



MINDSET

From Integration to Innovation: CHS's SAP BTP Journey

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Leading farmer-owned energy, grains, agronomy, and foods cooperative

Originate more than 2 billion bushels of grain
Supply more than 300 million gallons of energy products
Handle more than 2 million tons of crop nutrients
Manufacture more than 1 million tons of animal feed

What we do

Sell to customers

Agronomy



Energy



Nutrition



Retail

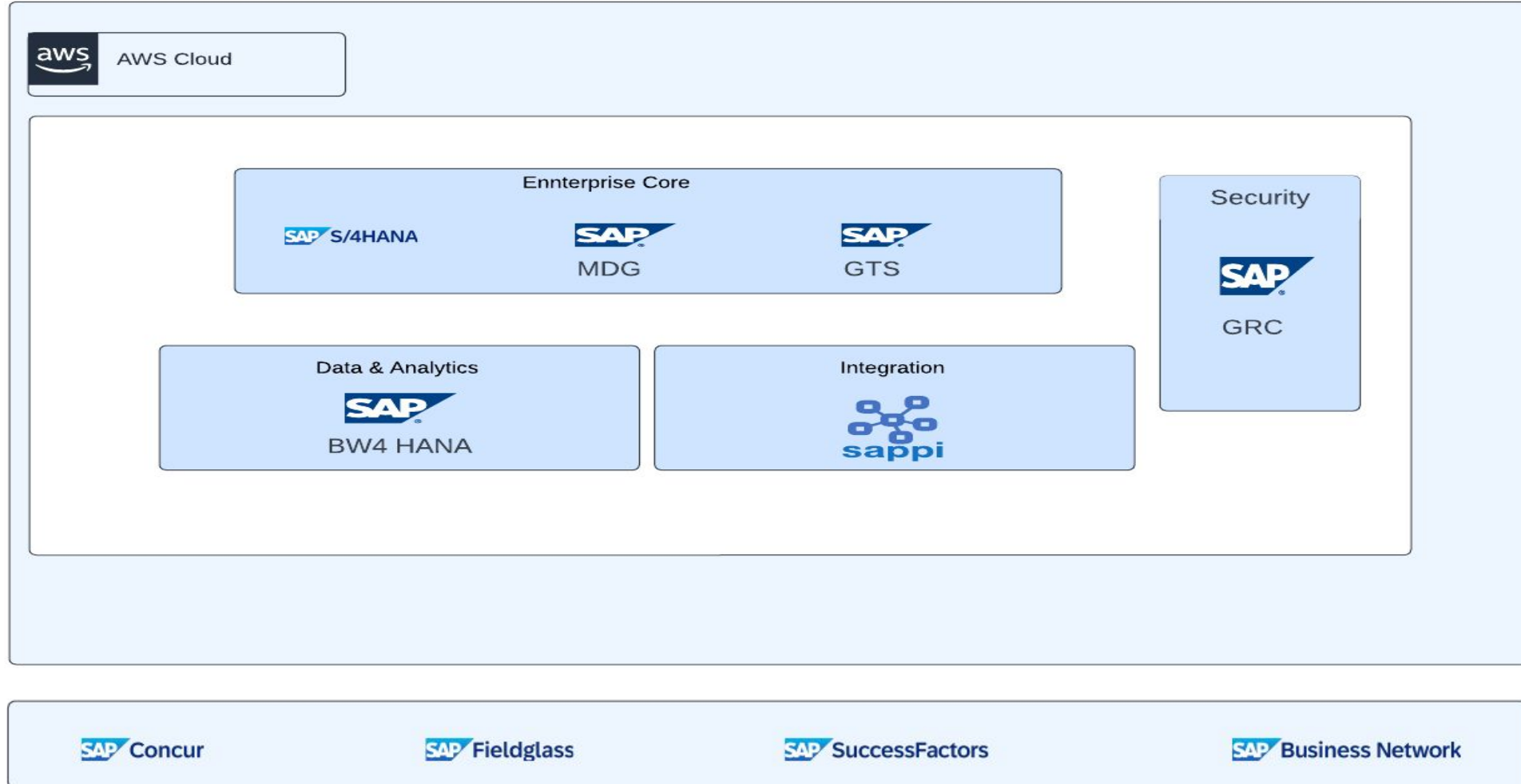


Buy from customers

Grain



Our SAP Landscape



CHS's Challenge - Integration



Vijay Gonuguntla

Principal Software Engineer
SAP IT Integration

“ We need a **middleware platform** with capabilities to **integrate** on-prem and SAAS applications.”

