

TORONTO | SEPTEMBER 11, 2024

aws SUMMIT



TEL201

# Turbocharging SAP Migrations: Bell's journey to the cloud with AWS

**Swati Singh**

She/Her  
AWS

**Archana Sharma**

She/Her  
Bell



# Problem statement

- In 2023 Q1, Bell had 5-year roadmap to migrate and modernize SAP Retail and eCommerce landscape
- Need support for Oracle databases on cloud
- Need flexible infrastructure to scale up and down for key marquee events
- Modernize eCommerce monolithic application to light weight container based
- Limited AWS skills



# Roadmap for eCommerce and SAP systems



# Roadmap for eCommerce and SAP systems



Original plan : *On premises – modernization and hardware refresh roadmap*



# Roadmap for eCommerce and SAP systems



**Original plan :** *On premises – modernization and hardware refresh roadmap*

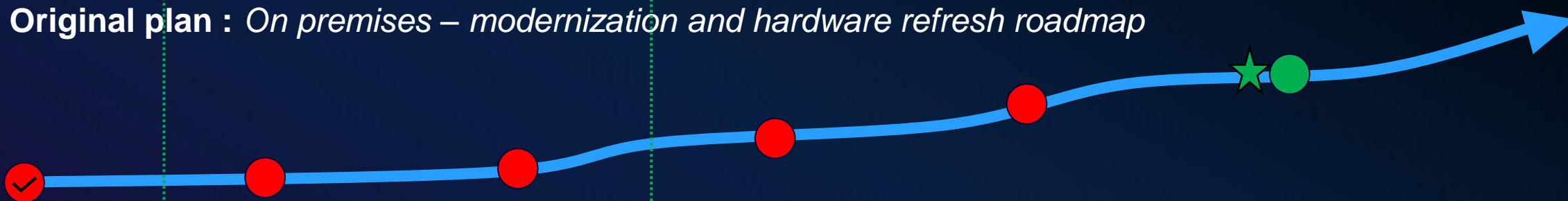


**Revised plan :** *AWS – Migration and modernization roadmap*

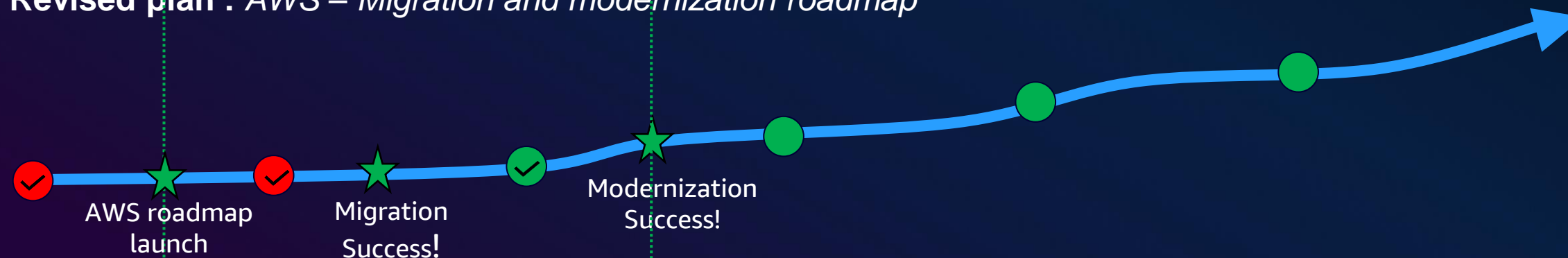
# Roadmap for eCommerce and SAP systems



**Original plan :** *On premises – modernization and hardware refresh roadmap*



**Revised plan :** *AWS – Migration and modernization roadmap*



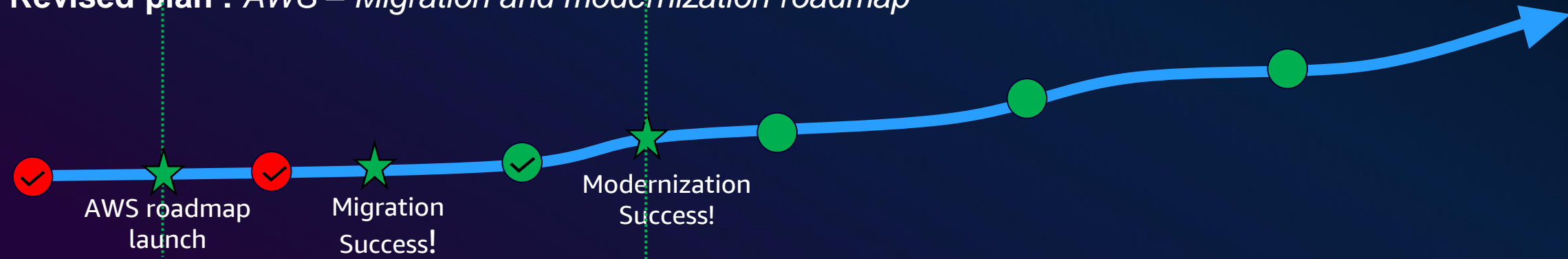
# Roadmap for eCommerce and SAP systems



**Original plan :** *On premises – modernization and hardware refresh roadmap*



**Revised plan :** *AWS – Migration and modernization roadmap*



**Results: reduced 60-month roadmap to a 20-month roadmap**

# Benefits for migrating SAP to the cloud



## Modernized Deployment

Deployment: frequent and faster deployment with near-zero downtime (N.ZT), with pre-built security controls



## Improve agility and scalability

Scalability: Kubernetes (K8s) design allows application scaling across multiple AZs within minutes



