



Accelerate Manufacturing Transformation with **SAP on AWS**

Warren Peters III

SAP Sales Specialist, AWS

Email: iwarre@amazon.com

Bidwan Baruah

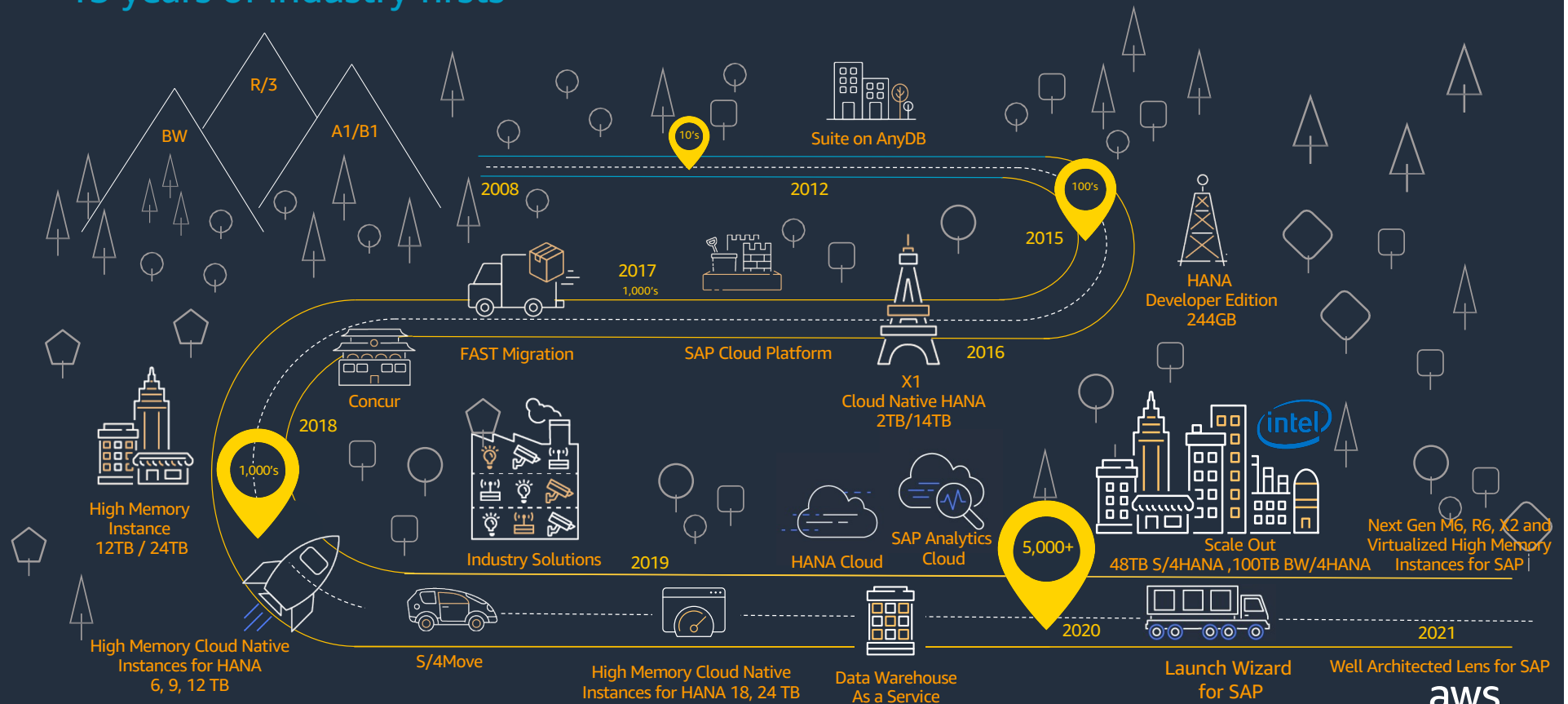
SAP Specialist Solution Architect, AWS

Email: bbidwan@amazon.com



SAP | AWS innovations

13 years of industry firsts



© 2022, Amazon Web Services, Inc. or its Affiliates. | Amazon Confidential



5000+ SAP customers across industries and geos trust AWS

HEALTHCARE & LIFE SCIENCES



ENERGY & NATURAL RESOURCES



RETAIL & CONSUMER GOODS



MEDIA & ENTERTAINMENT



PUBLIC SECTOR & DEFENSE



AUTOMOTIVE & TRANSPORTATION



MANUFACTURING & INDUSTRIAL



AGRICULTURE, CPG, & FOOD/BEV



PROFESSIONAL/ FINANCIAL SERVICES



TECHNOLOGY



© 2022, Amazon Web Services, Inc. or its Affiliates.

