AWS for SAP

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Barcelona

2024

SAPinsider

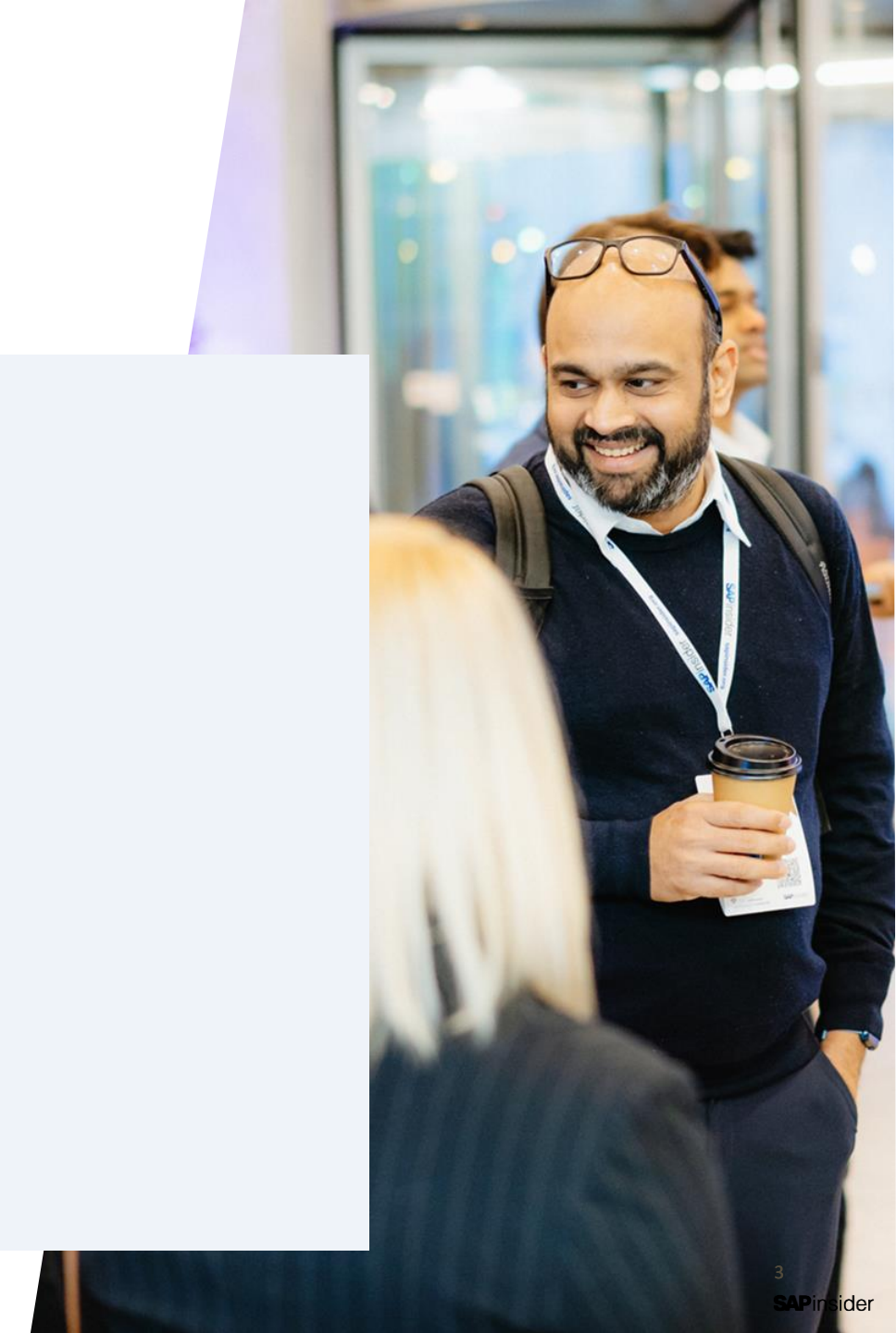
In This Session

SAP Rise on AWS and SAP BTP offerings.

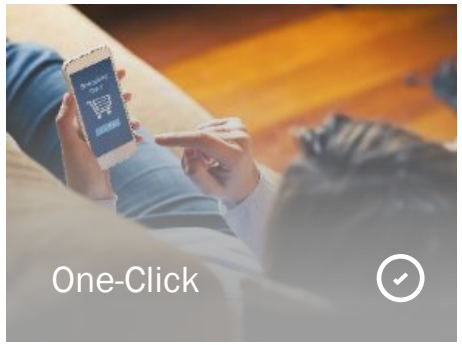
How customers can leverage SAP BTP and AWS offerings together in transformation their SAP workloads on cloud.

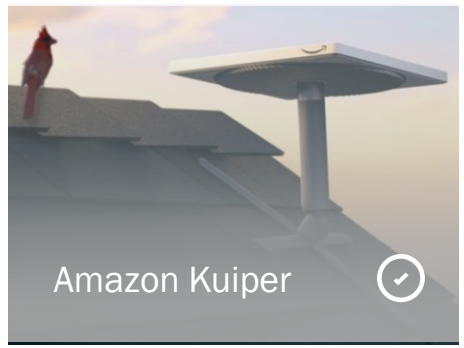
What We'll Cover

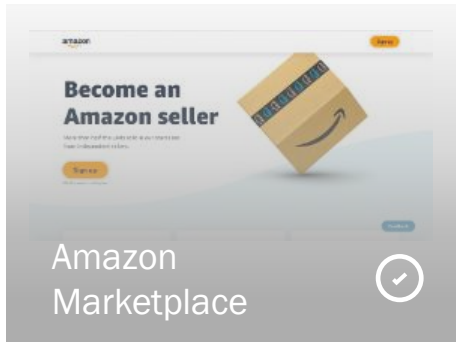
- SAP & AWS Partnership
- SAP Rise on AWS
- SAP BTP
- Joint Reference Architecture
- SAP Discovery Missions
- Wrap-Up

