

The background features a dark blue gradient with abstract geometric shapes. On the left, a large triangle is formed by a vertical orange line and a diagonal orange line. On the right, a large curved shape transitions from orange to blue. A thin blue line forms a rectangular frame in the lower right quadrant.

AWS re:Invent

NOV. 29 – DEC. 3, 2021 | LAS VEGAS, NV

ENT215

Transforming agriculture at John Deere with SAP on AWS

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Product Manager, SAP Platform

John Deere

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Amazon Web Services



Deere's SAP Cloud journey



Agenda

- About John Deere
- Business drivers for our cloud migration
- SAP on AWS Cloud journey
- SAP automation
- SAP migration patterns
- Challenges we overcame and lessons learned
- Navigating your own SAP transformation





JOHN DEERE

JOHN DEERE *TODAY*



ICONIC GREEN AND YELLOW MACHINES



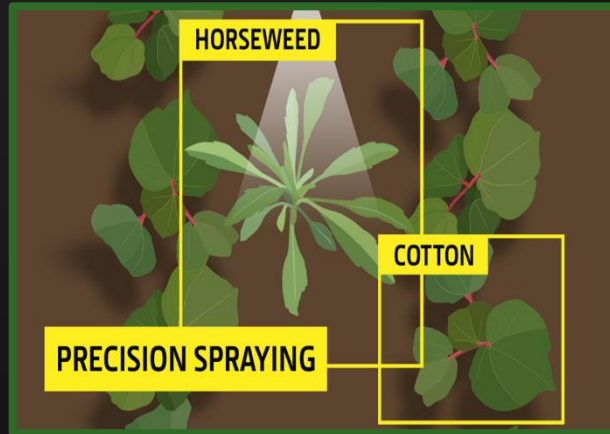
LOCATIONS IN OVER 70 COUNTRIES



70K EMPLOYEES



SMART TECHNOLOGY



JOHN DEERE *TODAY*

INNOVATION IS IN OUR DNA

Key insight: Just start and keep going



SAP is core to our operations at Deere



Manufacturing & engineering



Parts & order management



**HR, finance, and
supply management**

Engineer cutting-edge digital solutions to fuel our smart industrial aspirations

Unique opportunity for transformation across multiple dimensions



Speed/flexibility



Scalability



Quality



Investment



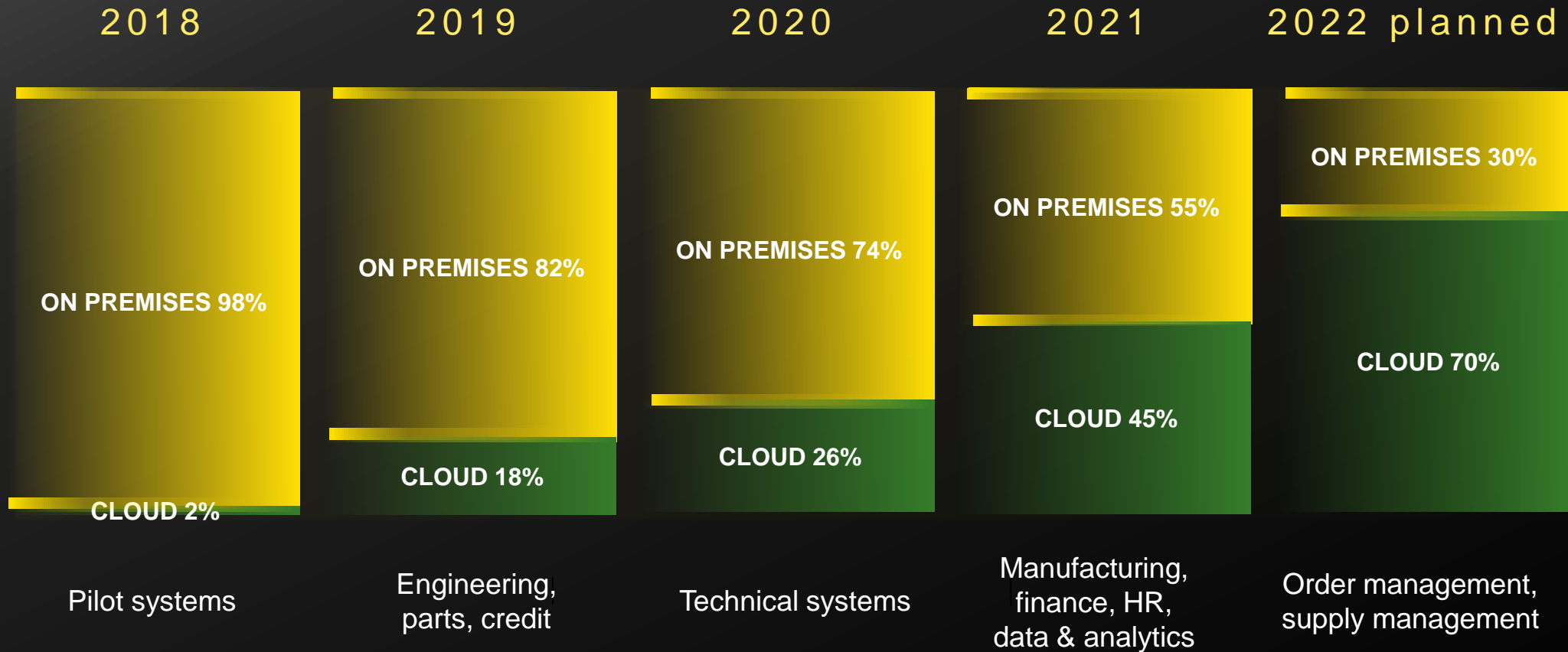
Innovation



Security/compliance

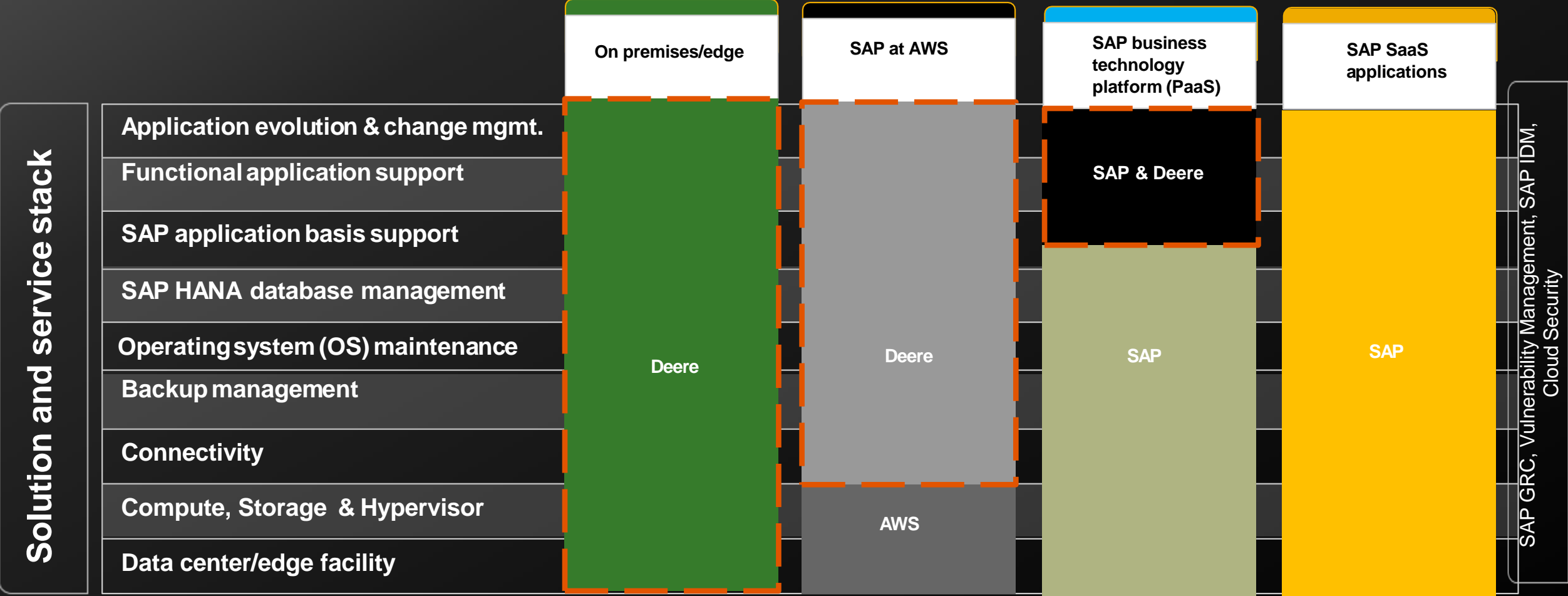
Aligned to Deere's cloud-first strategy

Our SAP cloud journey is well underway!