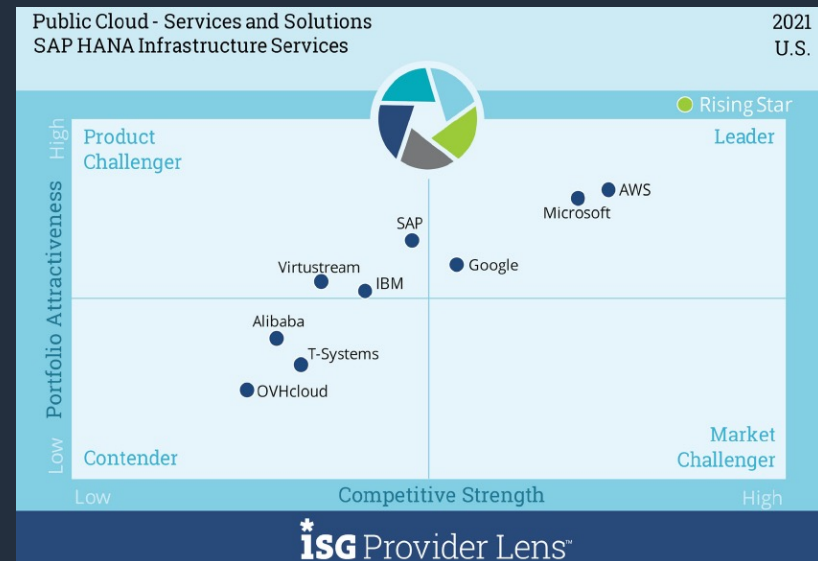


AWS leads HANA Infrastructure Services

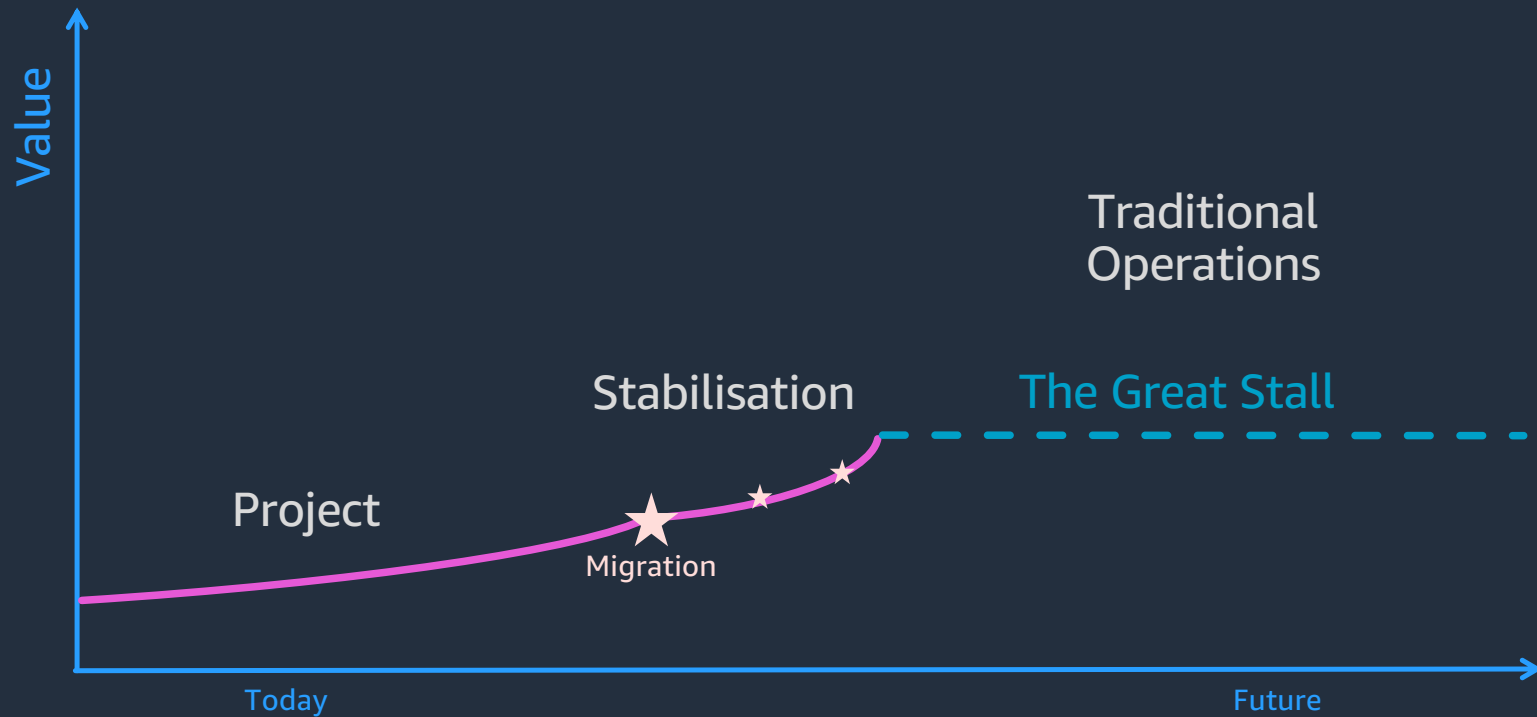
ISG RECOGNIZES AWS AS A LEADER FOR THE FOURTH CONSECUTIVE YEAR

"AWS offers high flexibility and helps customers get the most value out of SAP investments, whether it is lift and shift, modernize or move to S/4HANA. It also offers a secure, reliable and extensive public cloud infrastructure, with more than 200 services to innovate, along with a purpose-built SAP automation tooling."

