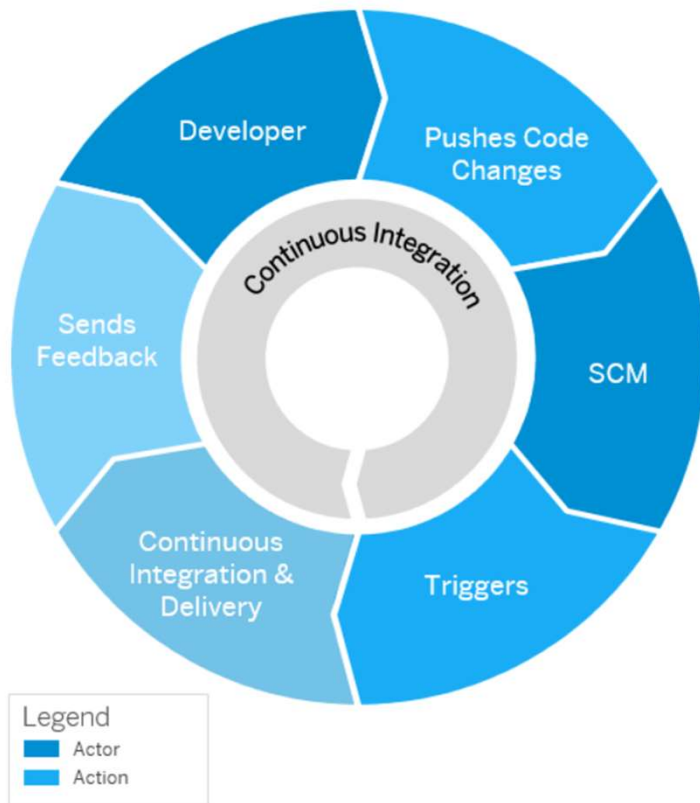
```
2019-12-11 11:59:07.518 [INFO] Run --- [ Thread-4] c.s.s.concurrent.ThreadPooledTaskExecutor
[INFO] Shutting down ExecutorService 'ApplicationTaskExecutor'
[INFO] Reactor Summary for bookstore-parent 1.0-SNAPSHOT:
[INFO] bookstore-parent ..... SUCCESS [ 1.378 s]
[INFO] bookstore ..... SUCCESS [ 56.467 s]
[INFO] BUILD SUCCESS
[INFO] Total time: 52.841 s
[INFO] Finished at: 2019-12-11T11:59:07Z
user@bookstore: $
```