Took a risk-based approach for the sequencing

Strategic positioning for IaaS, SaaS, and SAP BTP

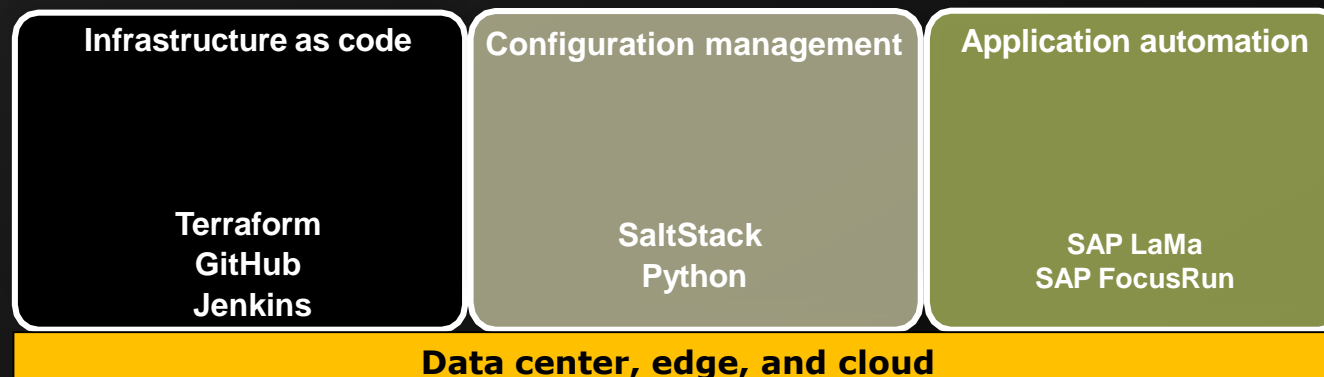


Start automation initiatives by setting simple and clear goals

3 key design principles

- Design for API-driven infrastructure – infrastructure as a code
- Provision services, not just infrastructure – self-service
- More proactive, less reactive – reliability engineering