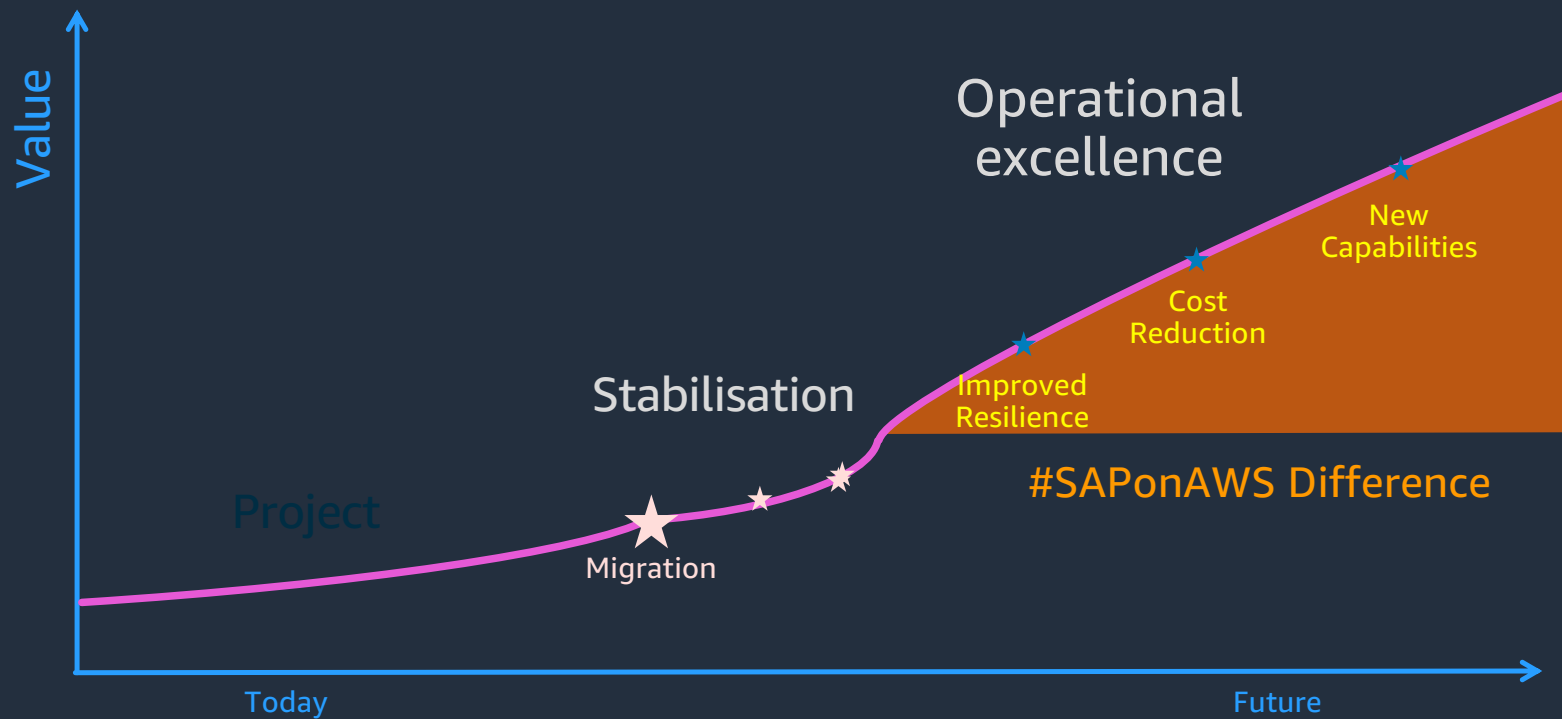
"AWS continues to lead the infrastructure services offering market with its wide range of services to host for SAP HANA workloads on its platform."



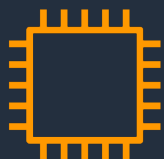
Our aim: continued SAP value creation



Our aim: continued SAP Value Creation



Summary of AWS innovations for SAP in 2021 / early 2022



EC2 Instances

New [instances for SAP](#) including R5b (storage optimized), Virtual High Mem, Intel Ice Lake (M6i, R6i,) AMD Milan (M6a), next gen X1/X1e* etc.)



Amazon EBS

New [storage options for SAP](#) (e.g. gp3, io2 Block Express, FSx for NetApp ONTAP^)



Amazon AppFlow

Native integration of [data from SAP to AWS services](#)



Amazon CloudWatch Application Insights for SAP HANA

[Easily set up observability for SAP HANA](#) to identify and resolve issues faster



AWS Launch Wizard

7 major [additional features](#) including [DevOps capabilities](#), HA config, RHEL/SUSE version support, AMS support



AWS Backint Agent

3 [major enhancements](#) including [support for S3 Intelligent Tiering](#)



AWS Well-Architected Lens for SAP

Proven [SAP on AWS best practice guidance](#) across operational excellence, security, reliability, performance, and cost optimization



AWS Training and Certification

[SAP on AWS specialty certification](#) to validate skills in architecting, migrating and managing SAP workloads on AWS

*= December 2021 ^ = Early 2022

© 2022, Amazon Web Services, Inc. or its Affiliates. | Amazon Confidential



Why AWS for Manufacturing?