## Improve availability

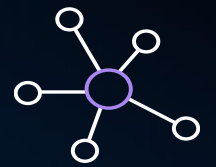
Reliability: A three-Availability Zone (AZ) architecture improved reliability to 99.99% uptime after migration



## Automation

Automation: approx. 20% operational cost savings

Automated patching and security updates



## Performance improvements

Performance: Avg. dialog response time decreased by 25%–40%.

# Challenges encountered during our migration

## Challenge

Additional security requirement on landing zone at the start of the project caused rework & delays at critical stage



## Resolution

Engaged AWS Security specialists to fast-track the requirements baselining and resolution

Longer deployment window – conversion AND a migration needed to happen in a single deployment



Created a data replica in AWS (instance #2) for extra capacity to complete the conversion and migrate faster

Commerce apps on-premises architecture was not cloud native



Redesigned on-premises architecture into cloud-native architecture through app re-factoring on Kubernetes using AWS managed services like Amazon RDS and Amazon EKS

# Lessons learned

- Onboard AWS ProServe team before starting the project to get guidance on IAM and resolve access issues
- Conduct detailed landing zone readiness check prior to vendor engagement
- Understand security guidelines and controls for data privacy and encryption policy to run our application on AWS
- Validate availability of all required AWS managed services needed on the tenant account
- Implement continuous improvement process to optimize the instance sizing and application performance as per workload requirements
- Flexible project plan and keep working the plan

