

Objectives

Solution

Benefits

Quick Facts

SAP Solution Brief
SAP Data Intelligence

Enterprise AI Meets **Intelligent Information Management**

THE BEST RUN





A New Approach to Information Management and AI

Information management and artificial intelligence (AI) are more closely connected than ever before. While AI promises to deliver a wealth of new, meaningful business insights, the data requirements and complexity involved in deploying and operating AI is daunting. With today's data sprawl and complex changes in the variety, volumes, and types of data, most companies need a dizzying array of disparate tools to extract value from increasing volumes of multifaceted data. To harness the power of data, we need to **reimagine information management**.

A New Approach to Information Management and AI

The SAP® Data Intelligence solution addresses these challenges head-on. SAP Data Intelligence delivers data-driven innovation and intelligence across the enterprise, unifying scalable enterprise AI and intelligent information management. It helps you extract value from distributed data, scale AI, and embrace the best of open technology. The

solution empowers you to connect siloed data assets and manage discovery, refinement, governance, and orchestration of all data across your distributed-data landscape. You can finally transform valuable data from any source into critical insight to drive better business outcomes.



With this single solution, you can drive DataOps initiatives with collaborative tools for data preparation and automation of data workflows, providing transparency across data-centric roles including data architects, developers, integrators, stewards,

and scientists. You can orchestrate using a data fabric architecture that enables connections and management across disparate data sources, as shown in Figure 1.

A New Approach to Information Management and AI

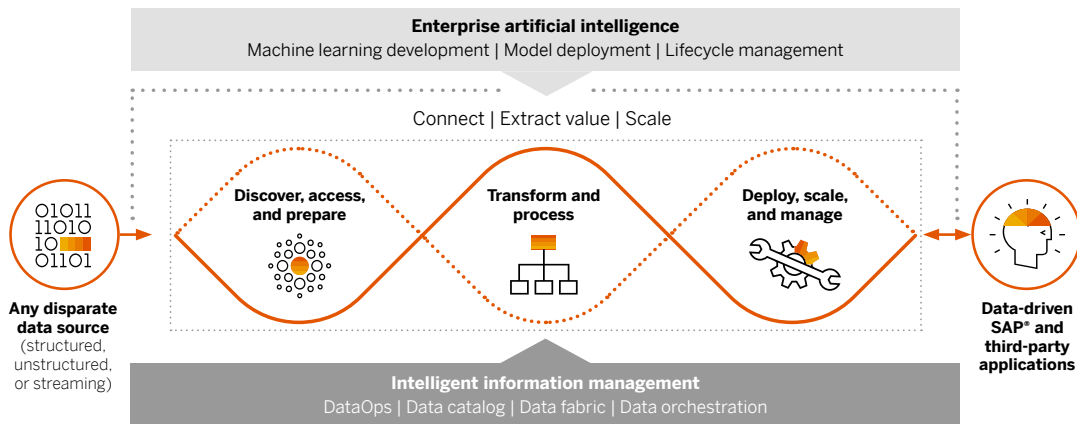


Figure 1: Overview of SAP Data Intelligence

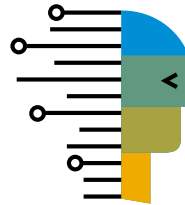


Extracting Value from Distributed Data

SAP Data Intelligence empowers you to discover, refine, govern, and orchestrate data sources. You can merge audio, image, video, text, and IoT streams with structured corporate and third-party data. Governance and compliance become much simpler with robust data management that tracks all transformations against data sets. Using an SAP or open-source processing engine, you can orchestrate and execute modular data pipelines, connecting to disparate sources to derive deep, refined insight. The solution also allows you to execute data orchestration with modular data pipelines to scale up and down according to demand and deliver trustworthy data to the right users with the right context at the right time.

By deriving actionable insights for predictive maintenance, product-as-a-service paradigms, and smart logistics, you can transform event streams into enterprise-ready data. You can combine data from enterprise systems, external

systems, social systems, and purchased data to better understand your business partners and assess risk and predict late payments. SAP Data Intelligence drives initiatives such as finding the best job candidates without bias, creating 360-degree customer profiles, evaluating marketing campaign effectiveness, and simulating renewable energy production.



The information management revolution is relentless, and **full automation** of current human tasks may very well occur in our lifetime.

Extracting Value from Distributed Data

Scaling Artificial Intelligence

Embracing Open Technologies

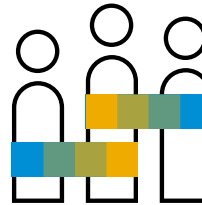


Scaling Artificial Intelligence

AI projects often break down between the developers of algorithms and the IT teams responsible for folding them into working business processes. With SAP Data Intelligence, data-science work flows smoothly from data management through design to implementation, as shown in [Figure 2](#) on the next page.