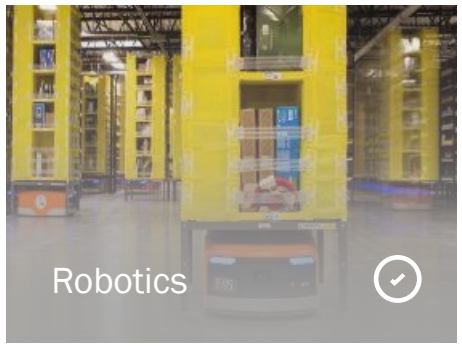


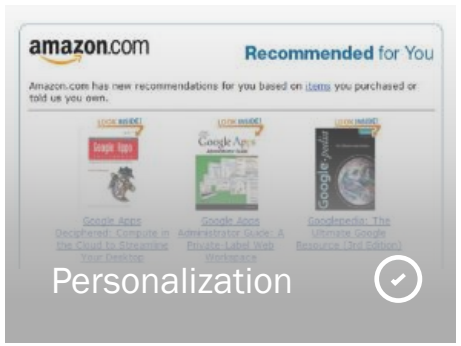
25+ years of Amazon innovation

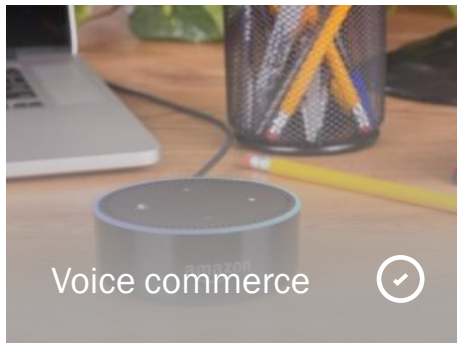


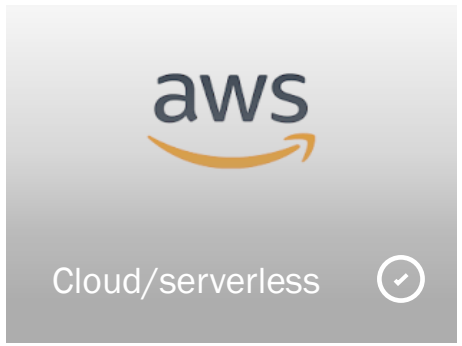


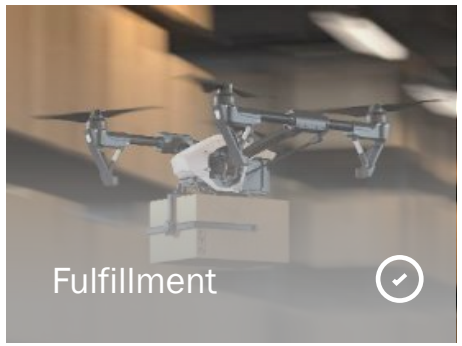


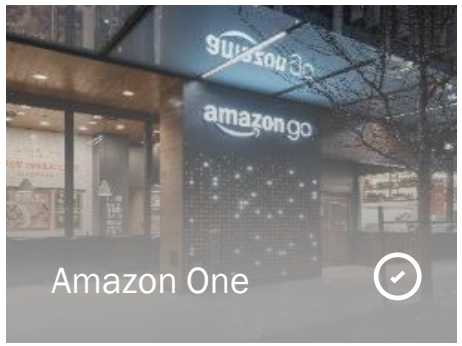


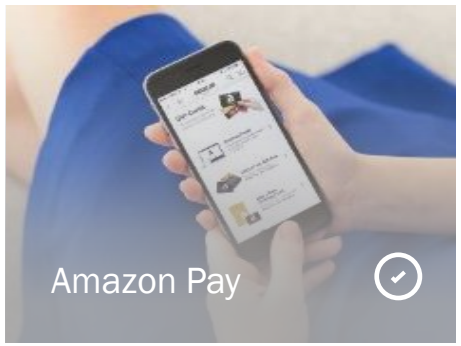


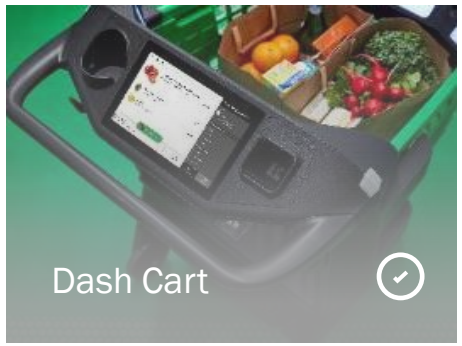


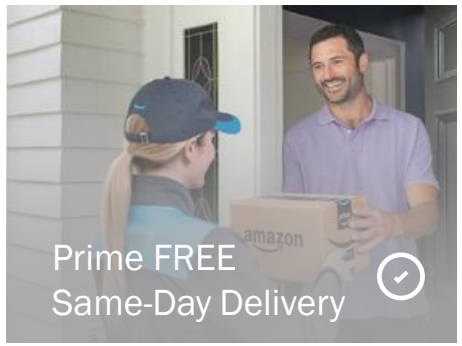






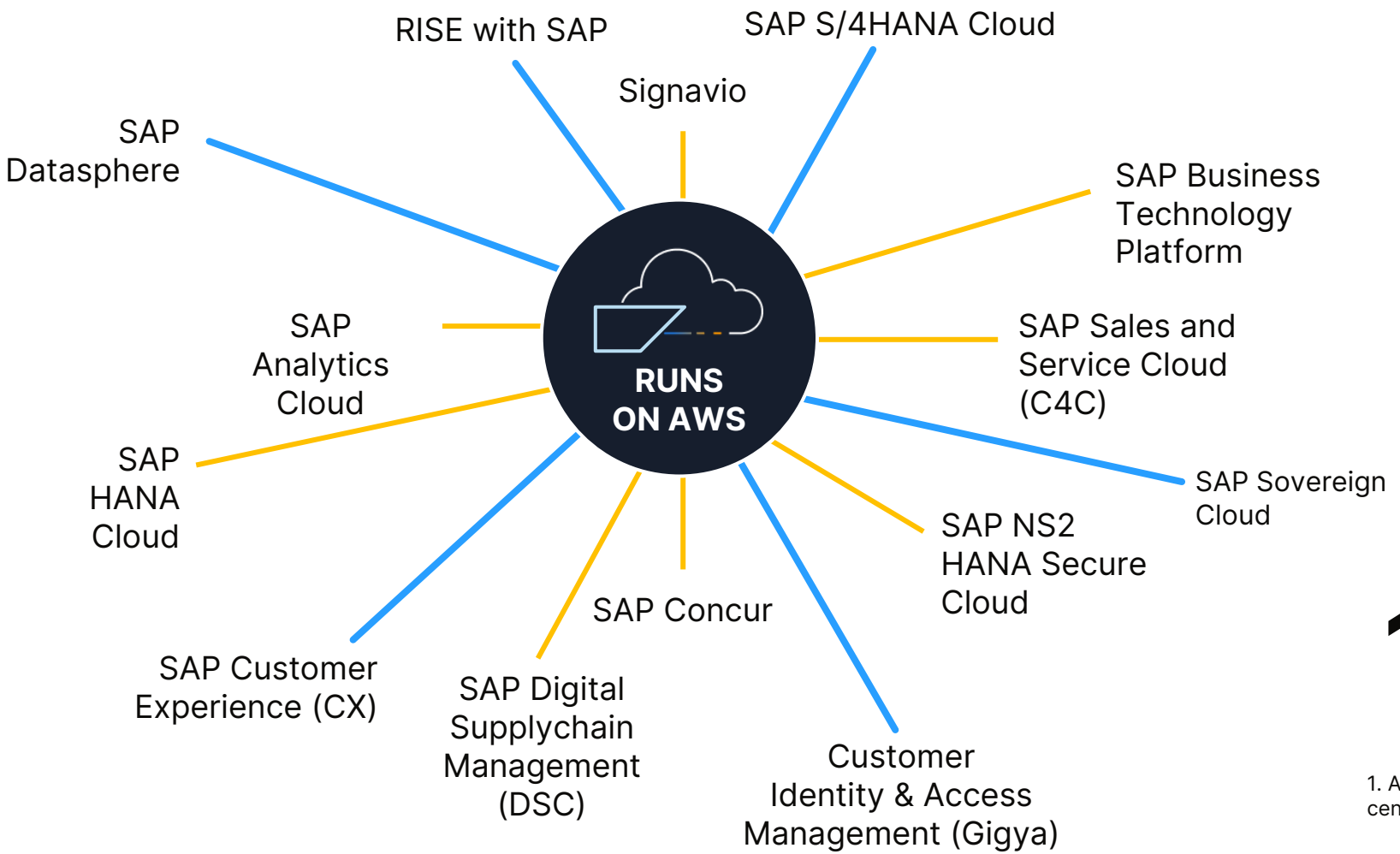






SAP has trusted AWS for over 15 years

AWS HAS THE LONGEST TRACK RECORD PARTNERING WITH SAP IN THE CLOUD



6 BTP services run on AWS, the full extent available on CSPs

3

13 BTP services powered only by AWS

9 Publicly available regions for BTP services, more than any other CSP

100% Signavio services run on AWS

1. As of 24th April 2024: https://discovery-center.cloud.sap/viewServices

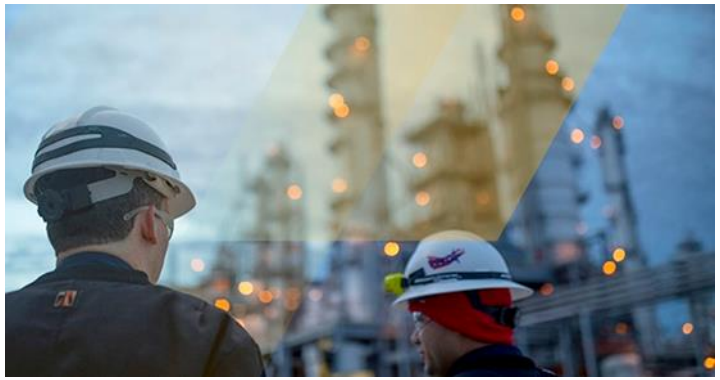
Thousands of customers across industries and geos trust AWS for SAP

How customers are transforming their businesses with AWS for SAP

Apollo Tyres

Streamlined SAP landscape with RISE on AWS and **unified SAP and non-SAP data** in multi-PB data lake

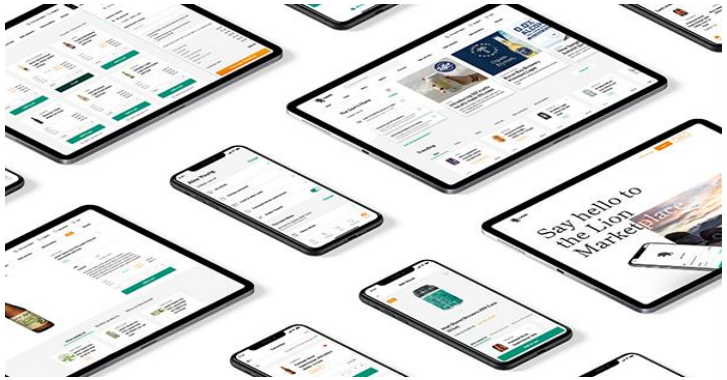
AWS IoT Core and Amazon SageMaker used to achieve **15% productivity gains** via machine optimization



INVISTA

Uses AWS AI/ML to conduct **visual inspection** to reduce defects, employ **predictive maintenance** to reduce downtime

SAP ERP data powers **fully-automated restocking**, helping further goal of $300M in operational value



LION

Used AWS services to enhance its customer beverage ordering experience with a **mobile app and portal** through SAP on AWS **serving 25,000 retailers**, restaurants, and vendors

What is RISE with SAP and BTP

What is RISE with SAP?