Development Efficiency – SAP Fiori Elements & SAP Fiori Tools

Low/No Code Scenarios, Drive UX consistency, Simplified app-generation process

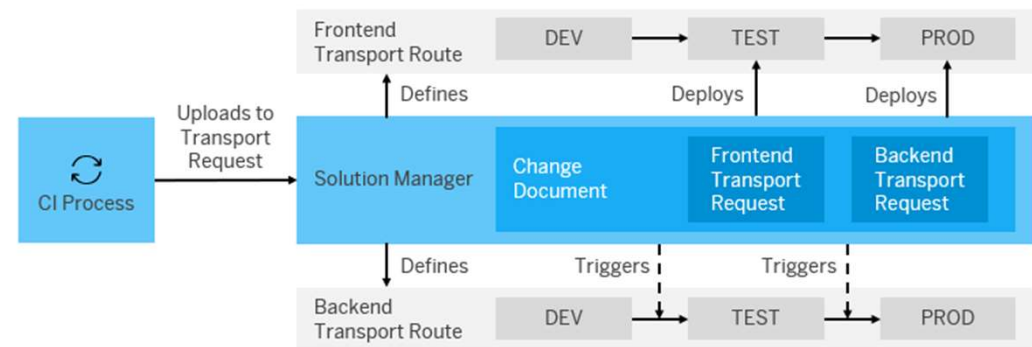


Extension Suite - Continuous Integration & Delivery, Project Piper

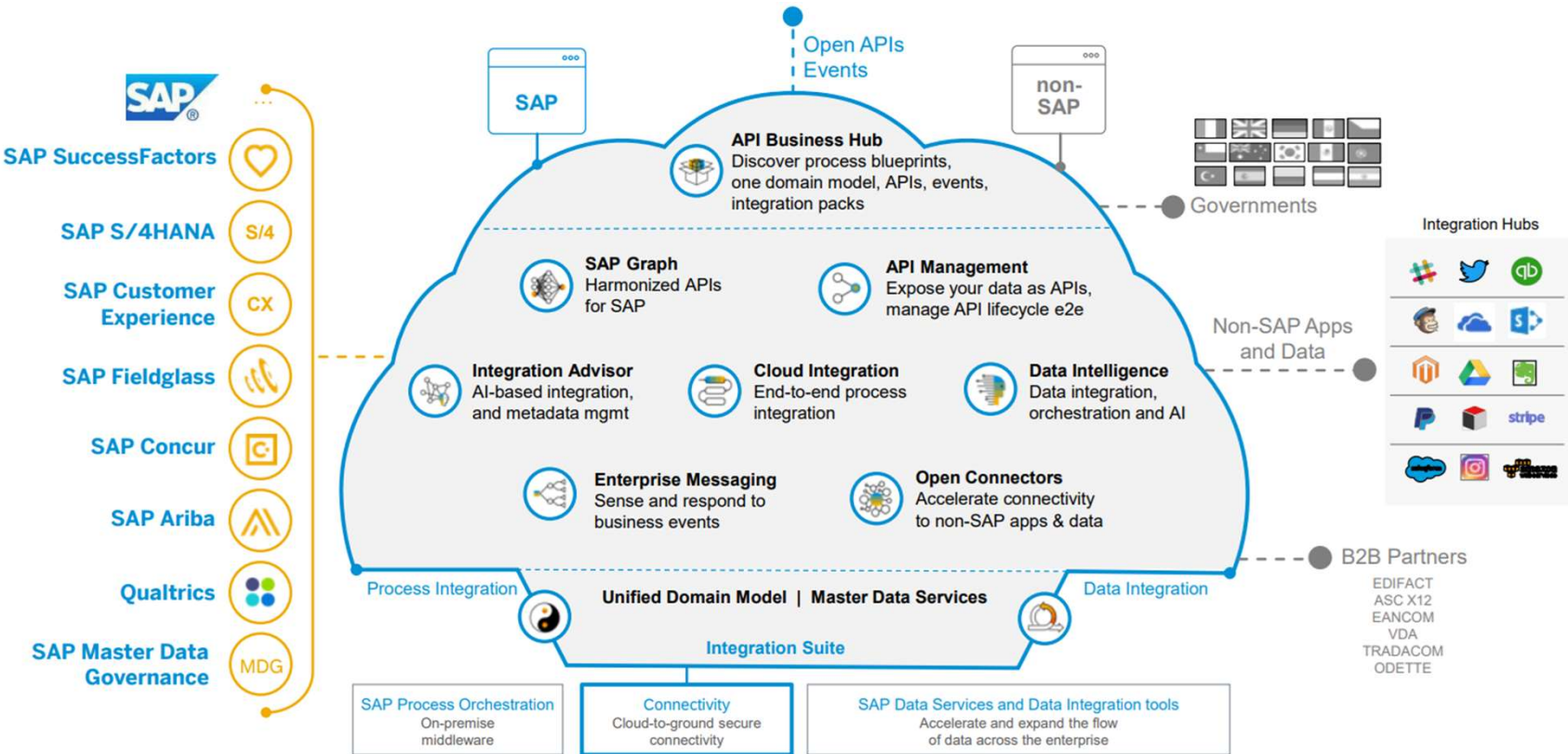


Developing with SAP Continuous Integration and Delivery comprises the following steps:

1. As a developer, push your code changes into a central source code management system (SCM).
2. The SCM triggers an event to which SAP Continuous Integration and Delivery reacts.
3. Depending on your pipeline configuration, SAP Continuous Integration and Delivery automatically tests, builds, and deploys your code changes, and provides feedback on the build status.



Integration Suite



- 1 As SAP states, Intelligent enterprises are integrated enterprises. SAP Integration Suite is the strategic decision of SAP for future integrations. All new OnPremiseToCloud and CloudToCloud integrations should be realised by help of Integration Suite. This Integration Suite includes a set of products:
- 1)API Business Hub - to look for pre-built content
 - 2)Integration Advisor - to speed up integrations based on AI capabilities
 - 3)Enterprise Messaging - for asynchronous communication
 - 4)Data Intelligence - for data integration combined with AI\ML capabilities
 - 5)Cloud Integration - tool for Process Integration (similar to on-premise Process Orchestration but in cloud)