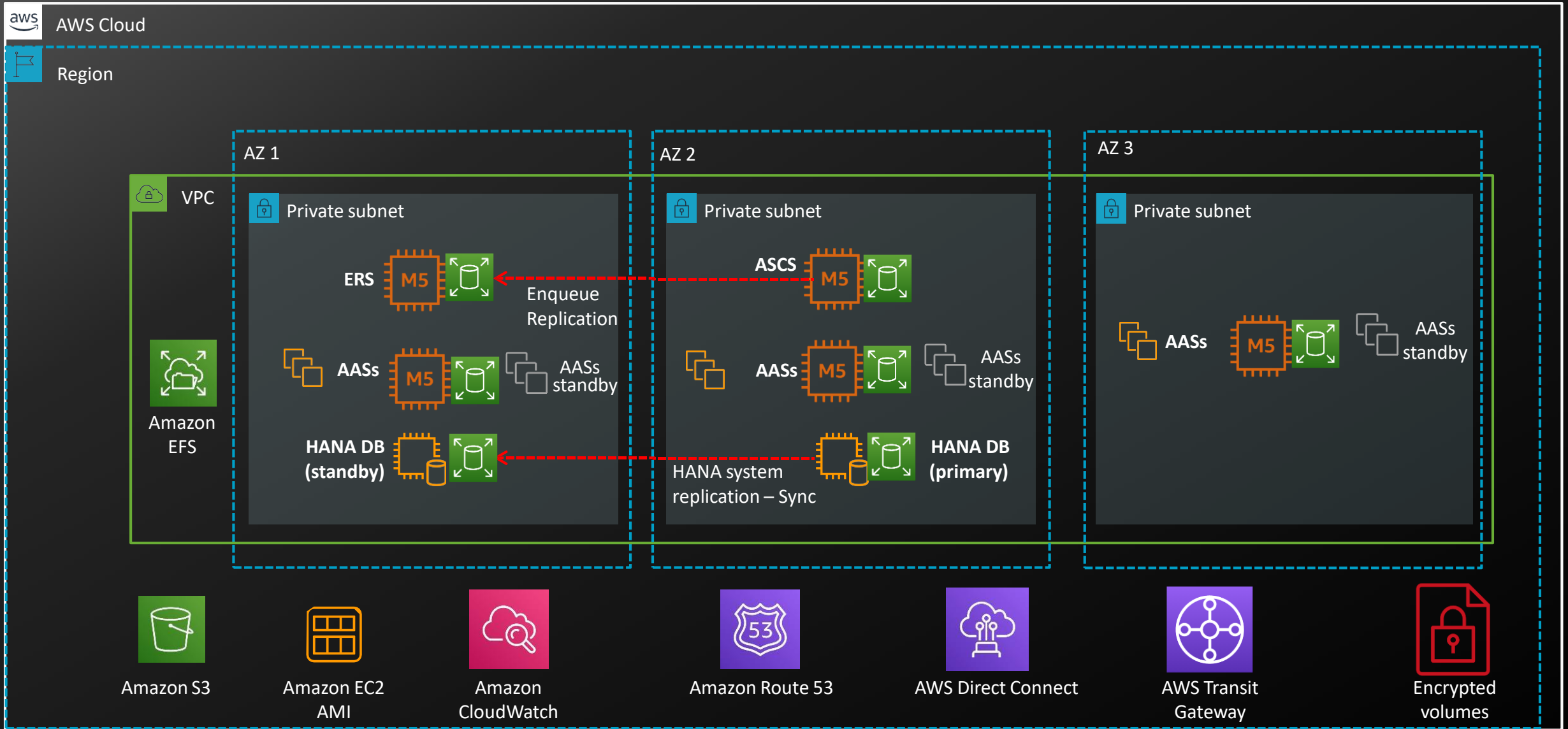
3 key toolsets



SAP Cloud Automation components

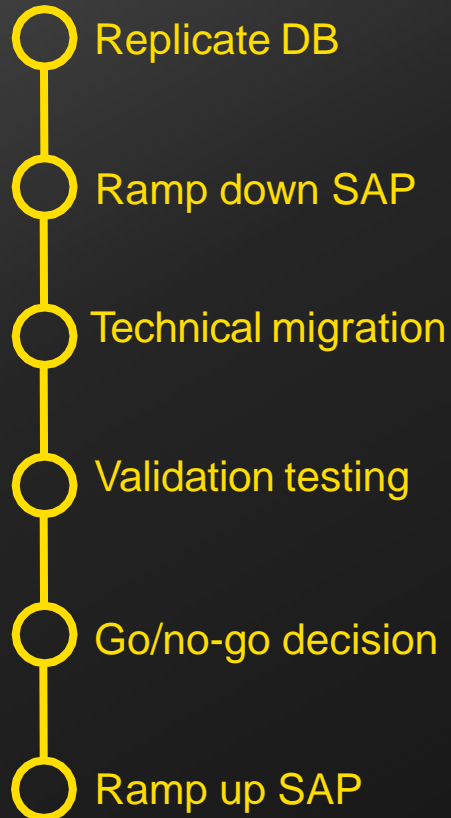
GitHub	Jenkins	Terraform Terragrunt	Salt	AWS
sap-iac-live SAP Systems as configuration files	Live-* Pipelines Create new SAP systems and update systems	Infrastructure as code (IAC)	Configuration management	SAP Cloud systems
sap-iac-modules Terraform code as reusable modules	Modules-* Pipeline CI/CD process for maintaining module code; builds, linting, and testing	Providers AWS VMware ...	States SAP Backup Patch ...	Terraform remote state Storing of Terraform AWS resources
salt-pillar SAP System Salt configuration and Salt function code				