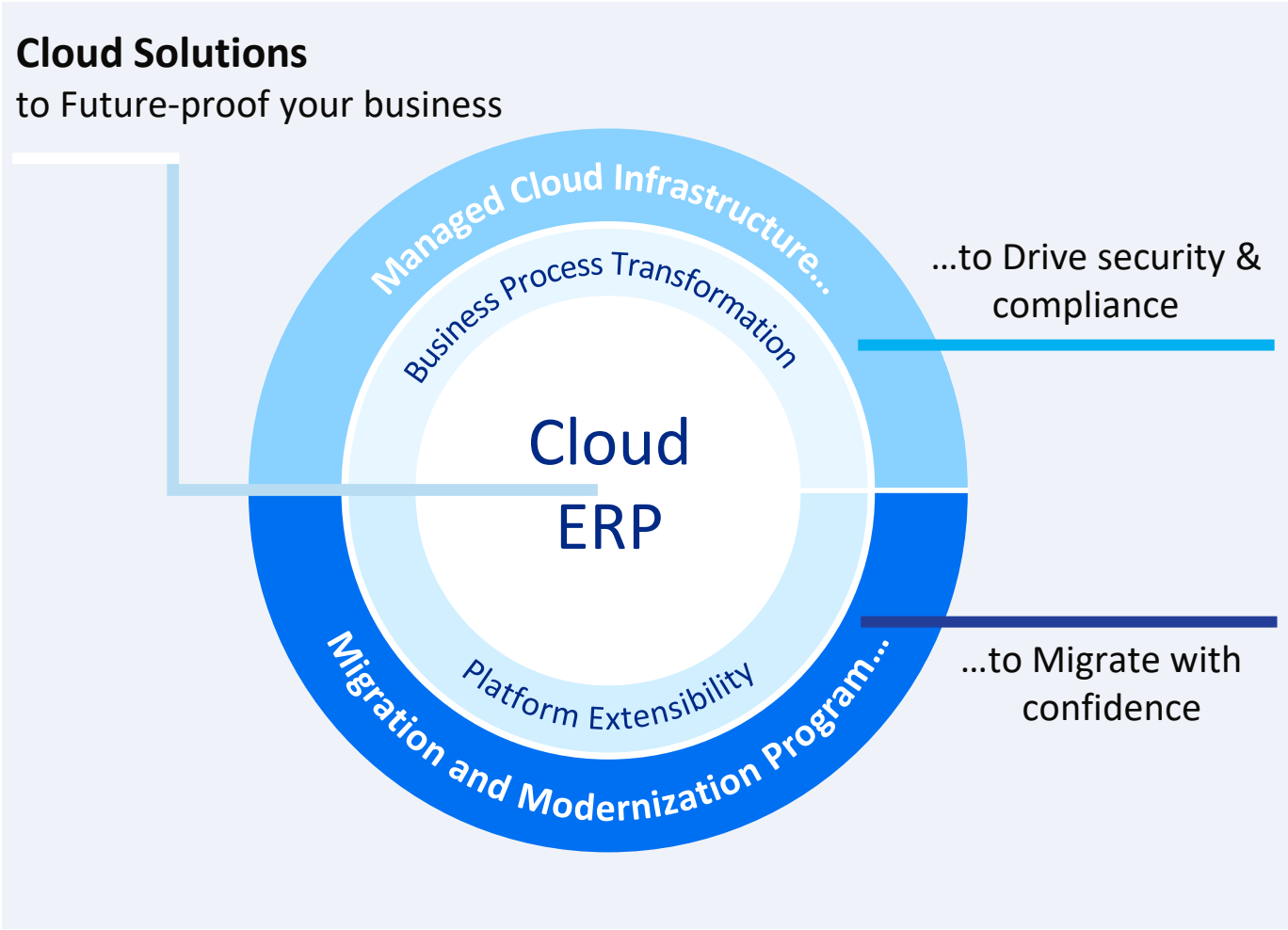
YOUR TICKET INTO THE FUTURE OF ERP

RISE with SAP is a comprehensive offering designed to transition your current SAP ECC and SAP S/4HANA on-premise installation to the cloud.

*"Only the cloud provides the **speed** and **agility** our customers need to take their businesses to the next level and **drive innovation**."*