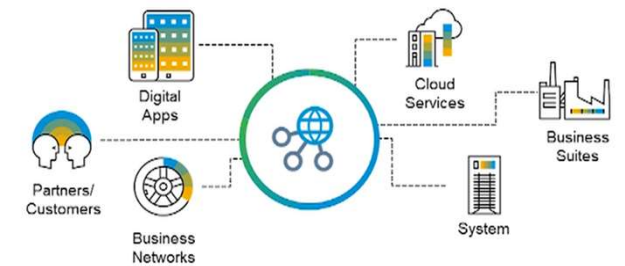
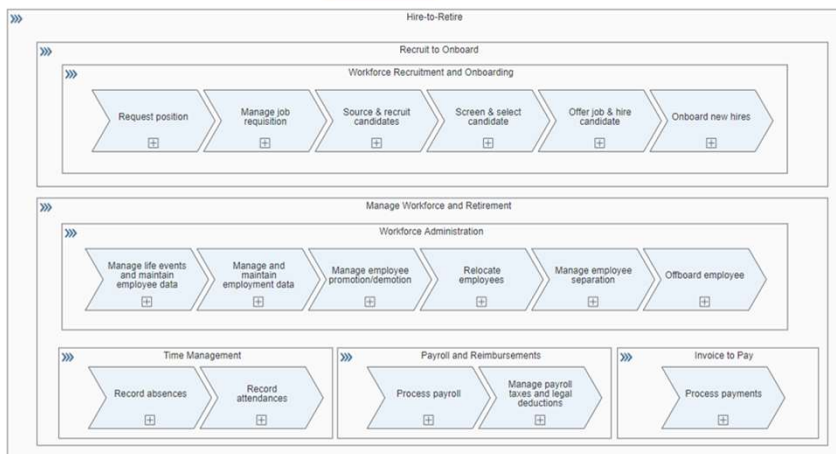
Artur Latifov; 10.03.2021

Hire to Retire (Cloud)

A subprocess of the Recruit to Retire scenario covering the lifecycle of an internal employee.

Mark as Favorite

Business Process Details



Discovery Center – BTP Services & Roadmaps



SAP Discovery Center

Home / Services

Services
SAP Business Technology Platform services help you integrate and extend your solutions, optimize your business processes, and create an engaging digital experience.

Search for SAP Business Technology Platform services

Show Filters

Categories

All

New & Featured

Retiring Services

Business Services

By Suite

Extension Suite - Development Efficiency

Extension Suite - Digital Experience

Extension Suite - Digital Process Automation

Integration Suite

By Capability

AI & Machine Learning

Analytics

Blockchain

Data Management

DevOps

Developer Productivity

Digital Process Automation

Integration

Internet of Things

LOBs & Industries

Mobile

All Services (92)

ABAP environment
Develop ABAP cloud apps and extensions, leveraging innovations ...
CPEA SUBSCRIPTION

Advanced Compliance Reporting
Generate and submit statutory reports that comply with governme...
BUSINESS SERVICE SUBSCRIPTION

Agent Activation for Dynatrace Service
Connect your Java applications to a Dynatrace SaaS monitoring...
SUBSCRIPTION

Agentry
Develop and run Agentry metadata-driven mobile applications.
SUBSCRIPTION

Alert Notification Service
Create and receive real-time alerts about your services.
CPEA SUBSCRIPTION

Application Autoscaler
Automatically scale your applications to meet their dynamic resource...
CPEA SUBSCRIPTION

Application Logging Service
Create, store, access and analyze application logs.
CPEA SUBSCRIPTION

Audit Log Service
Retrieve the audit logs for your subaccount.
CPEA SUBSCRIPTION

Authorization and Trust Management Service
Manage application authorizations and connections to identity...
SUBSCRIPTION

Automation Pilot
Simplify the operational effort behind any cloud solution in the SAP BTP.
CPEA