CHS's Challenge – Front End



Jeff Carty

Manager, IT Engineering
CRP IT App Development

“ CHS system landscape is quite complex containing many SAP systems. Our users needed a single **unified launchpad** to access all of their applications in one place. ”

CHS's Challenge - Security



Fred Sirota

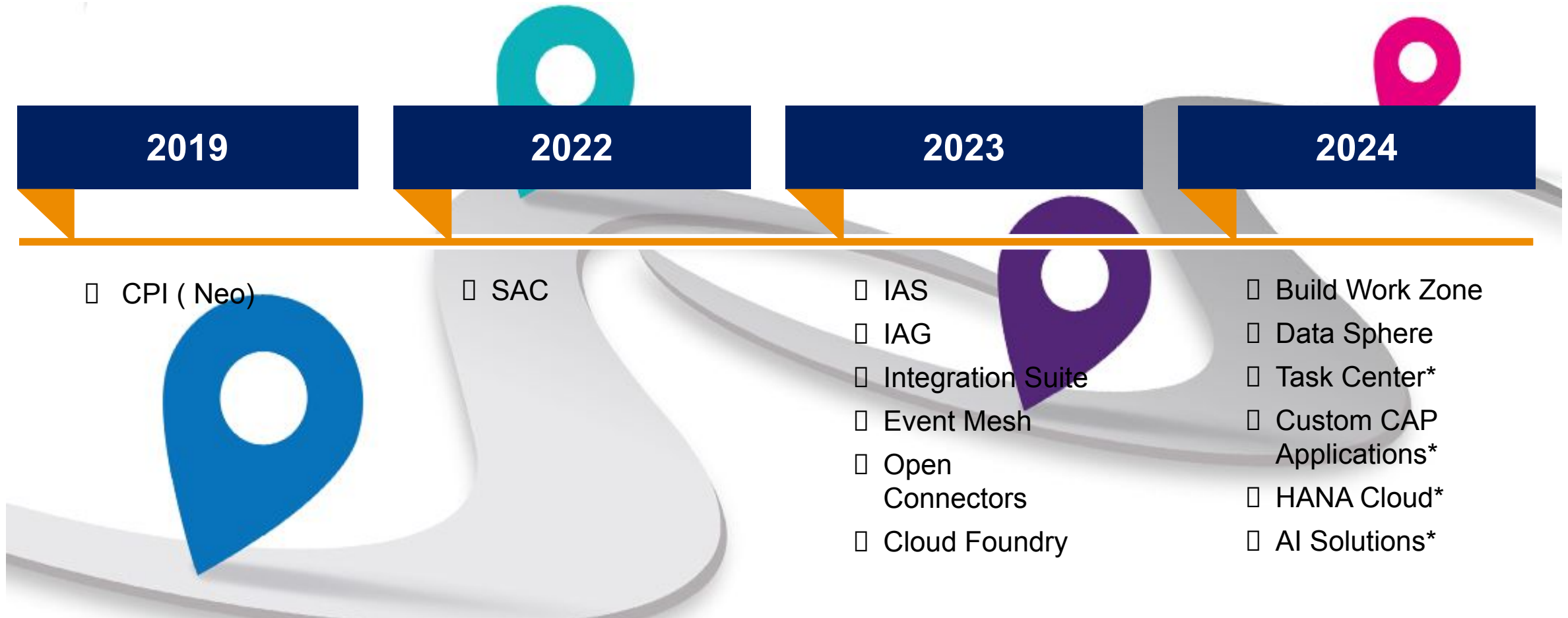
Senior Manager
SAP Security

“ SAP Cloud solutions requires an efficient and **compliant** approach to **authentication and user provisioning**. We need a solution that can effectively handle risk analysis and manage user provisioning ”

We found SAP BTP has answers for these challenges



CHS's SAP BTP Journey - From Integration to Innovation ..