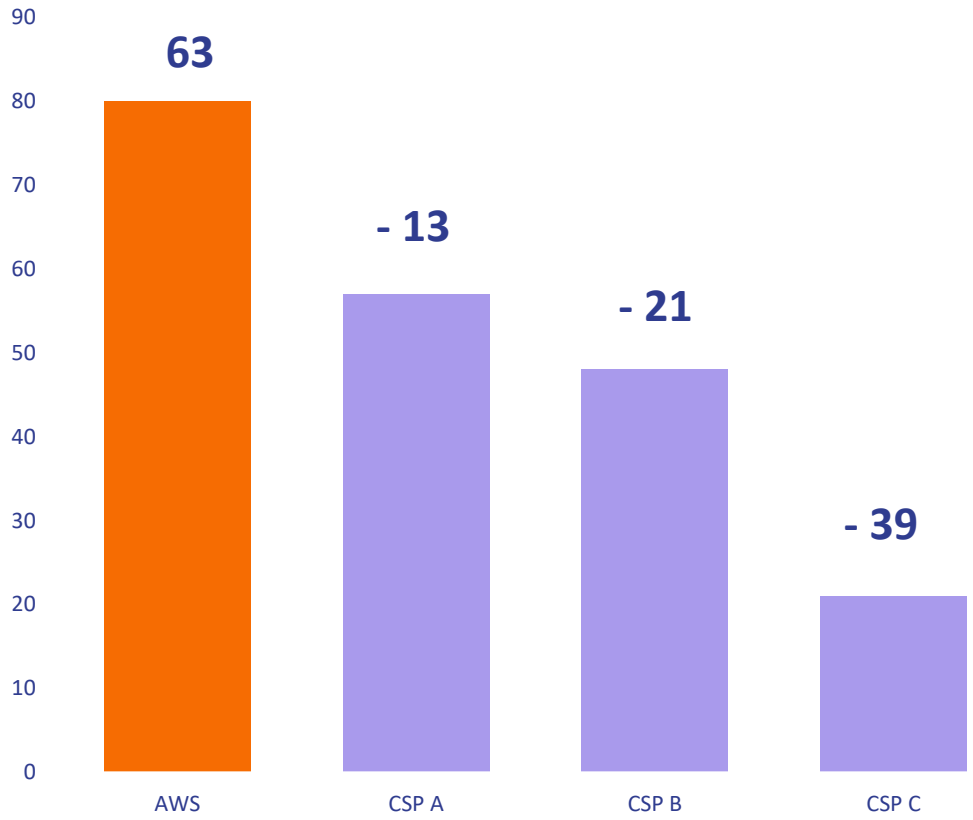
Christian Klein

CEO and member of the Executive Board of SAP SE



More SAP BTP Services on AWS

SAP BTP services availability



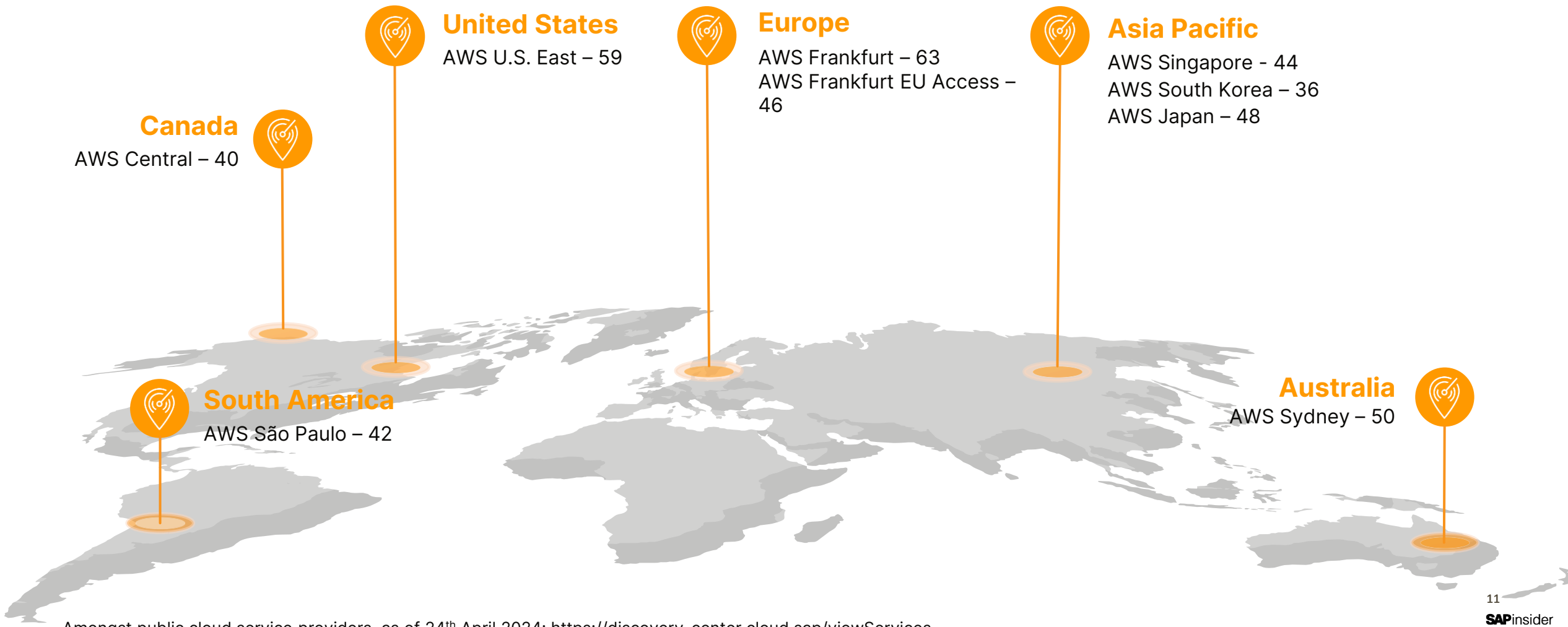
1. As of May 2024: https://discovery-center.cloud.sap/viewServices

Select SAP BTP services only on AWS

- Master Data Integration
- SAP Analytics Cloud Embedded Edition
- SAP Build Apps
- Intelligent Intercompany Reconciliation
- SAP AI Core
- SAP AI Launchpad
- Document Information Extraction
- Business Entity Recognition
- IBAN Service
- Intelligent Situation Automation
- SAP HANA Spatial
- Master Data Governance, Cloud Edition
- Personalized Recommendation
- Date and Time
- Work Calendar
- Market Rates Management, Bring Your Own Rates

SAP BTP services on AWS Global footprint

THE ONLY CSP WITH SAP BTP SERVICES IN CANADA AND SOUTH AMERICA



Amongst public cloud service providers, as of 24th April 2024: https://discovery-center.cloud.sap/viewServices

SAP BTP services exclusively only on AWS

SAP Build Apps

SAP Build Apps empowers anyone to develop fullstack applications in a visual way.

SAP Build Code

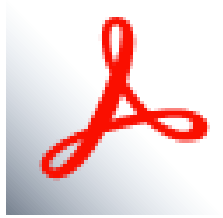
Develop UI5, SAP Fiori, mobile, and CAP apps on SAP BTP with Generative AI-based code development with Joule copilot.

Document Information Extraction

Use machine learning to automate your document information extraction processes.

SAP AI Core

Build a platform for your artificial intelligence solutions.



SAP Forms Service by Adobe

SAP Forms service by Adobe lets you generate print and interactive forms

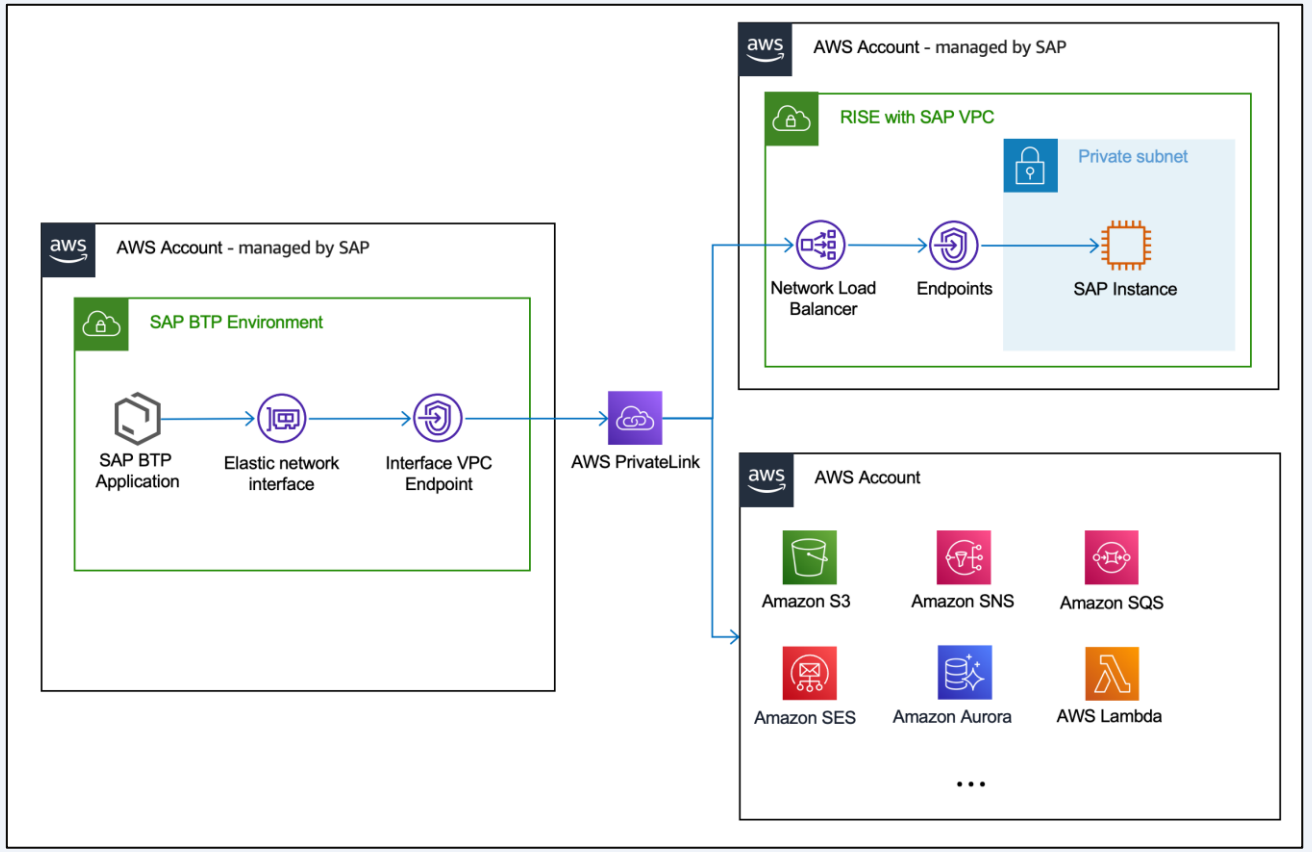
and 8 more BTP services run exclusively on AWS.