Bandwidth
Data transfer rate to a subscribed

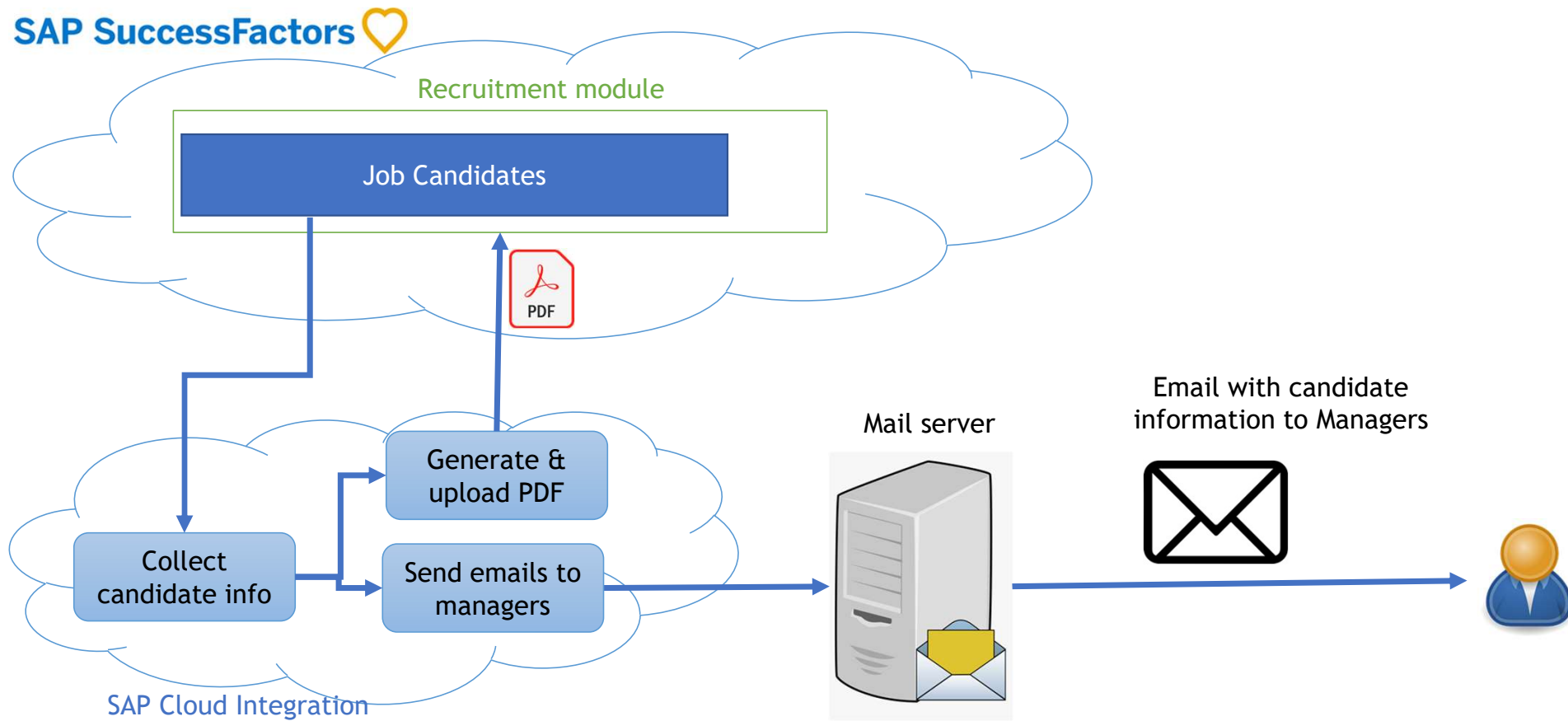
Big Data Services
Get insights from big data on ready-

Business Application Studio
Develop, debug, test, and deploy

Business Entity Recognition
Detect and highlight entities in

Cloud Foundry Runtime
Operate polyglot applications.

SuccessFactors integration at for one of the Norwegian state directorates



2 Artur Latifov; 10.03.2021

3 One of examples of S5 implementation projects connected to Integration Suite is integration of SAP HR solution in cloud (SuccessFactors) in Norwegian Public sector (DFØ).

Here Cloud Integration was used and it solved 2 problems:

1) SuccessFactors cannot have in-built programs and code (for example, Java-programs). But Cloud Integration can. That is why programs developed in Cloud Integration played a role as an add-on to SuccessFactors. These programs collected information from Job Candidates and Job Requisitions in SF, generated PDF-reports out of this information and uploaded PDFs back to SF

2) Another interation task included sending emails with information from SF to managers through mail servers. SF has some native functionality to send out emails, but this functionality is not enough when it comes to comlex logic (such as advanced conditions on which information should be in the email).