# Why Bell chose AWS Professional Services



Proven track record of delivering successful enterprise migration/transformation



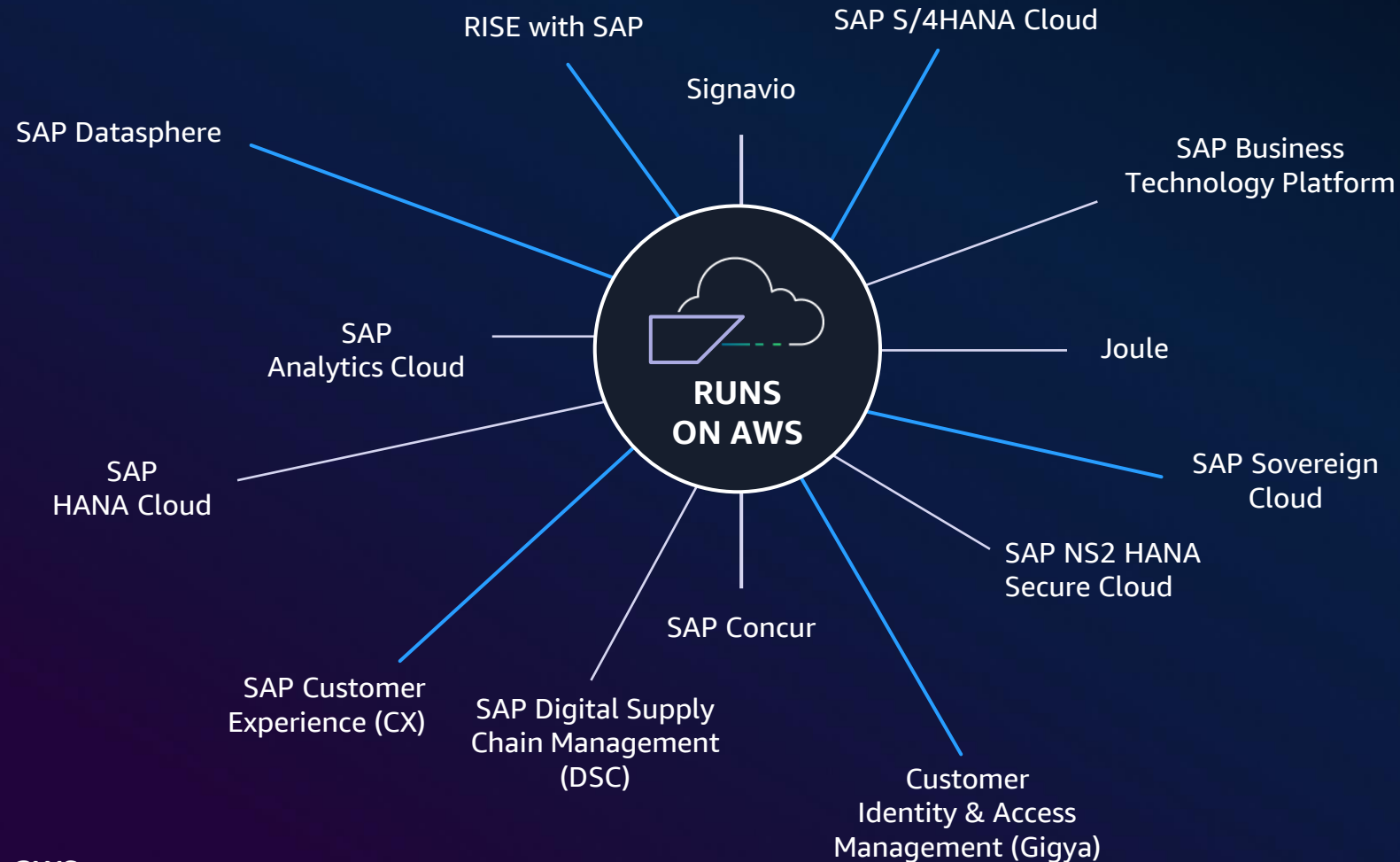
Deep AWS and SAP expertise



Specialized SAP migration tools

# SAP has trusted AWS for over 16 years in the cloud

AWS HAS THE LONGEST TRACK RECORD WITH SAP IN THE CLOUD



## Partnership

SAP leverages **AWS Cloud** infrastructure to run its AI assistant, Joule

SAP plans to use **AWS Graviton** to support solutions such as SAP BTP, SAP Datasphere, SAP Analytics Cloud, and SAP Cloud ALM

SAP plans to use **AWS Trainium** and **AWS Inferentia** for training and deploying future SAP Business AI offerings



# The advantages of running SAP on AWS

## Reliability

58%

less productivity losses from unplanned outages with S/4HANA on AWS vs. on-premises<sup>1</sup>

## Security

45%

reduction in security incidents for enterprise applications vs. on-premises<sup>2</sup>

## Performance

Up to

30%

better compute performance for analytical SAP workloads with AWS Graviton processors<sup>3</sup>

## Extensibility

100%

of SAP BTP services available on public cloud providers are available on AWS<sup>4</sup>

## Innovation

200+

AWS services available from AWS SDK for SAP ABAP covering gen AI, IoT, analytics, automations

## Generative AI

7

providers of foundation models (FMs) in Amazon Bedrock<sup>5</sup>



1. [The Business Value of SAP S/4HANA on Amazon Web Services, IDC, 2023](#)

2. <https://news.sap.com/2024/05/aws-sap-generative-ai-new-innovation/>

3. [The Business Value of Migration to Amazon Web Services, The Hackett Group, 2022](#)

4. As of 6-3-2024: <https://discovery-center.cloud.sap/viewServices>

5. As of 6-12-2024 available in US East Region

# Thousands of SAP customers 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



# AWS Professional Services global SAP practice

BRIDGE THE SAP-CLOUD SKILLS GAP AND ACHIEVE DESIRED BUSINESS OUTCOMES WITH SAP ON AWS EXPERTS

## Complementary offerings

- SAP on AWS Discovery
- SAP HA on AWS Discovery
- DevOps for SAP
- Analytics for SAP
- SAP Extend Discovery

## Launch offerings

- DevOps for SAP
- Analytics for SAP
- S/4HANA on AWS
- SAP on AWS Resident Architect
- Compliance Automation for SAP