AWS was born from complex automation & factory operations at Amazon



AWS has the most comprehensive and advanced set of cloud services & features available today



AWS customers take advantage of security designed for the most sensitive organizations



AWS' massive, global scale reduces risk

Manufacturing Industry Trends



Data is an
enabler



Digitally
"Executed"
Manufacturing



Product-as-a-
Service



Connected
Products



Sustainability

Manufacturing Industry Challenges



Create new
revenue sources



Improve OEE &
optimize production



Optimize supply
chain, reduce inventory



Worker attrition
and training



Protecting and
securing production
and IP

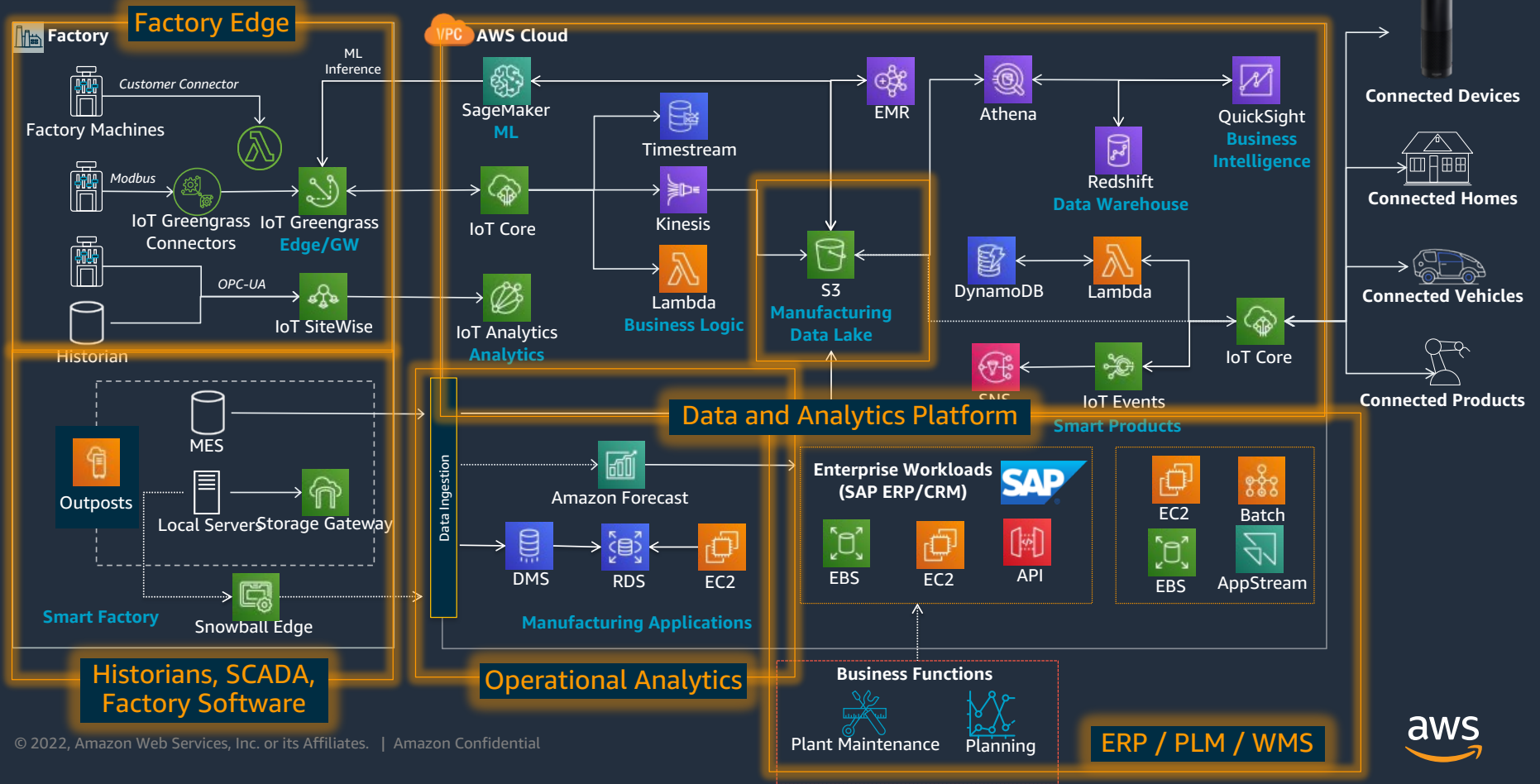


Liberating data and
revealing insights



Cost
reduction

SAP on AWS Manufacturing Reference Architecture



Case study: Optimizing manufacturing operations with AWS

Challenge

- INVISTA needed to unlock value in data siloed at its worldwide manufacturing sites. The company wanted to do away with time-consuming analytical processes and limited, pre-formatted BI reporting.

Solution

- INVISTA used AWS Lake Formation to implement a companywide data lake based on Amazon S3 and AWS Glue. The company used AWS Snowball devices to migrate large data volumes from plants into the data lake.

Benefits

- Large contribution to their goal of creating \$300 million of value from companywide data
- Reduced unscheduled plant downtime
- \$2 million annual data storage cost savings

“By using AWS to pull ordering patterns and other data from our SAP ERP system, we have a closed-loop, fully automated stocking process for high-moving spare parts that has shown significant return on investment.”

Elizabeth Gonzalez, Analytics Leader, Koch Industries

© 2022, Amazon Web Services, Inc. or its Affiliates.



Company:	INVISTA
Industry:	Manufacturing
Country:	United States
Employees:	5,000
Website:	invista.com

About INVISTA

