



MASTERING SAP 2023

OPTIMISE AND MODERNISE YOUR SAP APPLICATIONS

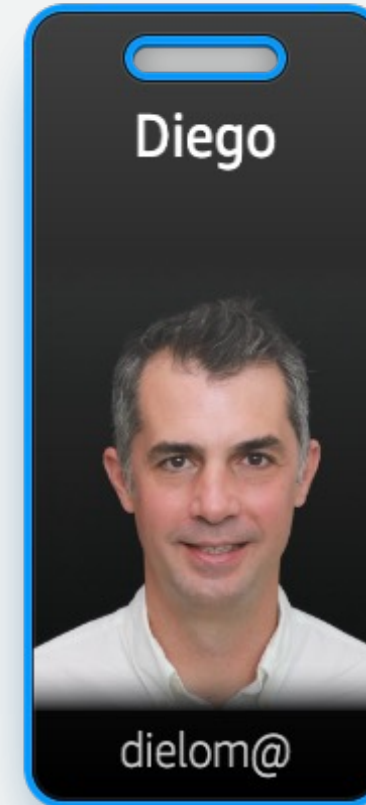
David Nye & Diego Lombardini

Amazon Web Services

Your presenters

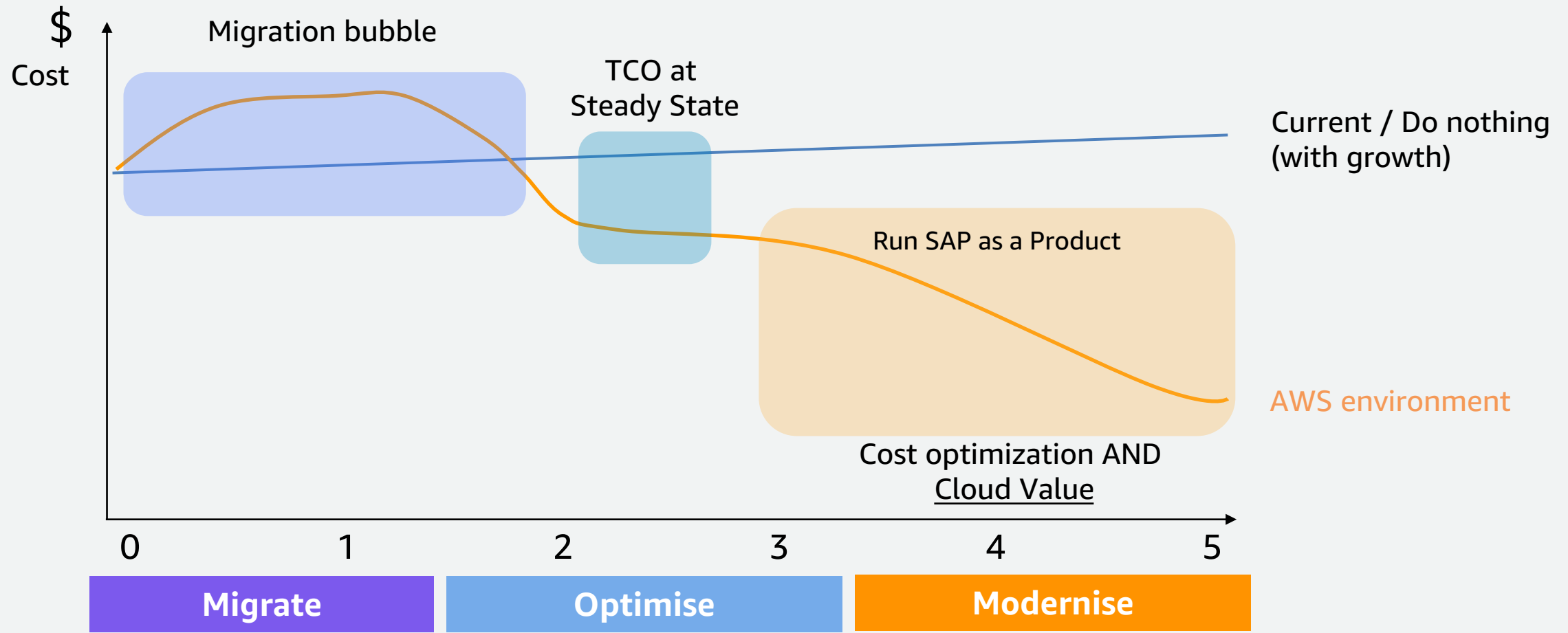


Solutions Architect, SAP Workloads
nydavid@amazon.com



Solutions Architect, SAP Workloads
dielom@amazon.com

Typical Cloud Migration Journey



Optimisation

Cloud Financial Management



Automation



Cloud Operating Models



Cloud Financial Management

Track & Manage



- Visibility of Spend
- Create a forecast
- Track your budget
- Monitor for anomalies