You can access any structured, unstructured, or streaming data source from the cloud, the IoT, and SAP and third-party applications. Automatic indexing helps you find information quickly, and you can create machine learning models within the service or bring your own to the table. With the solution, you have the ability to use convenient, open-source tools that are familiar to data scientists and IT teams alike, such as Jupyter, R, and Python. Automated machine learning

(AutoML) provides machine learning at the click of a button, enabling machine learning for everyone. AutoML automates pipeline generation and provides comprehensive workflow automation and preconfigured functionality.



Automatically **deploy, test, and continuously retrain models** from a central cockpit, and allocate developer and IT resources dynamically as needs change.

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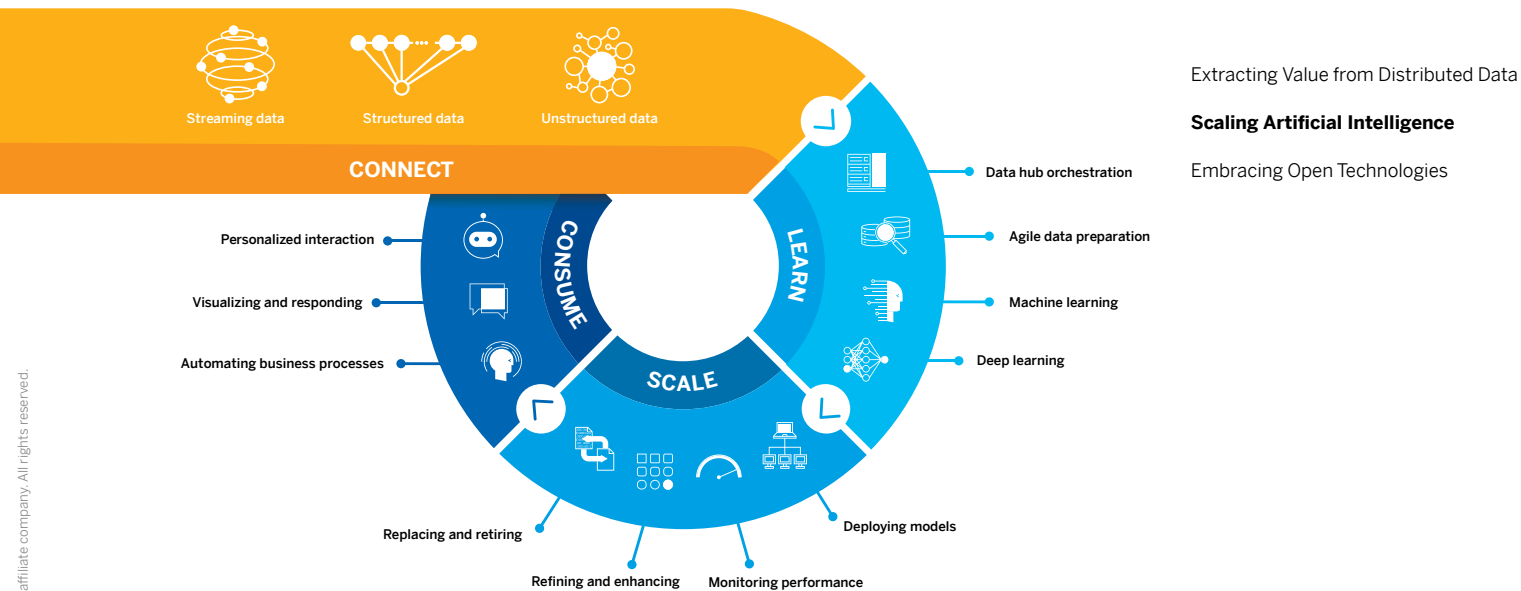


Figure 2: Building an Efficient Assembly Line for Data-Driven Innovation



Embracing Open Technologies

SAP Data Intelligence embraces the use of open technologies. The serverless architecture lets data pipelines execute on many different processing engines. Each step in a data pipeline executes in a set of Docker containers orchestrated by Kubernetes, which means the services are not bound to the operating system. It integrates with open-source machine learning frameworks such as Python, R, Go, and TensorFlow, as well as Apache Kafka, Apache Spark, and Google Cloud Pub/Sub.