SAP architecture in the cloud



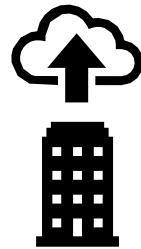
Cross-Region replication of backups

Deere SAP AWS migration scenarios



Scenario 1: Cloud migration only

3 to 8 hours

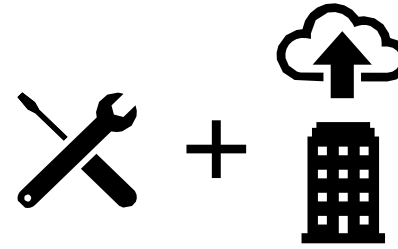


SAP source system running

- HANA on premises

Scenario 2: DMO and cloud

Up to 17 hours

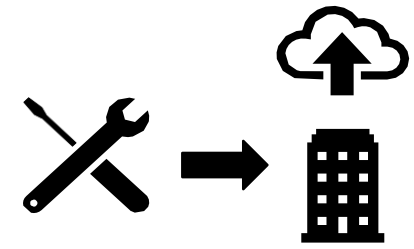


SAP source system running

- HANA or DB2 z/OS on premises
- Unicode or non-unicode
- SAP upgrade optional

Scenario 3: DMO then Cloud

Up to 23 hours



SAP source system running

- HANA or DB2 z/OS on premises
- Unicode or non-unicode
- SAP upgrade optional

Data Migration Option (DMO) is the SAP's Software Upgrade Manager (SUM) tool; this can be used to perform SAP upgrades, unicode conversions, and platform migrations (e.g., HANA)