Architecture



- Architecture and Cost are tightly coupled
- Architectural decisions should be assessed for cost

Cost Models



- Implemented a show-back or charge-back model
- Gain buy-in from the business on spend

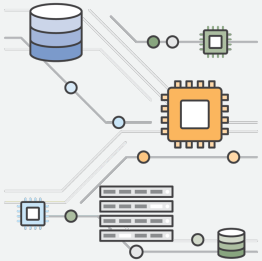
Sustainability



- Include carbon usage in regular reporting
- Visibility is the first step in the journey to improvement

Cost Savings Techniques

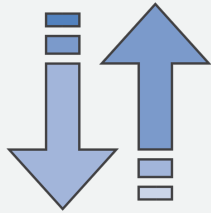
Services



Managed services

Higher value services

Right-Sizing



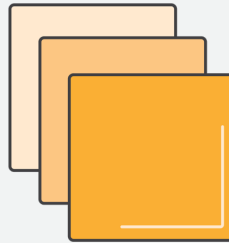
Instance type

Instance family

Storage type

Storage class

Unit Prices



Purchasing options

Licensing options

Scale



Time based

Event based

Manual

Iterate



Periodic reviews

Periodic updates

Automation

Key questions

- Define your goals for automation
 - Improve agility
 - Performance scaling
 - Lean operations
 - Compliance
- Assess cost \ benefit for scope of automation
- Consider each Solution layer when defining automation scope and tooling

Automation Process Scope

Build**Change****Operate**

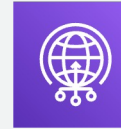
Solution Layers

SAP Application**SAP Netweaver (BASIS)****Database****Operating System****Cloud Platform****Orchestration**

Automation



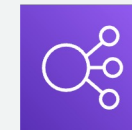
[CloudFormation for System Provisioning](#)



[Network Acceleration for SAP](#)



[CloudEndure System Copy for SAP](#)



[AWS Load Balancing for SAP](#)



[Auto Start-up and Shutdown SAP](#)
(extend to [Chatbot](#))



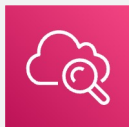
[AWS Backup for SAP](#)



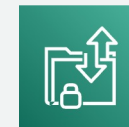
[AWS Config for OS Configuration Mgt.](#)



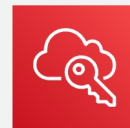
[Auto-scaling for SAP](#)



[AWS CloudWatch for monitoring SAP](#)



[AWS Transfer - SFTP for SAP](#)



[MFA for Fiori with AWS SSO](#)