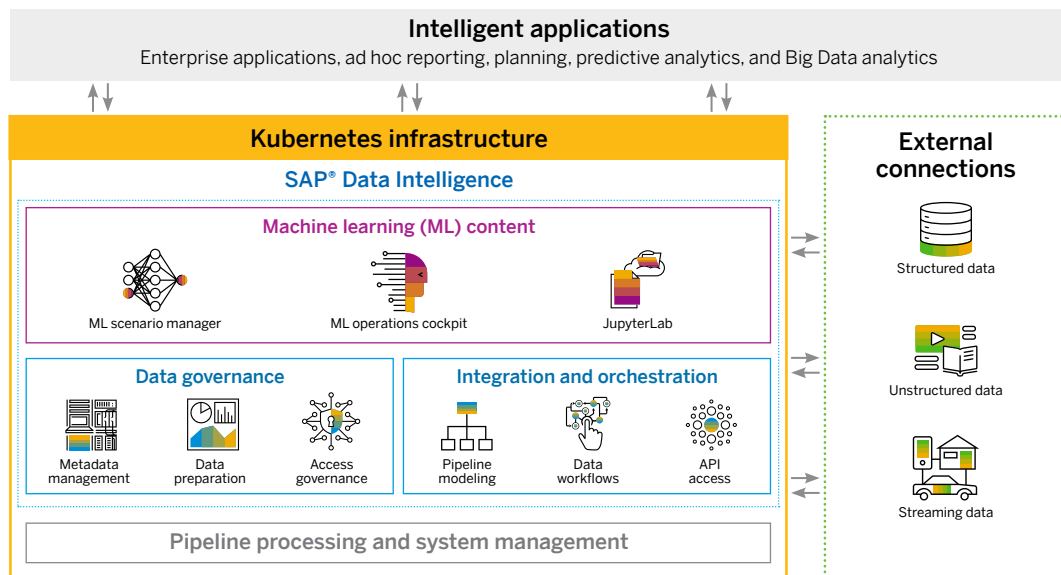
The solution also supports flexible pipelines that span data that is structured, unstructured, or streaming, processed in batches, in real time, OLTP, or OLAP, and is deployed across any cloud or on premise (see [Figure 3](#)).

Operators come in more than 200 types and include image processing, machine learning, text analytics, custom code, data masking, data cleansing, and data quality functions. By integrating with open-source machine learning frameworks, you can create and reuse an infinite number of custom operators. When you import your own models, you can deploy them straightaway or reuse them in additional models. And you can orchestrate the data flow to and from all your original and augmented models.

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Figure 3: Major Components in SAP Data Intelligence

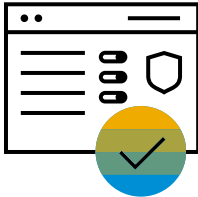


Tallying Up the Benefits

SAP Data Intelligence is a comprehensive solution that delivers data-driven innovation and intelligence across the enterprise, helping you create powerful data pipelines to leverage your data projects and orchestrate data processing. By eliminating disconnects between development and implementation teams, you're able to improve developer, IT, and

data scientist productivity and collaboration. You can harness advanced machine learning content to accelerate, scale, and automate your data science projects. With the solution, you can manage metadata across a diverse data landscape and create a data catalog that maximizes the value of your data.

Tallying Up the Benefits



Unify your data, implement AI confidently, and **ensure compliance** with privacy regulations with the SAP Data Intelligence solution.



Summary

Propel your business forward with trusted, data-driven processes, insights, and innovation using data orchestration and scalable enterprise AI. With the SAP® Data Intelligence solution, you can extract and deliver value from distributed data assets; scale, accelerate, and automate artificial intelligence initiatives; and ensure trust in data-driven processes, innovation, and insights.

Objectives

- Learn to maximize the value of complex data and help ensure all data is fit for use
- Counteract data siloing and tool sprawl that impede the speedy delivery of business insight
- Gain the skills – and confidence – to deploy machine learning effectively

Solution

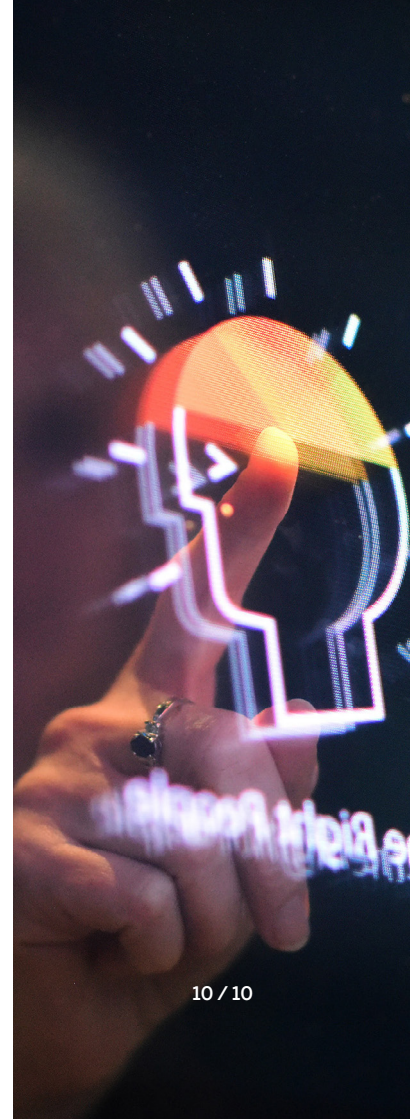
- Smooth data access and sharing in a distributed-data environment
- Single consistent data management framework for data scientists, developers, and IT teams
- Efficient delivery of trusted data to all data scientists and application users
- Portable container architecture for easy movement among data center providers

Benefits

- Eliminate disconnects between development and implementation teams
- Ensure trustworthy data and verifiable results
- Reduce overall costs to create and deploy AI-enriched processes
- Keep data trusted and compliant with an enterprise data strategy
- Drive DataOps initiatives with collaborative tools

Learn more

To find out more about SAP Data Intelligence, call your SAP representative today or visit us [online](#).



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