A subsidiary of Koch Industries since 2004, INVISTA brings to market the proprietary ingredients for nylon 6,6 and recognized brands including STAINMASTER, CORDURA, and ANTRON. INVISTA also offers specialty chemical intermediates and process technologies.

All trademarks are the property of their respective owners.

BUSINESS NEED

Detecting potential failures of industrial equipment, such as compressors, is critically important as this reduces downtime and maintenance costs. Koch Ag & Energy Solutions (KAES) needed a way to detect these issues before they occurred.

SOLUTION

KAES used Amazon Monitron and Amazon Lookout for Equipment, machine learning services that detect abnormal equipment behavior and enable predictive maintenance, to monitor industrial equipment including compressors.

IMPACT

Amazon Monitron proactively detected a possible failure in a fan at a nitrogen producing facility by alerting on increased vibrations. This led KAES to swap fans and clean the inlet filter avoiding the risk of complete loss of air. Because of this, KAES avoided running lengthy maintenance workflows which are costly and cumbersome.



“

We needed a solution to detect acoustic anomalies and potential failures of critical manufacturing machinery. Within a few weeks, the experts at the ML Solutions Lab worked with our internal team to develop an alternative, state-of-the-art, deep neural net embedding sound featurization technique and a prototype for acoustic anomaly detection. We were very pleased with the insight that the ML Solutions Lab team provided us regarding our data and educating us on the possibilities of using Amazon Lookout for Equipment to build and deploy anomaly detection models for new assets.

”

Dave Kroening

IT Leader, Koch AG & Energy Solutions

MORE INFO: [PRESENTATION](#) | [BLOG](#)

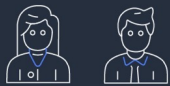
Why SAP on AWS?



Most Experience - Largest SAP customer base (5000+).



Reduce TCO – Saved customers over 50% in total cost of ownership.



Proven Partners – 80% of SAP customer engagements are lead by or include our partners.