Artur Latifov; 10.03.2021

Integration Architecture Project at Cognite – ISA-M

To-be technical architecture: 2) Cognite-ECC integrations

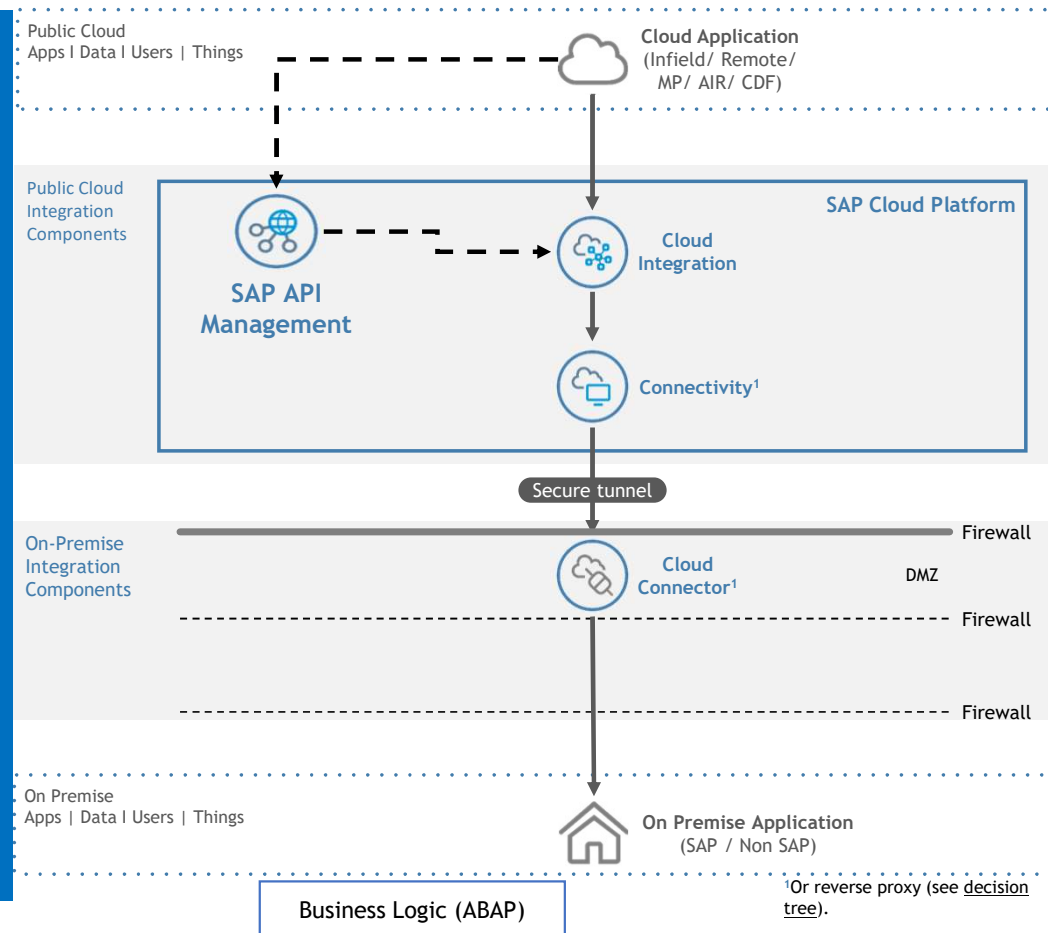
Alternative 2 A2A Integration Cloud2OnPremise

Characteristics | Selection Criteria

- Hybrid Traffic
- Unaligned APIs
- Pre-Packaged Content
- Structure Mapping
- Value Mapping
- Routing
- Splitting / Aggregation
- Protocol Mediation
- Techn. Exception Handling
- Quality of Service: Best effort, exactly once

Components

- Cloud Connector - allows secure connection from Cloud to SAP on-premise
- Cloud Integration - SAP middleware in cloud for design, runtime, monitor of integrations
- SAP API Management - optional, for exposing services as Odata, monitor and manage them



- 4 S5 did an integration architecture project for Cognite, where official SAP Integration Solution Advisory Methodology and TOGAF Architecture Development Method were applied. The result of this work were concrete Architecture Blueprints solving customer needs and containing a combination of elements from Integration Suite, such as Cloud Integration, API management, Enterprise Messaging and others

Artur Latifov; 10.03.2021

Let's keep in touch

Do you have any questions?
Contact us:

post@s5consulting.no
www.linkedin.com/company/s5consulting
s5consulting.no