Operational challenges

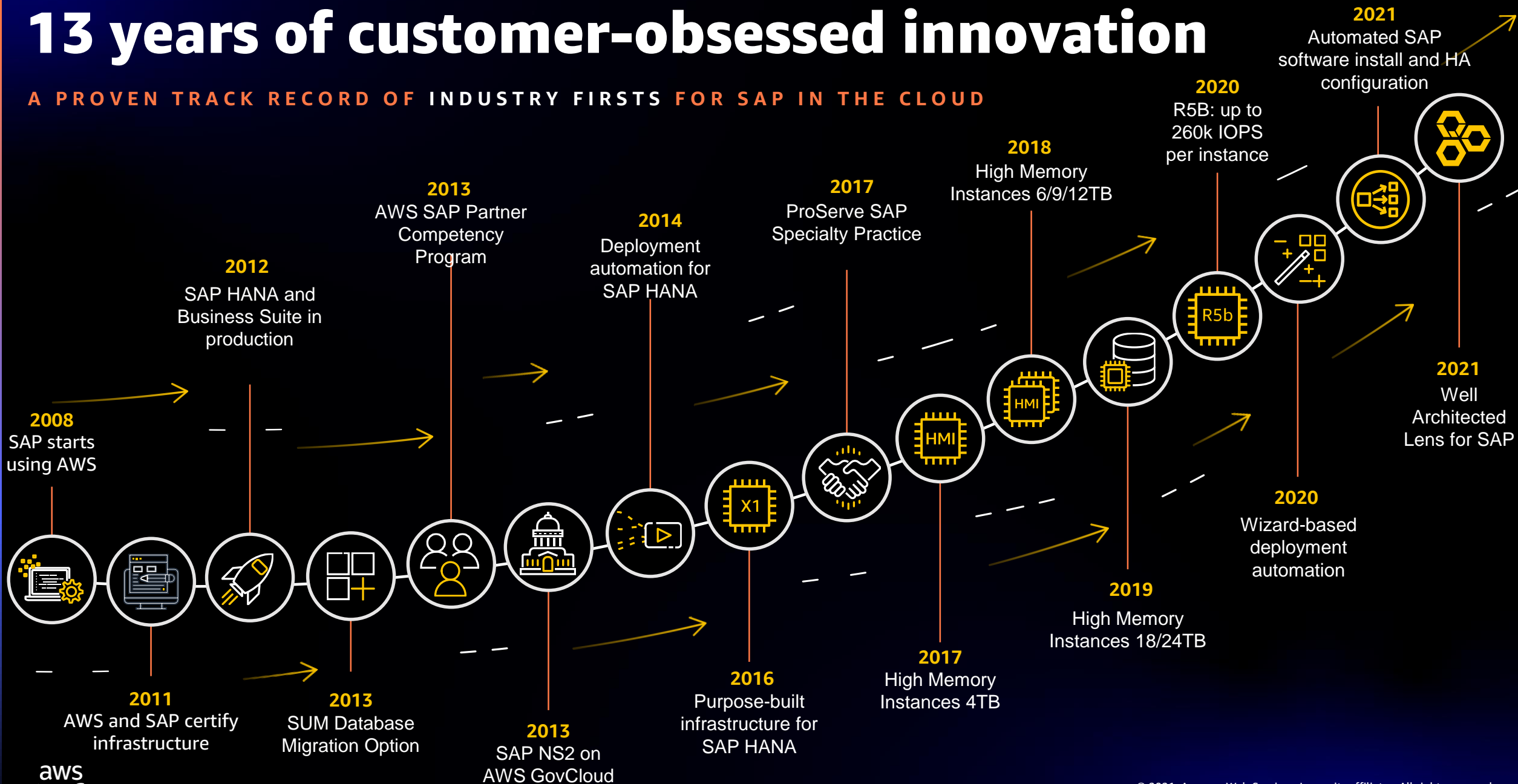


Build redundancy into your application to avoid single points of failure

Navigating your own SAP journey

13 years of customer-obsessed innovation

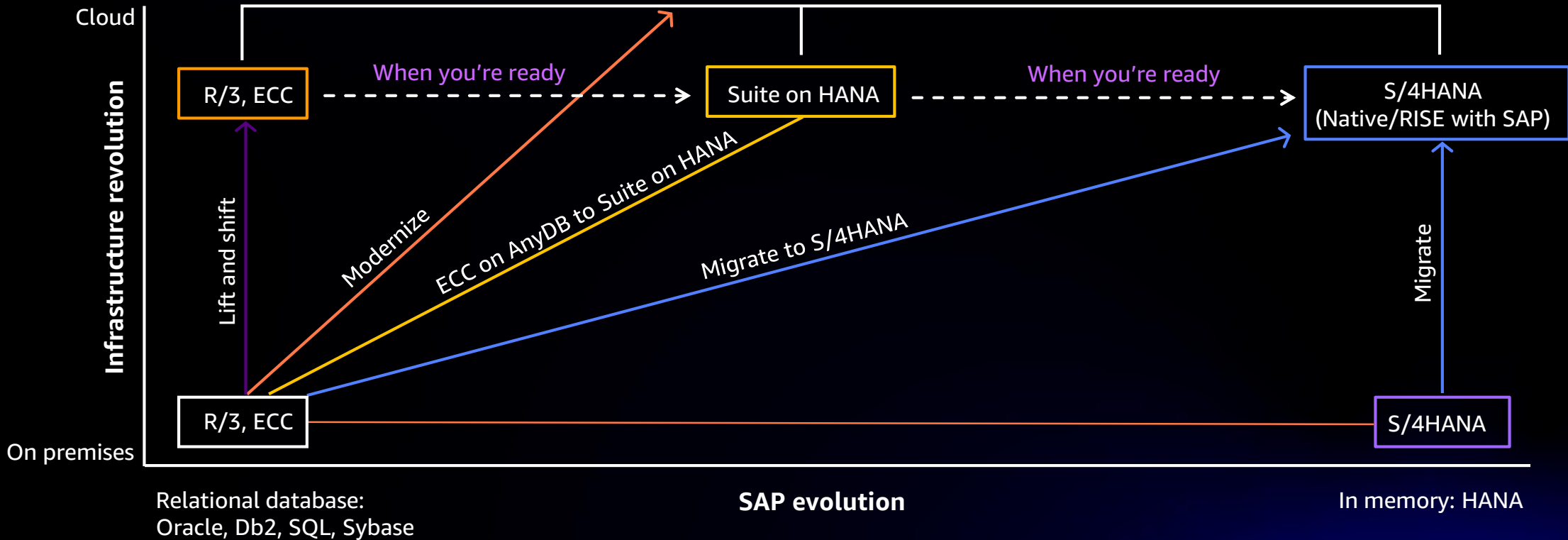
A PROVEN TRACK RECORD OF INDUSTRY FIRSTS FOR SAP IN THE CLOUD



The platform of choice and innovation for SAP customers



Innovate, modernize, and transform



Unmatched experience delivering customer success across approaches

Lift and shift ECC



20% cost reduction, 20%–50% performance increase for key processes



Reimagining its enterprise-wide media supply chain and distribution platform with ECC on AWS