Amongst public cloud service providers, as of 24th April 2024: https://discovery-center.cloud.sap/viewServices

Connect securely using SAP Private Link on AWS

ESTABLISH A PRIVATE CONNECTION BETWEEN SELECTED SAP BTP AND AWS SERVICES

- Access a service in another VPC using **private** service endpoints
- Transfer data over **private** networks and **avoid** data exposure to the public internet
- Satisfy **regulatory compliance** requirements



SAP BTP and AWS Data Privacy

BTP EU Access
AWS Frankfurt

European Economic Area (EEA) and Switzerland

Data Privacy

Data Processing Agreements

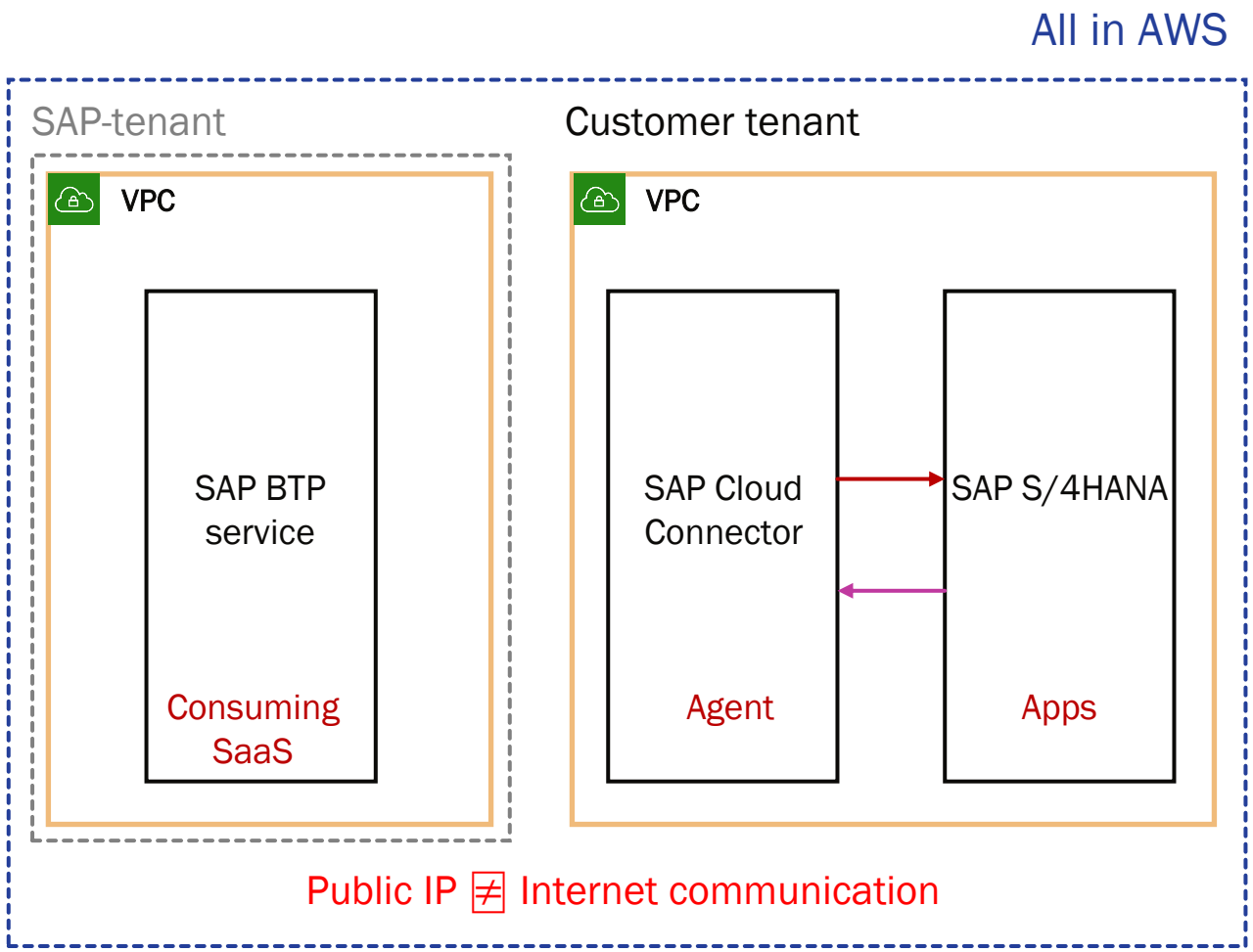
Customers with an EU Access contract can expect that data is hosted and processed in European Economic Area (EEA) or Switzerland only and based in a **maximum secure Data Center on Amazon Web Services (AWS).**

Data center location and backup data center location are in EEA or Switzerland.

If Customer Personal Data is processed by a person, this person must be physically located in EEA or Switzerland. **Persons employed by a Sub-processor (AWS) must be physically located in EEA or Switzerland.**

Technical and/or organizational measures must be in place to enforce these restrictions. SAP will use only European Sub-processors to provide support.

RISE and SAP BTP on AWS – Application Performance



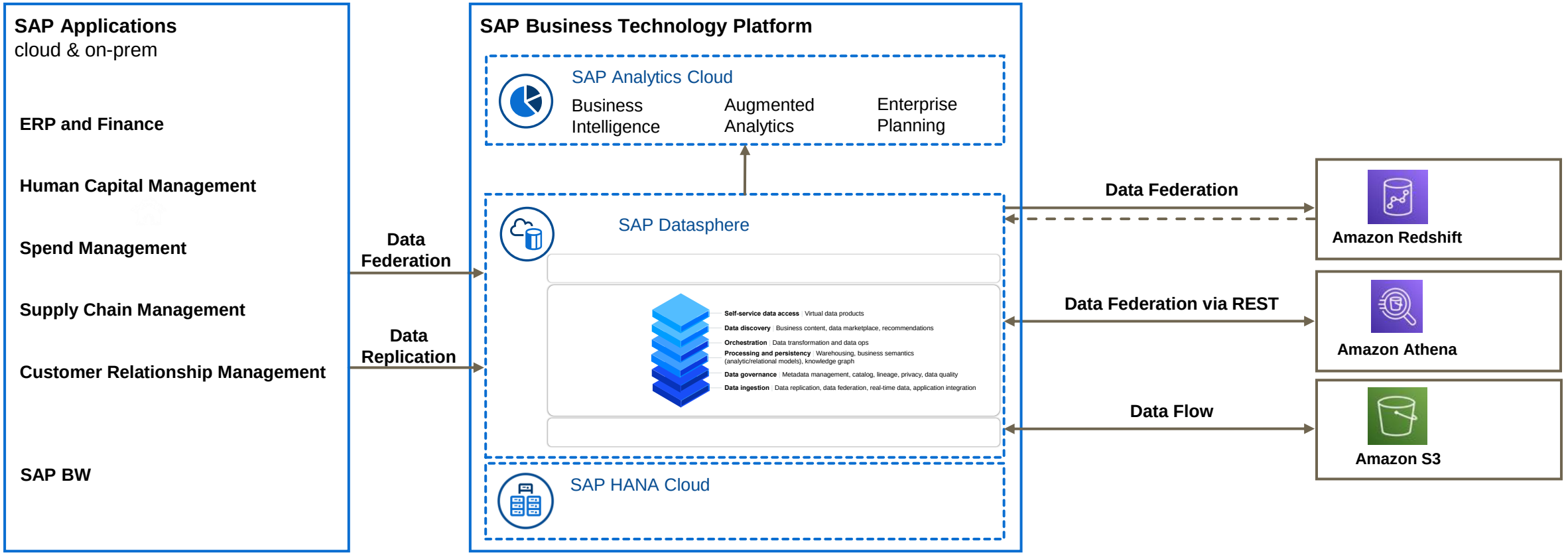
VPC FAQ

Q. Does traffic go over the internet when two instances communicate using public IP addresses, or when instances communicate with a public AWS service endpoint?

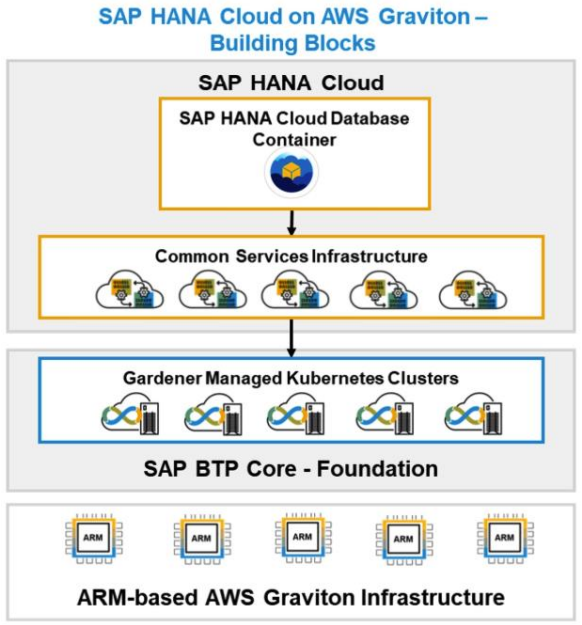
A. No. When using public IP addresses, all communication between instances and services hosted in AWS use AWS's private network. Packets that originate from the AWS network with a destination on the AWS network stay on the AWS global network, except traffic to or from AWS China Regions.