Execution Challenges – Adjustments

Neo Sunset

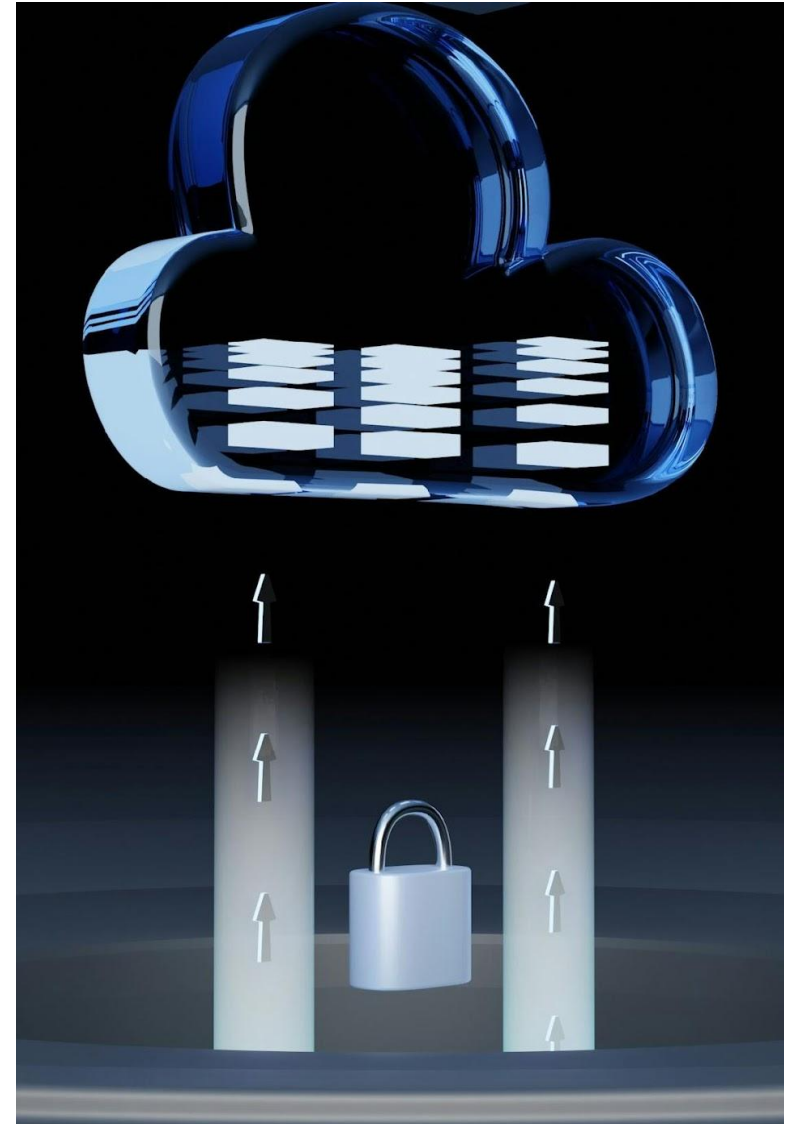
Included migration plan to Cloud Foundry in overall SAP BTP strategy.

Documentation / Knowledge gaps

Documentation for BTP was evolving. We worked with SAP Max A and our partner Mindset to plug in the gaps.

Cloud Security

Included IAS/IPS and IAG in our BTP road map and implemented them to build a comprehensive security process for SAAS applications.



Execution Challenges – Partnership selection

- Mindset Consulting selected as the IAG implementation Partner
 - Implementation completed in 2023
- Established Advisory Services with Mindset
- Advisory Services coverage:
 - BTP (enablement, governance, security, usage)
 - Build Work Zone
 - Fiori
 - Clean Core
 - Integration Suite
 - Event Mesh
 - HANA Cloud
 - DevOps optimization
 - AI Tools for SAP IT departments



Results

Seamless Integration

Integration Suite enabled seamless integration between on-premise and SaaS applications, such as SAP Fieldglass and SuccessFactors.

Real-Time Analytics

Implemented SAC and Datasphere for real-time analytics and reporting capabilities.