Suite on HANA



Uses Suite on HANA with AWS IoT for smart manufacturing

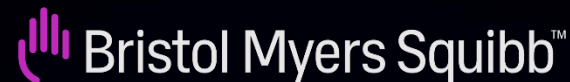


Moved to HANA, reduced costs by \$530K while navigating GoldCorp acquisition

S/4HANA/RISE with SAP migration



Shifting to an ecommerce/direct-to-consumer-centric business model by implementing S/4HANA on AWS



Reduced costs by 20% and automated GxP compliance with greenfield S/4HANA deployment

Innovate, modernize, and transform with AWS services



Estimated \$300M in operational value from smart manufacturing combining ECC with AWS analytics, AI/ML services



Integrating S/4HANA with VW Digital Production Platform to improve manufacturing productivity

SAP Migration Assessment Test (SMART)

LEARN YOUR SAP MIGRATION READINESS IN 15 MINUTES OR LESS

- Personalized recommendations based on ISG's customer research
- Identifies an ideal migration approach
- Provides industry benchmark data, best practices, and reference case studies

Get your customized report at smart.brandstory.in



Clean core + AWS = Innovation

ENABLING THE DATA-DRIVEN ENTERPRISE



REVENUE GROWTH



Empowered sales teams

Intelligent decision-making

Better relationship with customers

Increased efficiency

Products that get better with time

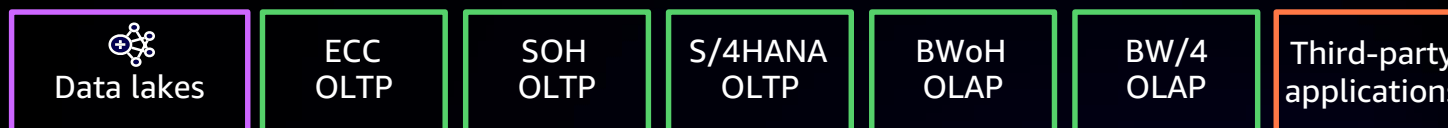
OPERATIONAL OVERHEAD



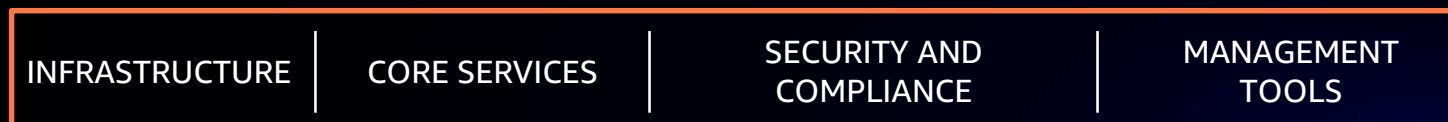
Data-driven discipline



DIFFERENTIATION LAYER
Build to change



APPLICATION LAYER
Build to consume



INFRASTRUCTURE LAYER
Build to last

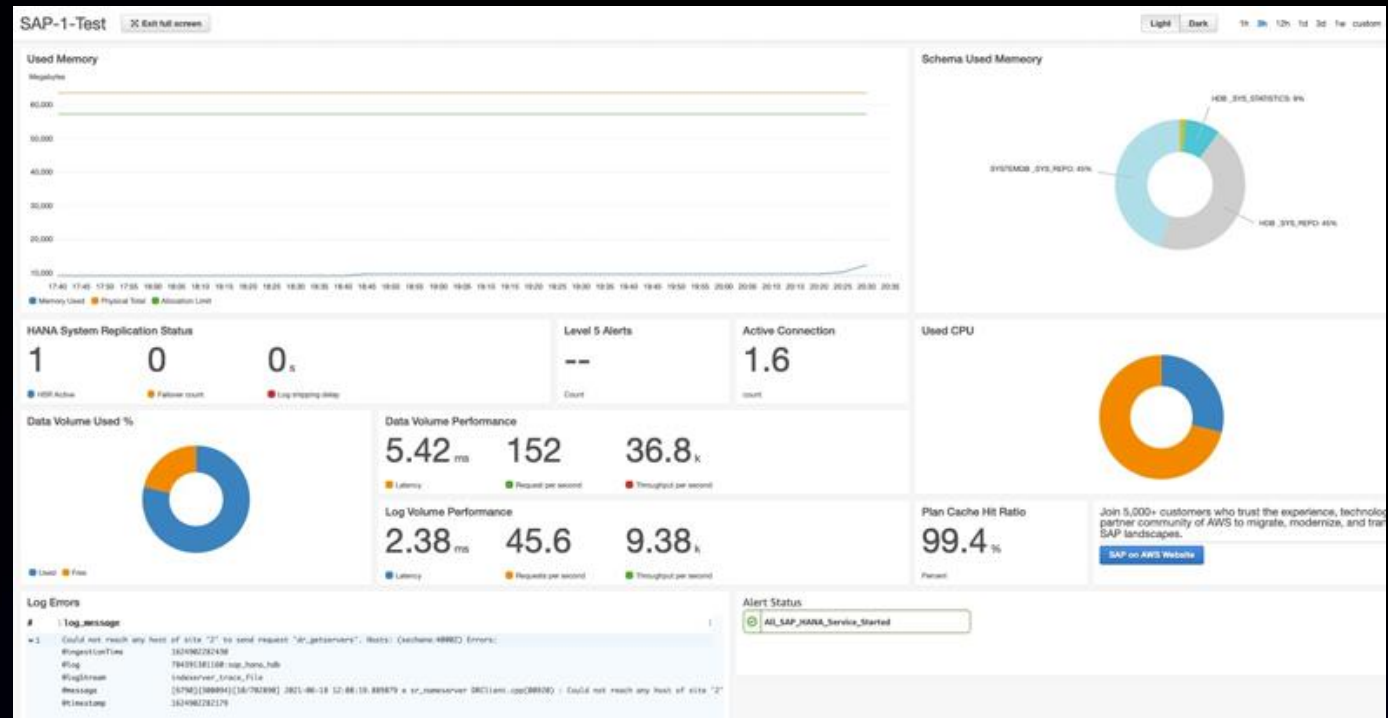


New announcements for SAP customers

Amazon CloudWatch Application Insights for SAP HANA

EASILY SET UP MONITORING, GAIN VISIBILITY, AND RESOLVE PROBLEMS IMPACTING YOUR SAP HANA-BASED WORKLOADS