In addition, all data flowing across the AWS global network that interconnects our data centres and Regions is automatically encrypted at the physical layer before it leaves our secured facilities. Additional encryption layers exist as well; for example, all VPC cross-region peering traffic, and customer or service-to-service Transport Layer Security (TLS) connections.

SAP Datasphere and AWS Data Federation



SAP BTP Services Runs AWS Technologies



2023 2022

[SAP HANA Cloud Now Supports AWS Graviton]

"At the same time, we have expanded many of our existing partnerships. One recent example is our partnership with AWS to bring **HANA Cloud** onto **AWS-designed Graviton processors,** which helps us optimize our own operational performance and cloud gross margins as well as support our sustainability goals."

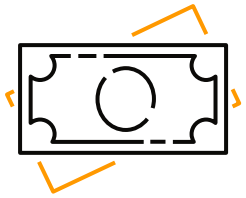
Christian Klein on January 27, 2022
at SAP's quarterly earnings call (13:18)

Innovation at Amazon

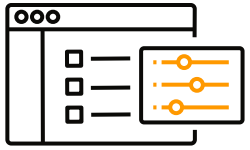
Innovation at Amazon

Source: SAP

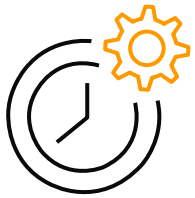
SAP Customer strive to innovate and transform



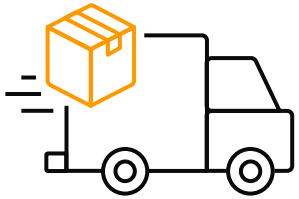
Create **new revenue sources** differentiated business models



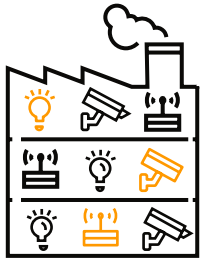
Improve intelligence with **real-time monitoring** and data-driven decision making



Increase productivity with process automatio



Optimize supply chain and logistics, reduce inventory



Accelerate **manufacturing throughput** reduce defects, downtime, and waste

Delight customers with personalized recommendations and support

Innovate by combining SAP and AWS Services

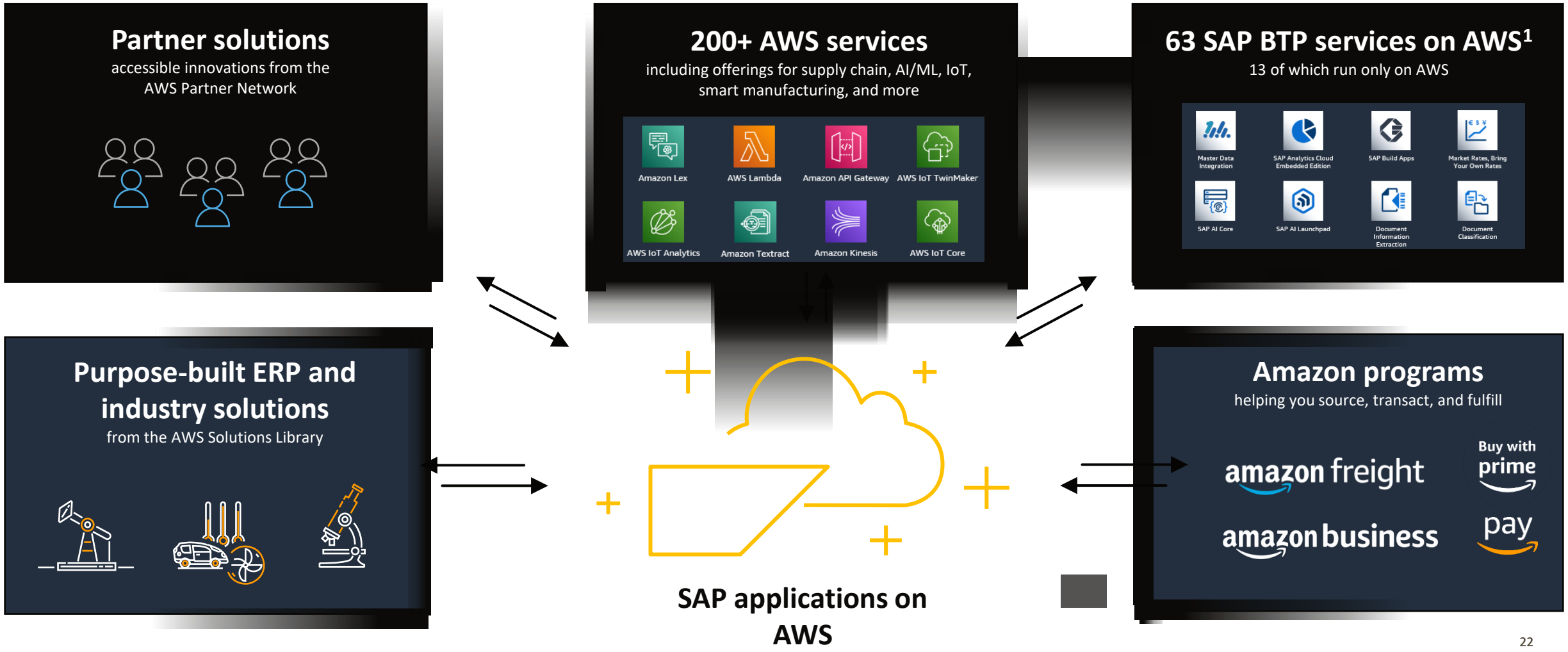
Business process modernization and re-invention are table stakes

Mission-critical business processes and data reside in SAP

200+ AWS services for nearly every imaginable use case including IoT, AI/ML, analytics, and more

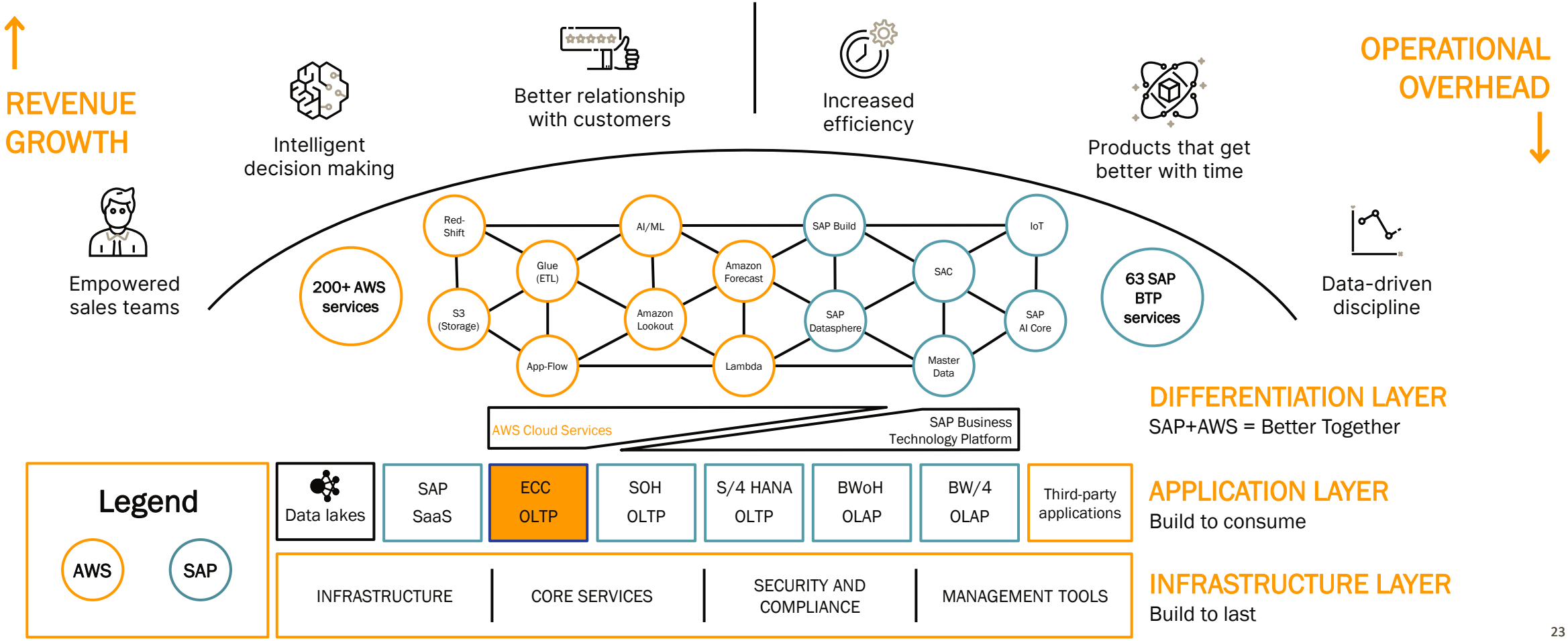
Innovate faster and transform your business

EXTEND YOUR SAP LANDSCAPE WHILE MAINTAINING A CLEAN CORE



Clean core + SAP BTP + AWS = Vast Innovation Options

JRA can combine over 200+ AWS Services with 63 SAP BTP Services to drive vast innovation



AWS for SAP JRA

Joint reference architecture (JRA) introduced to address questions coming from customers and partners on architectural choices for solving business needs.