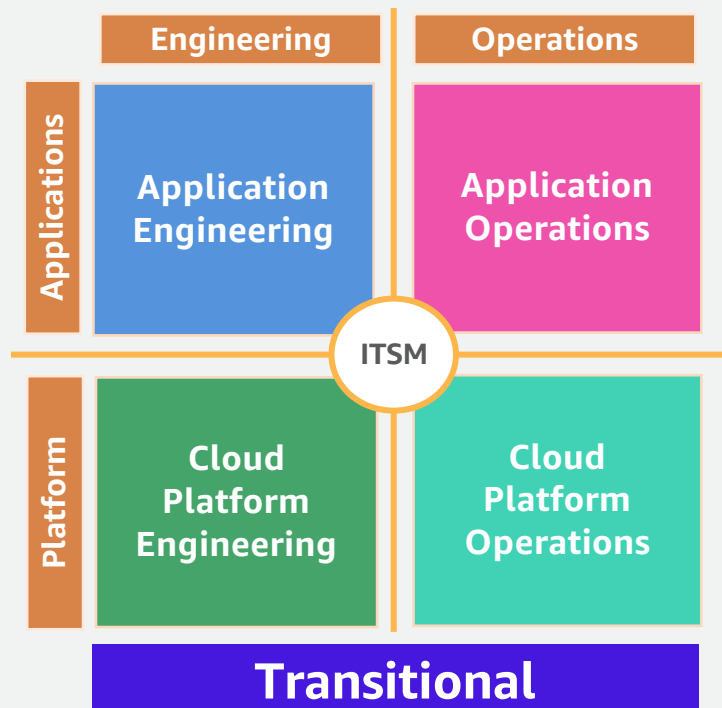


Cloud Operating Models



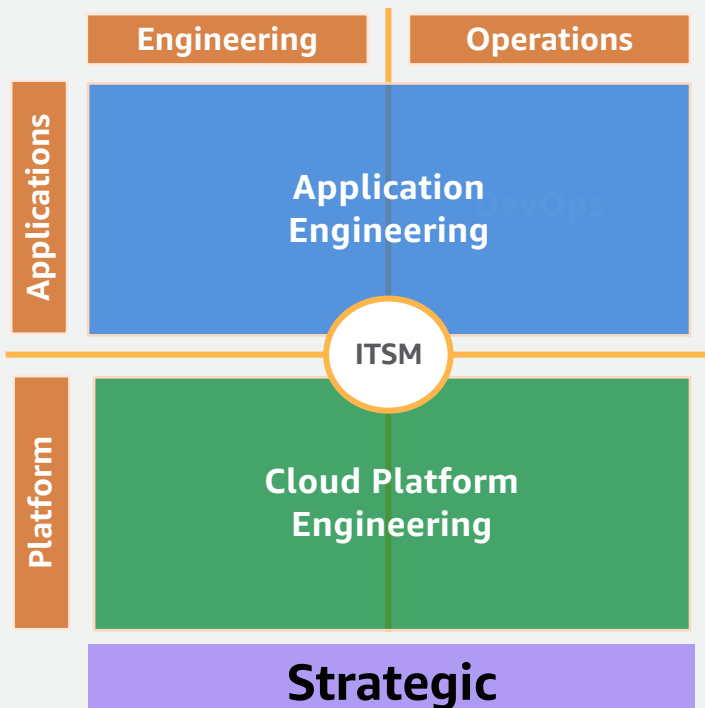
Sustain

“Traditional Operations”



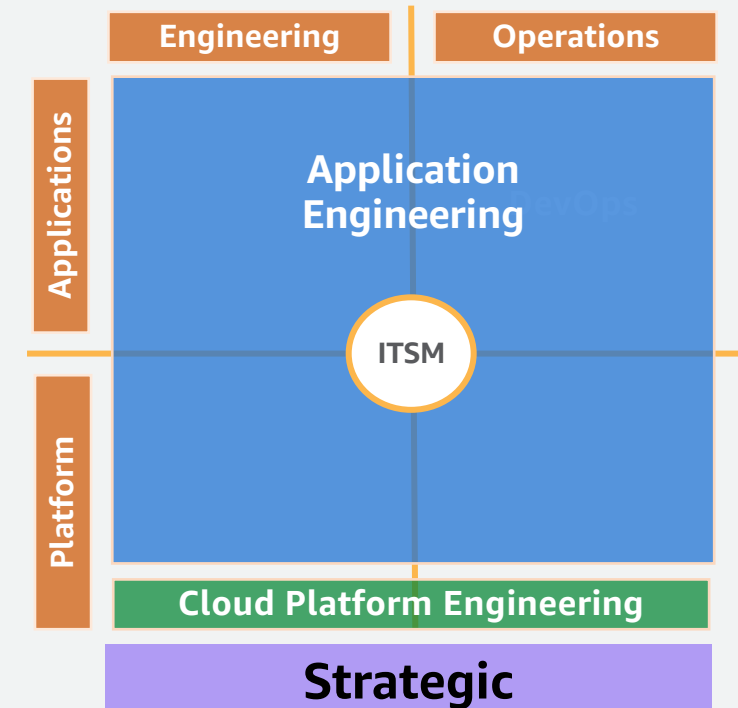
Optimize

“Distributed DevOps”



Grow

“Decentralized DevOps”



Modernisation





Fancy Fiori Screen ▾



Company Code: * 1710 (Company Code...) OL (Ledger 0L) Currency Type: * 10 (Company Code C... Fiscal Year of Ledger: * 2022 Fiscal Period (Balances): * 012 Depreciation Area: * 01 (Book Depreciation) Asset Class:

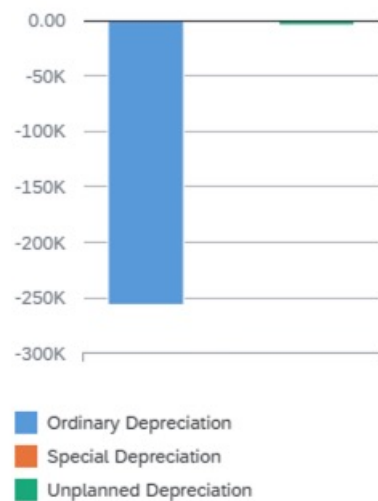
Go Adapt Filters (6)
Enter

Depreciation to Be Posted

Selected Period (Balances) | USD

-256.8 K
Total Depreciation

Value to Be Posted | USD



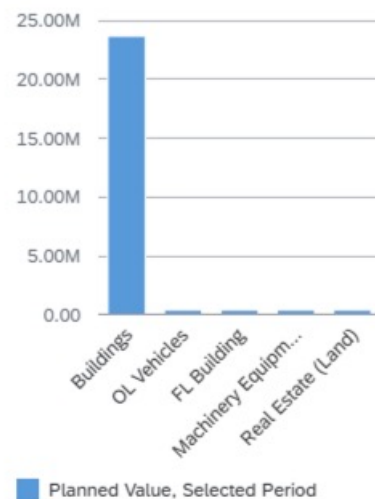
Asset Balances - Chart View

Selected Period (Balances) | USD

24.1 M
Total Planned Value

By Asset Class ▾

By Asset Class | USD



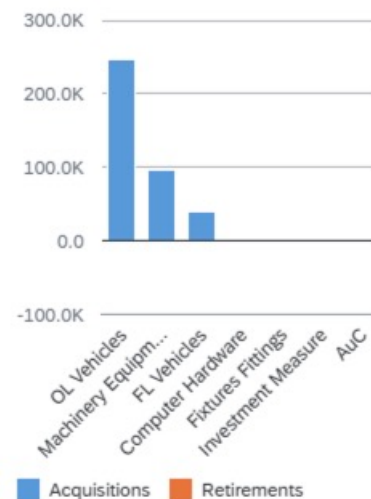
Asset Transactions

Selected Period (Transactions) | USD

389.4 K
Acquisitions minus Retirements

By Asset Class ▾

By Asset Class | USD

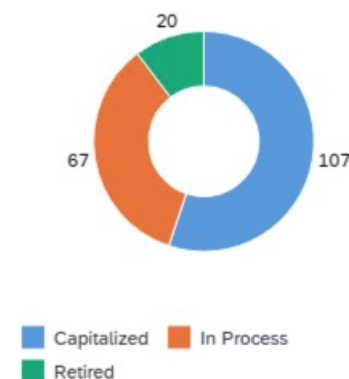


Asset Master Worklist

Number of Assets, as of Today

174
Active Assets

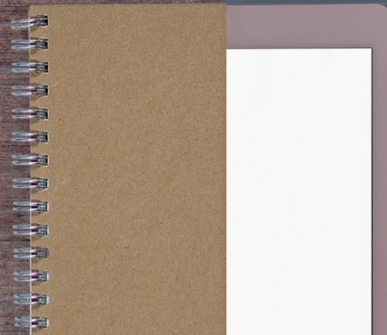
Number of Assets



Quick Links

- Asset Transactions
- Asset Balances
- Asset History Sheet
- Display Asset
- Display Asset Master Worklist
- Create Asset Master Record

Why?





Enter Vendor Invoice: Company Code 1710

Tree On Company Code Hold Simulate Park Editing Options

Transactn Invoice Bal. 0.00

Basic data Payment Details Tax Withholding tax

Vendor Sp.G/LI ☐

Invoice date Reference

Posting Date 05/29/2023

Cross-CC Number

Amount USD

☐ Calculate Tax

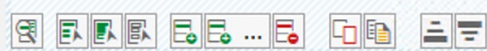
Tax Amount

Text

Company Code 1710 Company Code 1710 Palo Alto

0 Items (No entry variant selected)

S...	G/L acct	Short Text	D/C	Amount in doc.curr.	Loc.curr.amount	T..	T
			Debit v		0.00		^
			Debit v		0.00		v
			Debit v		0.00		
			Debit v		0.00		
			Debit v		0.00		
			Debit v		0.00		
			Debit v		0.00		
			Debit v		0.00		
			Debit v		0.00		
			Debit v		0.00		^
			Debit v		0.00		v



AI Invoice Assistant



Fast Invoice Entry

Vendor Name

Date

Cost Centre

Scan Invoice

How do you start?



A young girl with wild, messy brown hair is wearing large, black, round goggles. She has a surprised expression with her mouth wide open. She is wearing a light blue t-shirt. In front of her are several glass beakers and flasks containing liquids of different colors: yellow, blue, and green. To her right is a blue microscope. The background is a chalkboard filled with handwritten scientific formulas and diagrams, including chemical structures like CH_3 and NH_3 , and physics equations like $V = 100 \text{ cm}^3$, $P_{Fc} = 7,8 \cdot 10^3 \text{ kg/m}^3$, and $P_{Aj} = 2,7 \cdot 10^3 \text{ kg/m}^3$. There are also geometric diagrams of triangles and circles. The overall scene is a playful representation of a science experiment.