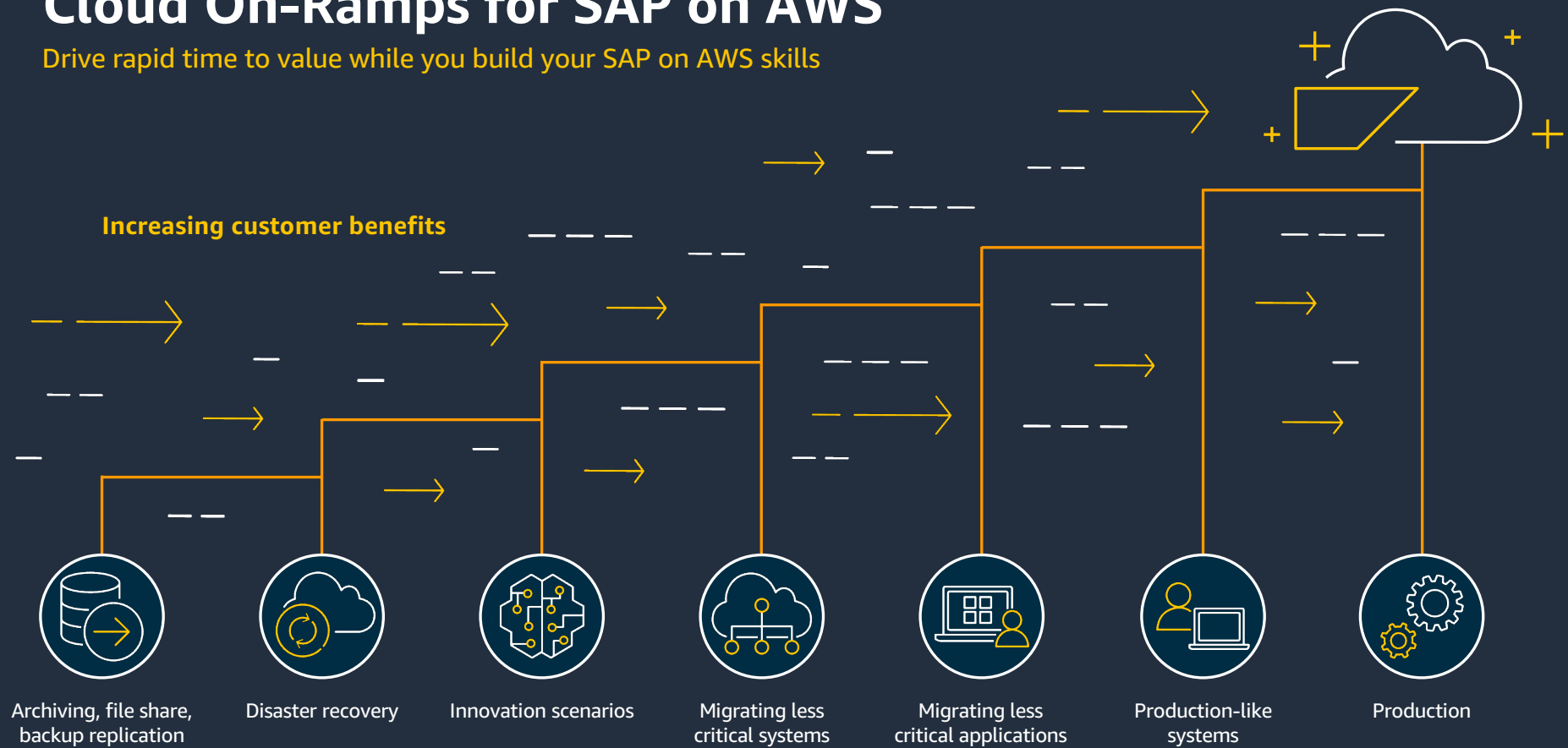
Broad Portfolio – AWS has the largest set of SAP certified offerings and the most complete set of HANA offerings.



Innovation – Customers and partners are using AWS as an innovation accelerator to get more from SAP.

Cloud On-Ramps for SAP on AWS

Drive rapid time to value while you build your SAP on AWS skills



Next steps to start your journey

- **Discover / Assessment:** AWS-led complimentary workshop to determine business case and migration strategy
- **Proof of Concept (POC):** Contact us for SAP Migration POC.
- AWS have funding programs available to support these PoCs.

Contact Us:

Warren Peters III

SAP Sales Specialist, AWS

Email: iiwarre@amazon.com

Bidwan Baruah

SAP Specialist Solution Architect, AWS

Email: bbidwan@amazon.com



Thank you!