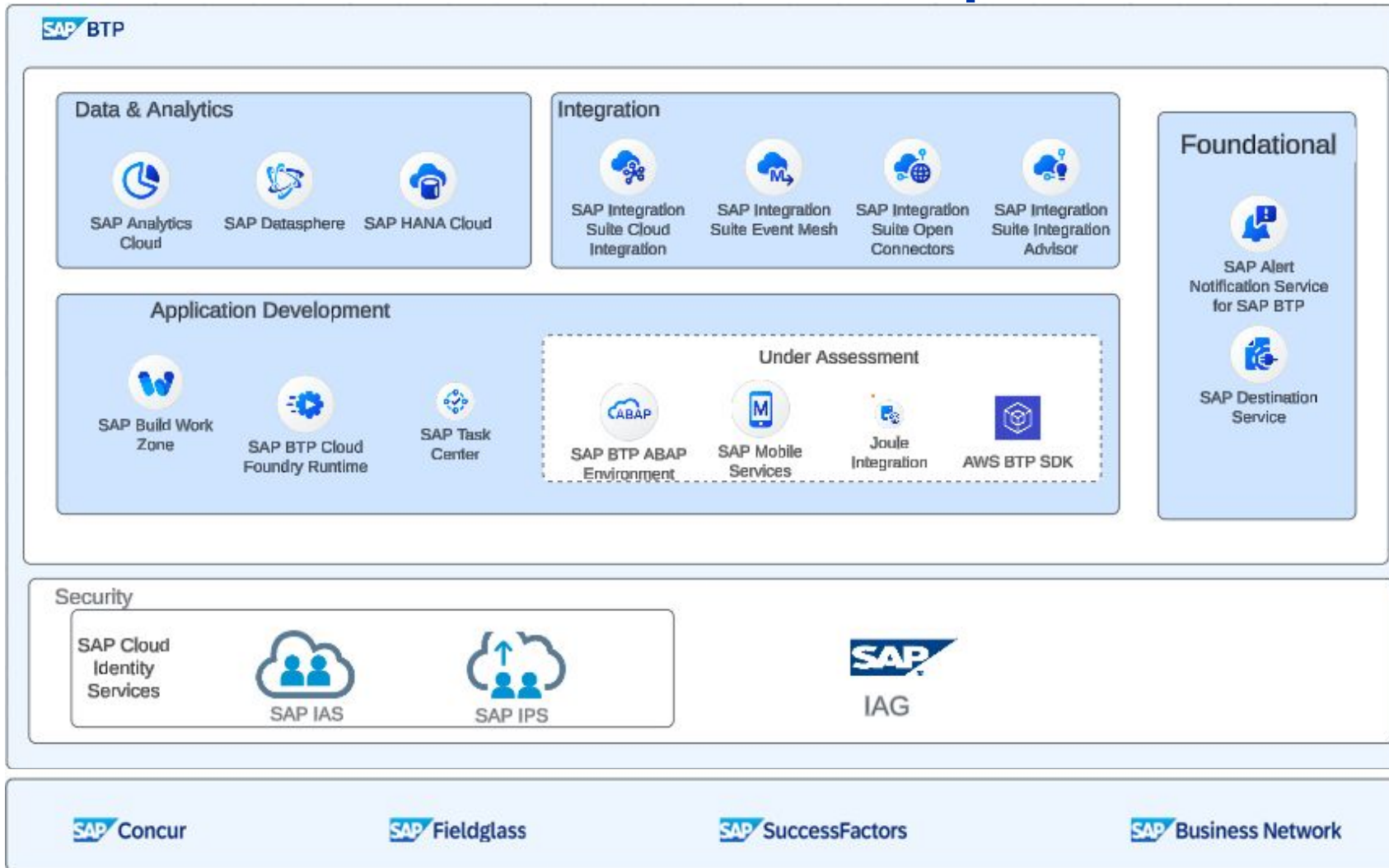
Unified and Central Launchpad

With SAP Build Work Zone, we have a unified launchpad to publish applications from different versions of on-premise and BTP environments.

Authentication and Provisioning

IAS is now used a single entry point to all SAAS/BTP applications and IPS for all provisioning IAG is setup as bridge to on-prem GRC to address risk assessment