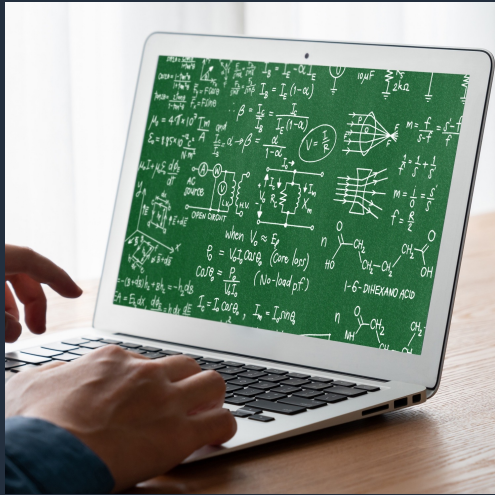
Experiment!

Start small

Iterate

Learn

Disrupt!



AP APPLICATIONS

Modernise ERP: AWS ABAP SDK



MASTERINGSAP
An SAPinsider Company

Supercharge BTP: Joint Reference Architecture

What can you do?



Unleash Data: Modern Data Platform

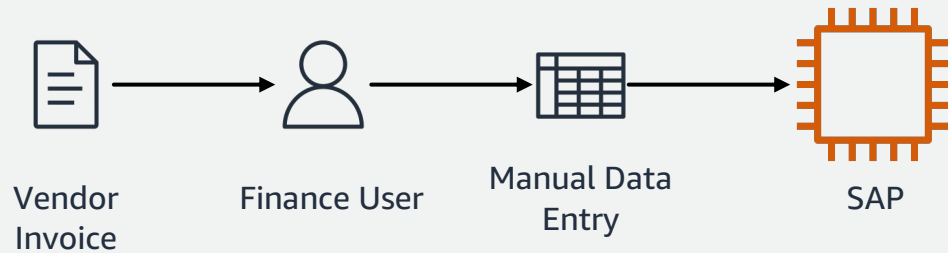


© 2023, Amazon Web Services, Inc. or its affiliates.

Modernise ERP with AWS ABAP SDK



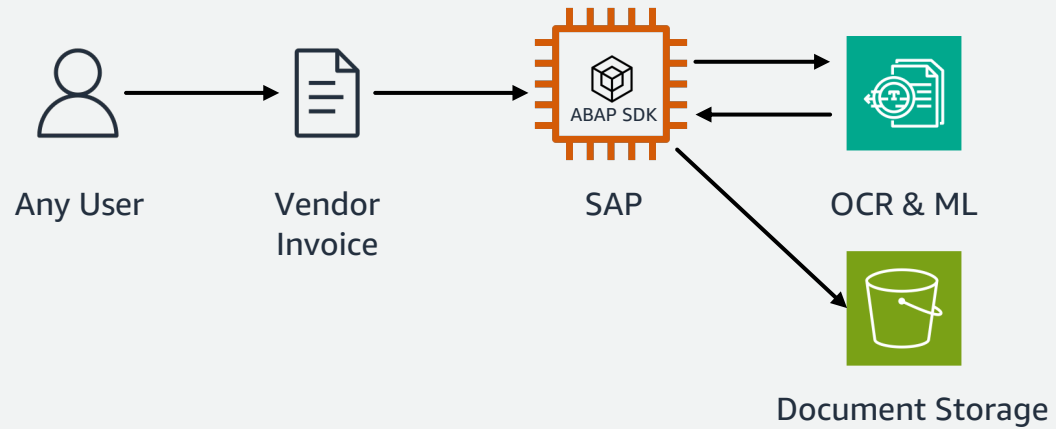
Manual Invoice Processing



- Manual invoice entry
- Manual document download / scan and upload to SAP
- Time consuming
- Low value add