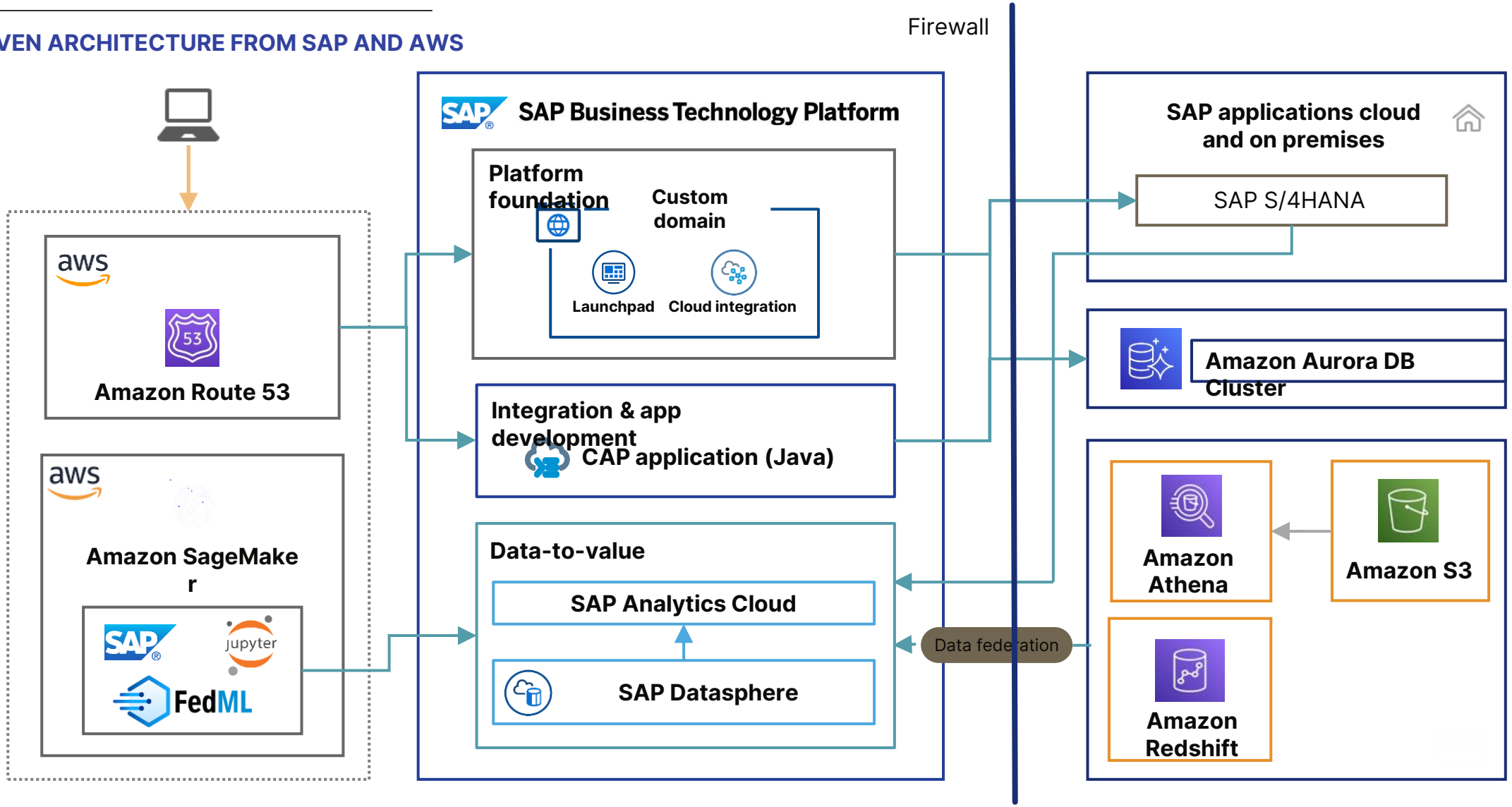
Solution recommendations based on: foundation, data, integration and application development capabilities

Guiding principles by capability for customer and partner decision making

Customers benefit from faster time-to-value and lower total-cost-of-ownership

AWS and SAP approved joint reference architecture

PROVEN ARCHITECTURE FROM SAP AND AWS



AWS Missions on SAP Discovery Center

Predict Inventory Allocation with Amazon Sagemaker and FedML

Explore SAP Datasphere and FedML-AWS library to source data, build, train and deploy machine learning models on Amazon Sagemaker. This...

Data Federation from Amazon S3 through SAP HANA Cloud

This mission highlights how to create a virtual table in SAP HANA Cloud with access to the data living in S3 via SAP Smart Data Integration. Data is...

Data Federation from Amazon Redshift through SAP HANA Cloud

Integrating SAP HANA Cloud and Amazon Redshift though data federation you can augment the non-SAP data in Amazon Redshift with SAP data in...

Data Federation from Amazon Redshift through SAP Datasphere

Integrating SAP Datasphere and Amazon Redshift though data federation you can augment the non-SAP data in...

Data Federation from Amazon Athena through SAP HANA Cloud

This mission highlights how to integrate data living in Amazon S3 via Amazon Athena into SAP HANA Cloud. The data is...

Learn more

Integrate Amazon Athena with SAP Datasphere

By integrating Amazon Athena (Amazon's interactive query service that helps analyze data in S3) with SAP Datasphere, we can now combine...

Integrate Events from Amazon Monitron with SAP S/4HANA using SAP BTP

Amazon Monitron is an end-to-end system including hardware (sensors and gateway) and software, that uses machine learning to detect...

Integrate Amazon Rekognition and SAP EHS for PPE Detection

Safety hazards can exist in every workplace in many different forms: sharp edges, falling objects, flying sparks, chemicals, noise, and other...

Predictive Maintenance using Amazon Monitron and SAP BTP

Avoiding unplanned downtime

COSTS OF UNPLANNED DOWNTIME

The significant impact for all industry sectors

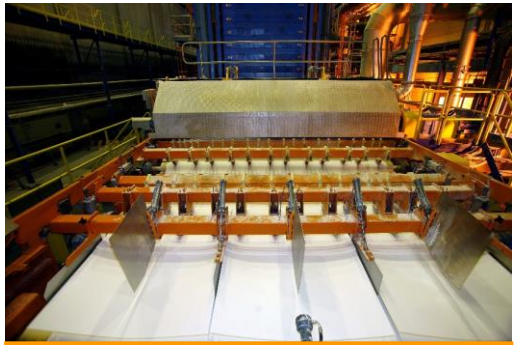
- Lost revenue
- Work-in-progress losses
- Safety concerns
- Environmental concerns

