

Leveraging AI technology +++ in SAP S/4HANA



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Data Day // 24





Data and AI Team

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Leveraging AI techology in SAP S/4HANA needs a comprehensive suite of business technology services

Past architectural setup



New architectural setup

AI Integration: Leverage ISLM to empower business applications





What is ISLM?

- •
- •
- delivered by SAP)

Key benefits of ISLM

- •
- activation
- •

Single-entry point within SAP S/4HANA to efficiently integrate and operate ML scenarios

Standardized framework delivered in SAP BASIS component: ISLM is part of standard license for SAP S/4HANA

Focus on customer managed use cases (custom developed and

Standardizes and streamlines application integration with various ML services and runtimes with minimal coding

Enables end-to-end lifecycle operations in the context of the business application right from exploration, prerequisite checks, training, and

Supports auditing requirements and simplifies change management through explicit activation of models

Discover, operate, and consume prebuilt / custom-built SAP S/4HANA AI use cases by means of the ISLM application

Embedded

AI service provider (such as HANA – ML) runs in the same stack as the business application (SAP S/4HANA)

Side-by-Side

AI service provider runs in a different stack (e.g. SAP AI Core on SAP's Business Technology Platform) than the business application (SAP S/4HANA)

Standardized consumption and operation of machine learning scenarios for both flavors

Discover prebuilt use cases in ISLM

1a

- Explore and identify relevant domain-specific use cases; check additional information about business application
- Check readiness requirements for an intelligent scenario on a given system running SAP S/4HANA

Innovate with new AI use cases

1b

- Identify the AI technology and algorithm •
- Create intelligent scenario in ISLM as a binding • entity
- Publish intelligent scenario

- **Operate in ISLM**
- Maintain connection for the intelligent scenario
- Train AI model with customer data
- Analyze quality of trained AI model



Run productively

- Deploy and activate to specify which trained model to use in business application
- Model consumption in business scenario with SAP S/4HANA

Roles and components in the Intelligent Scenario Lifecycle Management application

Development of intelligent scenarios Develop business logic, ABAP development environment, UI 0 ABAP developer Register & publish Intelligent scenario 0 Intelligent scenario owner Side-By-Side Develop AI artefact SAP AI Core

Data scientist

Consumption of intelligent scenarios



Classification of how to leverage (Generative) AI technology in the SAP S/4HANA ecosystem from an architectural perspective



Extract of SAP's Generative AI roadmap



Support for storage and retrieval of vector embeddings

Q2/2024

Q3/2024 and beyond

SAP AI Core:

• Automated grounding of prompts • Data masking and anonymization for prompts and LLM responses • SDK for support of LLMs

Joule:

Availability in Cloud ERP – related financial functions (SAP S/4HANA Cloud, Private Edition)

SAP AI Core: automatic refinement of prompts using **Generative AI**

Scenario 1: Boost efficiency and accuracy of sales order creation by leveraging AI technology



• Accelerate your sales order creation process Reduce data management costs • Increase productivitiy of sales staff

Scenario 2: S/4HANA Embedded AI Showcases

Using the Insight-to-Action principle to combine various outof-the-box predictive functionalites

Predict Material Slow Movement

Description

+ Reduced inventory carrying and warehouse management costs, increased supply chain efficiency, efficient supply chain planning with reduced effort and avoiding/reducing scrap.

Slow- or Non Moving Materials Product Fact Sheet

Predict Delivery Dates

Description + Prediction of purchase order delivery date based on the historic data. Recognize potential delivery delays and gain insight into the performance of the supplier based on the past deliveries.

Monitor Purchase Order Items

Forecast Goods Transfer Times

Description

+ Prediction of purchase order delivery date based on the historic data. Recognize potential delivery delays and gain insight into the performance of the supplier based on the past deliveries.

Stock Multiple Materials Transfer Stock: Cross Plant