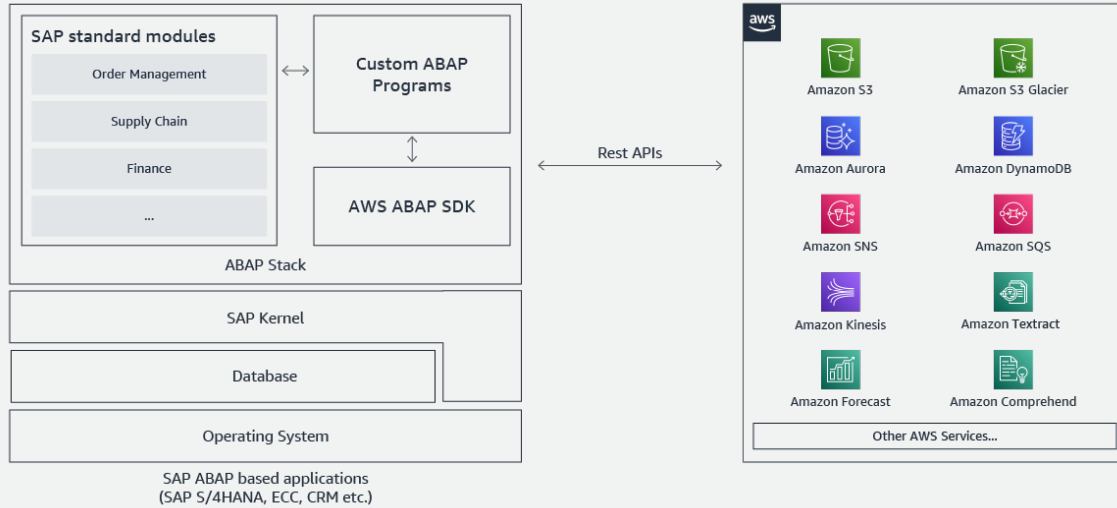
Invoice Automation with AWS ABAP SDK



- Enhance SAP with AWS Services – ABAP SDK
- OCR and Machine Learning – Amazon Textract
- Scalable, secure and resilient document storage – Amazon S3



How do you start?



AWS ABAP SDK



Developer Guide



Code Samples
(github)



Supercharge BTP with the SAP AWS Joint Reference Architecture

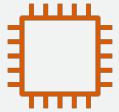


Asset Maintenance

- Field worker – works in the field, not with computers
- Business process is in SAP
- Offline activities
 - Update Orders
 - Enter measurements (i.e.: odometer)
 - Provide documents / images
 - Navigate to location and find asset



Enhanced Field Worker app



ERP – Work Orders



Mobile Device



Mobile App



Location Services



Image Recognition




Document Storage



SAP AWS Joint Reference Architecture

Guiding Principles


When to use SAP BTP and AWS Services

 © 2023, Amazon Web Services, Inc. or its affiliates.

16

Foundation Plane


Integration: A2A, A2X, B2B, B2G

 © 2023, Amazon Web Services, Inc. or its affiliates.

17

Data Plane


Integration, Federation & Data Access

 © 2023, Amazon Web Services, Inc. or its affiliates.

18

Select Use Cases


Example of SAP BTP and AWS joint use cases

 © 2023, Amazon Web Services, Inc. or its affiliates.

41

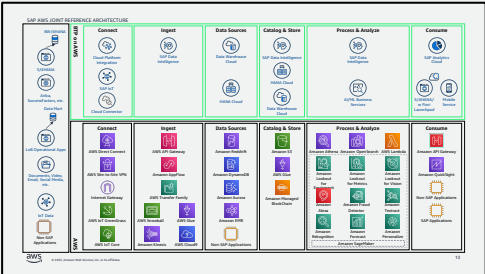
Application Plane

Automation, Low Code / No Code, Citizen Development and Process Excellence

 © 2023, Amazon Web Services, Inc. or its affiliates.

19

Principles	Description
Service Capability	Service capability will drive the use case in the architecture based on its ability to solve a business problem and where the solution will take action. Example: <ul style="list-style-type: none">Use of SAP AppGover for SAP No Code Development to build mobile app for Purchase Order approval.Use of AWS IoT Greengrass and IoT Core to build integration with IoT in the manufacturing lines. When there is a pre-built integration or report content in the related service, then it is preferred to use such service. Example: <ul style="list-style-type: none">If there is a pre-built integration between SAP S/4HANA and SAP LoB/select 3rd party SaaS, it should be used as a preferred integration tool for such scenarios.If there is a pre-built integration between SAP and Amazon S3 on Amazon Appflow, then it should be used as preferred tool.
Pre-built Content	When there is business requirement to have a consolidated data for transactional, analytics, machine learning, it is preferred for the data to be accessed from the source rather than replicated to avoid latency, inconsistency and extra storage cost.
Data Federation	The data gravity or location will drive the preference on which services to use. Example: <ul style="list-style-type: none">If the data source is located in SAP Data Warehouse Cloud, then it is preferred to use SAP Analytics Cloud for visualization tool.If the data source is located in Amazon S3 or Redshift (for example: IoT Data Stream), then it is preferred to use Amazon QuickSight for visualization tool.
Data Gravity	When federation is not possible, then data replication can be done as minimum as possible, by recommending the lowest possible latency, inconsistency and storage cost. Example: <ul style="list-style-type: none">Use of Amazon S3 as low cost data lake to combine SAP and non-SAP Data for AI/ML use case such as Amazon Lookout for Equipment where it can integrate SAP Plant Maintenance and Sensor data from IoT Devices.
Data Replication	



Want to know more?