Automotive panel stamping
$43,000 per hour

CPG packaging
$15,000 per hour

Oil platform crude separation
$20 million per incident

Pharmaceutical batch
$500,000 per batch



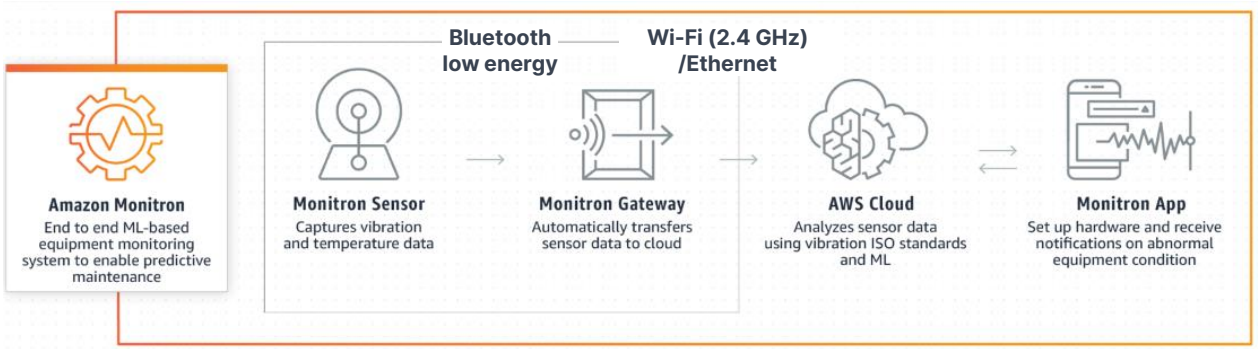
Paper drying line
$31,000 per hour

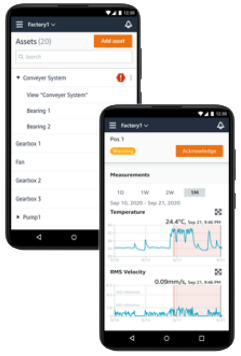
Source: https://www.arcweb.com/industry-best-practices/trends-technologies-plm

Amazon Monitron

OUT-OF-THE-BOX SYSTEM TO ENABLE PREDICTIVE MAINTENANCE

Monitoring





Machinery

Pumps

Fans

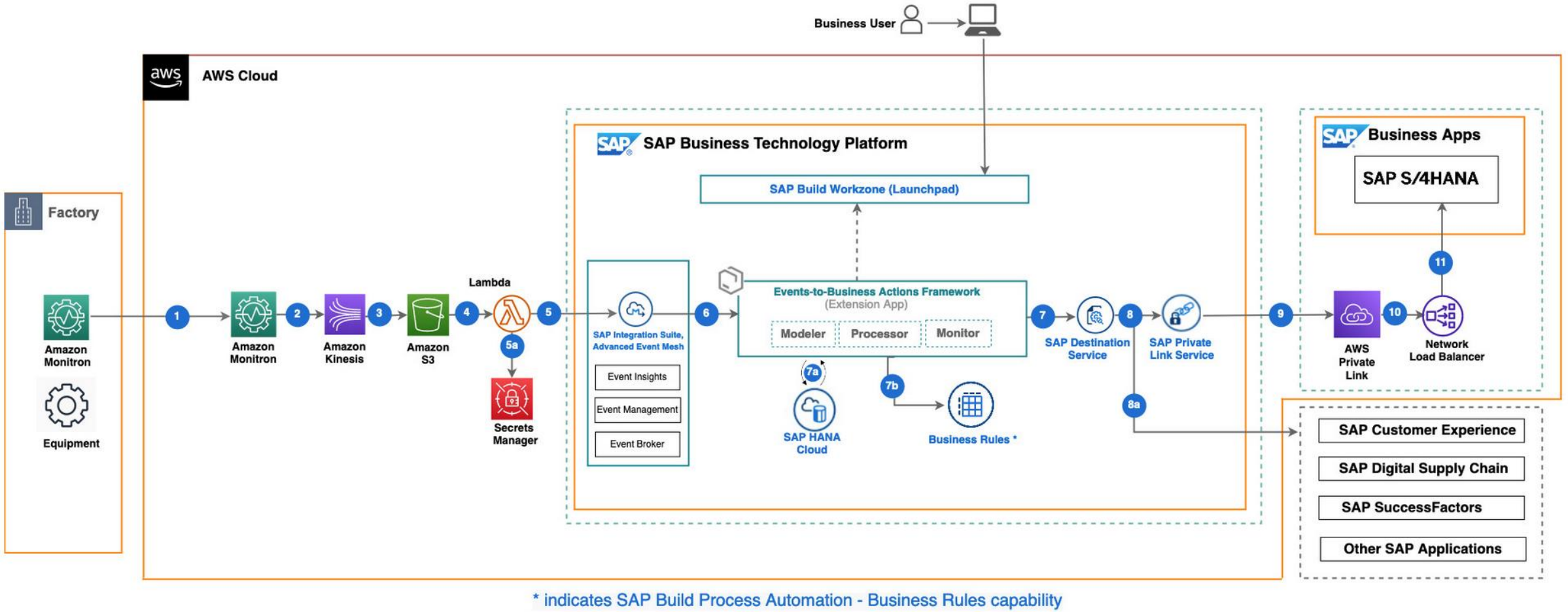
Gearboxes

Bearings

Compressors

Motors

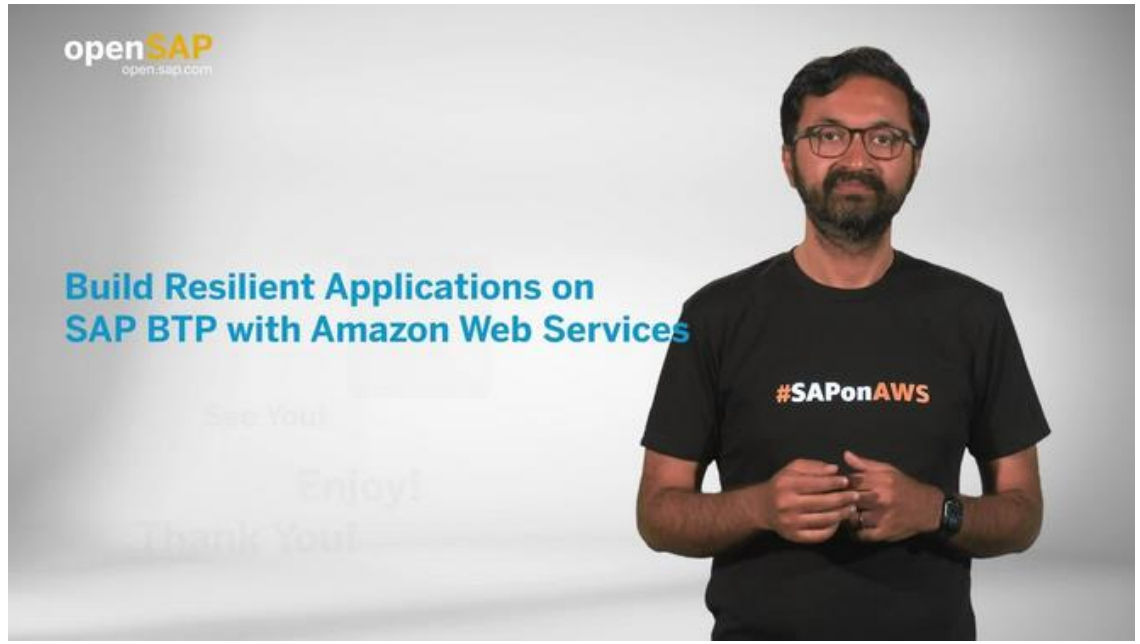
Predictive maintenance with Amazon Monitron and SAP BTP



Wrap Up

LEARN MORE ABOUT BUILDING RESILIENT APPLICATIONS ON SAP BTP WITH AWS

Register now on openSAP



Where to Find More Information

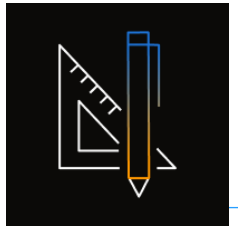
Schedule your free RISE with SAP on AWS best practices workshop

Learn how SAP and AWS are supporting RISE with SAP customers

Learn more about AWS for RISE with SAP

Key Points to Take Home

SIMPLIFY AND SAFEGUARD THE S/4HANA JOURNEY



Transformation planning

Leverage **SAP Signavio running on AWS** to understand processes and prioritize improvements

Clean core and app preservation

Use low-code tools like **SAP Build Apps** and BTP services like **ABAP environment**, running on AWS

Data management

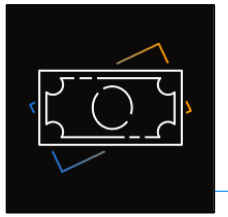
Improve the quality of your master data with **Master Data Governance, cloud edition**, and **Master Data Integration**, running **only on AWS**

AWS Partner Network

Safeguard your SAP implementation with help from **91 SAP Competency Partners**

Workshops and training

Ready your team with **free online training** and best practice **workshops** from AWS



Migration assistance

Get started with cost-effective options. **Offset implementation costs** with dedicated funding

Thank you! Any Questions?

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