Our BTP Landscape

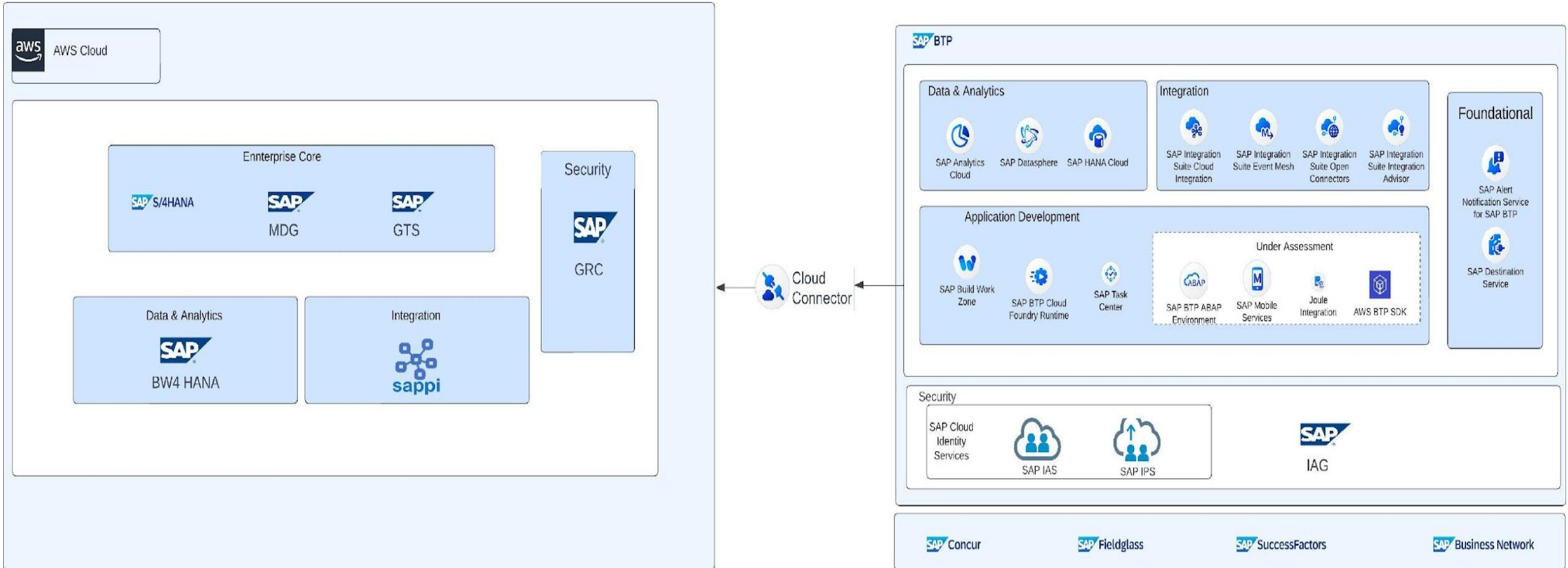




Our enterprise landscape is now better prepared for the future.

SAP BTP provides us the ability to scale our existing solutions and also add new Line of Businesses

CHS SAP Landscape



What are we doing next?

Centralized Task Management

Implement SAP Task Center to provide a unified interface for managing tasks across various SAP applications.

Artificial Intelligence

- Clean Core Advisor using AI
- ABAP and Fiori testing automation using AI

CAP Applications

Develop CAP applications to replace legacy / standalone solutions which are not scalable

HANA Cloud Database

Use HANA Cloud database for CAP applications

AI for SAP IT Teams

The screenshot displays the SAP BTP interface. On the left, a 'Bots' panel lists several bots: 'ABAP Unit test code generator', 'UIS js code unit test generator code and test cases', 'No docs bot', 'Clean Core Bot', and 'Clean Core Advisor'. On the right, a 'Conversation' panel shows a chat history with messages such as 'Generate UI5 QUnit Tests for Carrier Controller', 'Generate UI5 QUnit Test Cases for Carrier Controller', 'UIS QUnit Test Case Creation', 'UIS Controller Comments and QUnit Test Cases', and 'UIS Controller Code Comment Addition'. The current message in the conversation is a code snippet for generating QUnit tests.

Mindset's RAG Framework

CHS is using Mindset's SAP BTP hosted **RAG Framework** to make the development process more efficient.

The first 2 use cases are:

1. A clean core advisor trained with unlimited support documentation and CHS coding standards
2. ABAP and Fiori Testing bot to propose unit tests

```
Anonymous: Please provide me the SAP UI5 QUnit testcases for the formatter code given below

sap.ui.define([], function () {
    "use strict";

    return {
        prettyDate: function (now, time) {
            var date = new Date(time || "");
            diff = ((new Date(now)).getTime() - date.getTime()) / 1000;
            dayDiff = Math.floor(diff / 86400);

            if (!isNaN(dayDiff) || dayDiff < 0 || dayDiff >= 3) {
                return;
            }

            var oResult = dayDiff === 0 && {
                diff < 60 && "just now" ||
                diff < 120 && "1 minute ago" ||
                diff < 3600 && Math.floor(diff / 60) + " minutes ago" ||
                diff < 7200 && "1 hour ago" ||
                diff < 86400 && Math.floor(diff / 3600) + " hours ago" ||
                dayDiff === -1 && "yesterday" ||
                dayDiff < -7 && dayDiff + " days ago" ||
                dayDiff < -31 && Math.ceil(dayDiff / 7) + " weeks ago";
            };
            return oResult;
        }
    };
});
```

AI for SAP IT Teams (RAG Architecture)