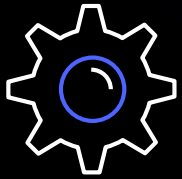
- Automatically set up monitors and dashboards for application resources
- Detect and troubleshoot problems quickly with automatic notification
- Determine root causes quickly with AI-driven insights
- Supports single, multi-node and high-availability landscapes



SAP Lens for AWS Well-Architected Framework



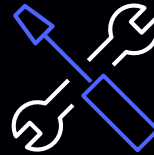
Customer-proven design principles and best practices for ensuring SAP workloads on AWS are well-architected across:



**Operational
Excellence**



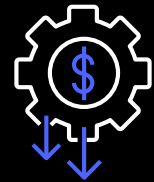
Security



Reliability



**Performance
Efficiency**



**Cost
Optimization**

SAP on AWS Specialty certification exam

VALIDATE YOUR SKILLS IN ARCHITECTING, MIGRATING, AND MANAGING SAP WORKLOADS ON AWS



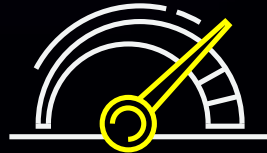
training and
certification



Learn more and start your SAP on AWS journey



Complementary discovery
workshops



Explore the AWS Migration
Acceleration Program



Work with AWS Professional
Services SAP/ERP Specialty Practice



Work with an AWS SAP
Competency Partner

aws.amazon.com/sap

SAP on AWS at re:Invent 2021

Build your SAP on AWS proficiency

- Outcome-oriented analytics for SAP on AWS
- Migrate SAP ERP system to AWS with minimal downtime
- Balancing your cost and availability requirements for SAP on AWS
- Build a real-time health dashboard for SAP HANA

Hear from other customers

- Inside Johnson & Johnson's cloud transformation
- Marc O'Polo's journey to direct-to-consumer and SAP S/4HANA
- Transforming agriculture with SAP on AWS at John Deere

Hear from SAP

- Uncover value using the SAP Business Technology Platform

Thank you!