THURSDAY 08 JUNE 2023

13:55 – 14:40

BTP PLAYS WELL WITH OTHERS (JOINT REFERENCE ARCHITECTURE)

Tech & Cloud

A joint reference architecture can demonstrate how SAP BTP works seamlessly with other technologies by providing a clear, visual representation of the various components and how they integrate with one another. By showing how these different technologies work together to deliver a cohesive solution, a reference architecture can help businesses to better understand the value and benefits of using SAP BTP alongside other technologies.

- Learn how you can use SAP BTP along with your existing technology stack
- Discover how BTP fits into an environment with hyperscalers and plays an important role



AWS JRA Blog



JRA Modernisation



SAP JRA Blog

Modern Data Platform for SAP and Non-SAP Data

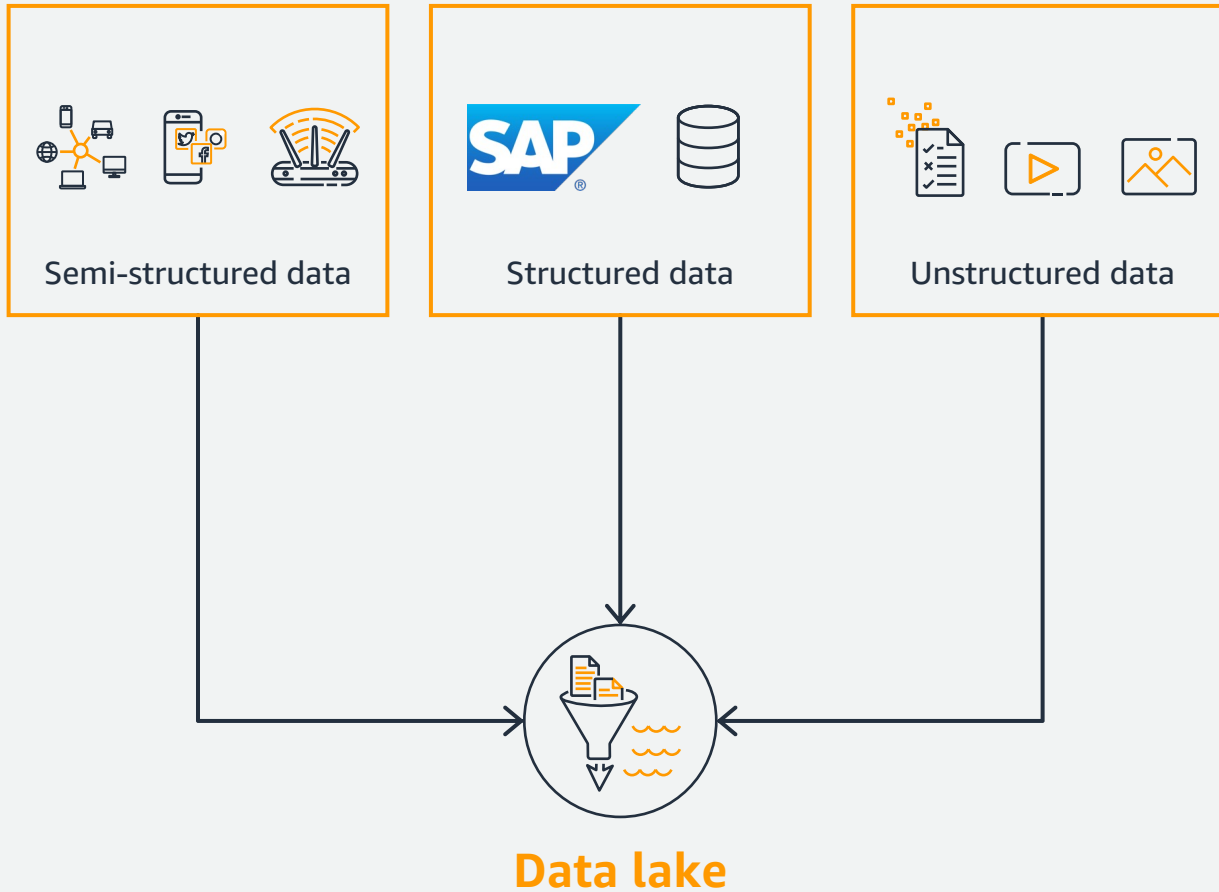


Data & Analytics

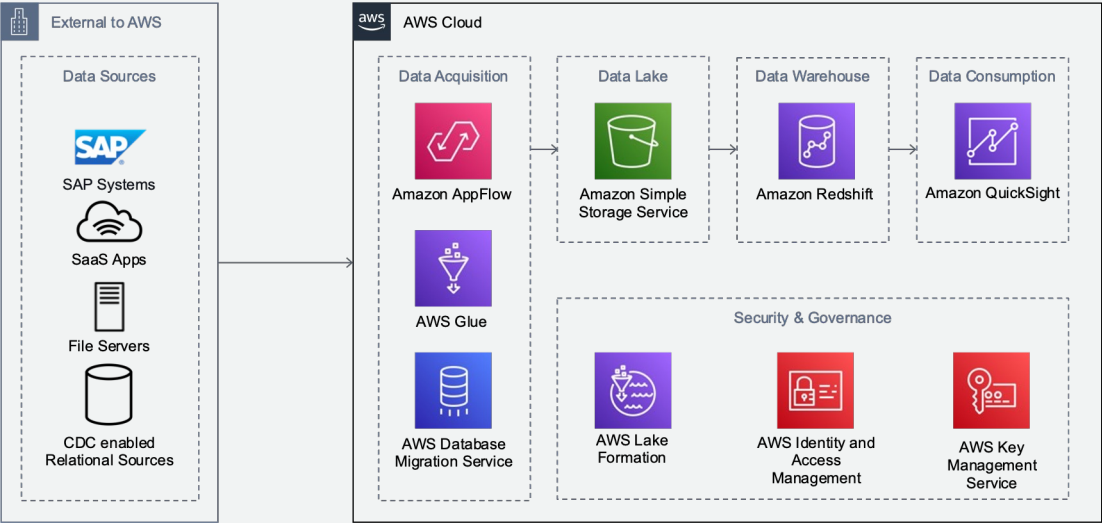
- Reference data is distributed across several applications
- Business systems – core vs. business unit
- Volumes exponentially growing
- Structured vs. unstructured data
- External sources
- **Need data NOW!**



Modern Data Platform



How do you start?



AWS Modern
Data Architecture



SAP Data
Warehousing
Solution Guidance



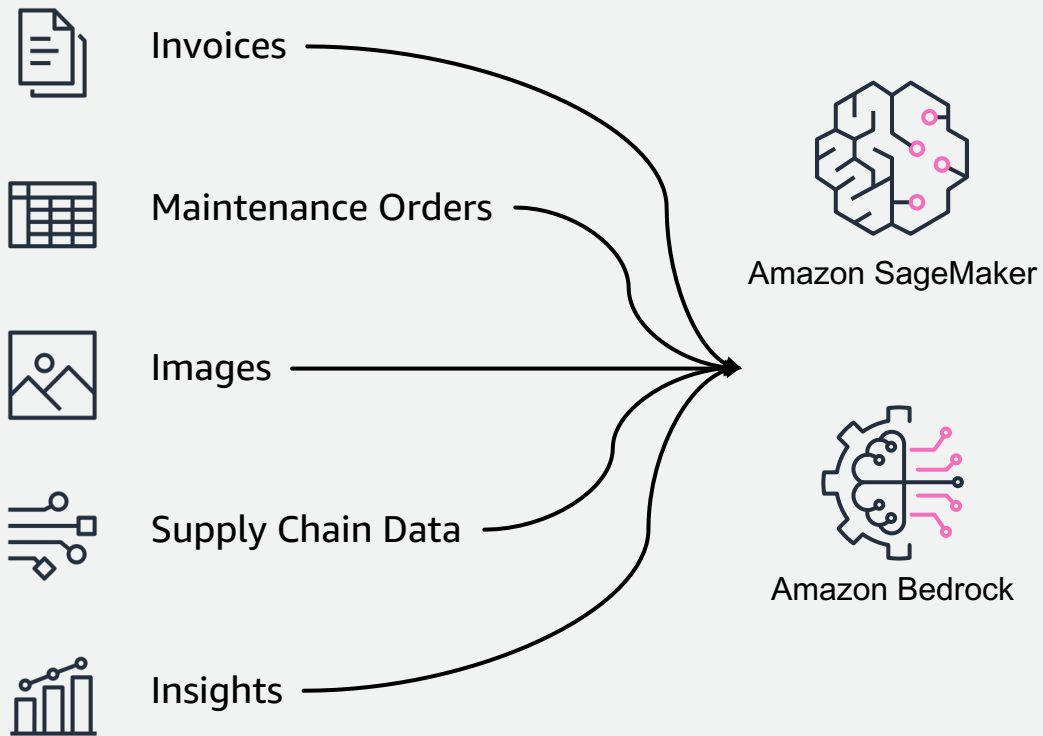
SAP and Non-SAP
Data Lake
Solution Guidance



What's Next?



Generative AI / AI



Document Generation Digital Assistant



Next steps



Call to action

Manage Cost



Operate Lean



Experiment



Engage in a Well-Architected Review





Thank you!

David Nye
nydavid@amazon.com

Diego Lombardini
dielom@amazon.com