Delivering successful SAP migration and transformation for industry leaders including:



# Professional services offerings

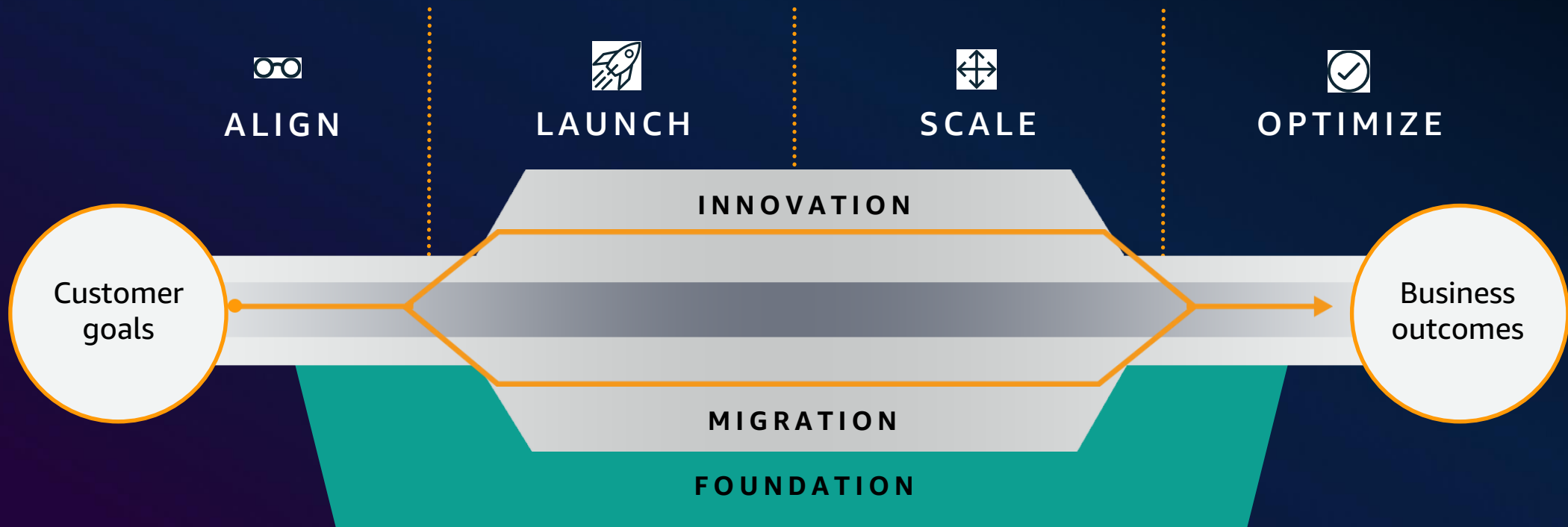
CLOUD ADOPTION  
FRAMEWORK  
WORKSHOP

AWS PLATFORM  
OFFERINGS

AWS INNOVATION  
OFFERINGS

AWS SECURITY  
OFFERINGS

AWS DEVOPS  
OFFERINGS



# Professional services offerings

CLOUD ADOPTION  
FRAMEWORK  
WORKSHOP

AWS PLATFORM  
OFFERINGS

AWS INNOVATION  
OFFERINGS

AWS SECURITY  
OFFERINGS

AWS DEVOPS  
OFFERINGS

SAP ON AWS  
DISCOVERY



ALIGN



LAUNCH



SCALE



OPTIMIZE



# Professional services offerings

CLOUD ADOPTION  
FRAMEWORK  
WORKSHOP

AWS PLATFORM  
OFFERINGS

AWS INNOVATION  
OFFERINGS

AWS SECURITY  
OFFERINGS

AWS DEVOPS  
OFFERINGS

SAP ON AWS  
DISCOVERY

SAP ON AWS HA/DR  
& MIGRATION  
OFFERINGS



ALIGN



LAUNCH



SCALE



OPTIMIZE



# Professional services offerings

CLOUD ADOPTION  
FRAMEWORK  
WORKSHOP

AWS PLATFORM  
OFFERINGS

AWS INNOVATION  
OFFERINGS

AWS SECURITY  
OFFERINGS

AWS DEVOPS  
OFFERINGS

SAP ON AWS  
DISCOVERY

SAP ON AWS HA/DR  
& MIGRATION  
OFFERINGS

SAP ON AWS GO-  
LIVE ASSESSMENT



ALIGN



LAUNCH



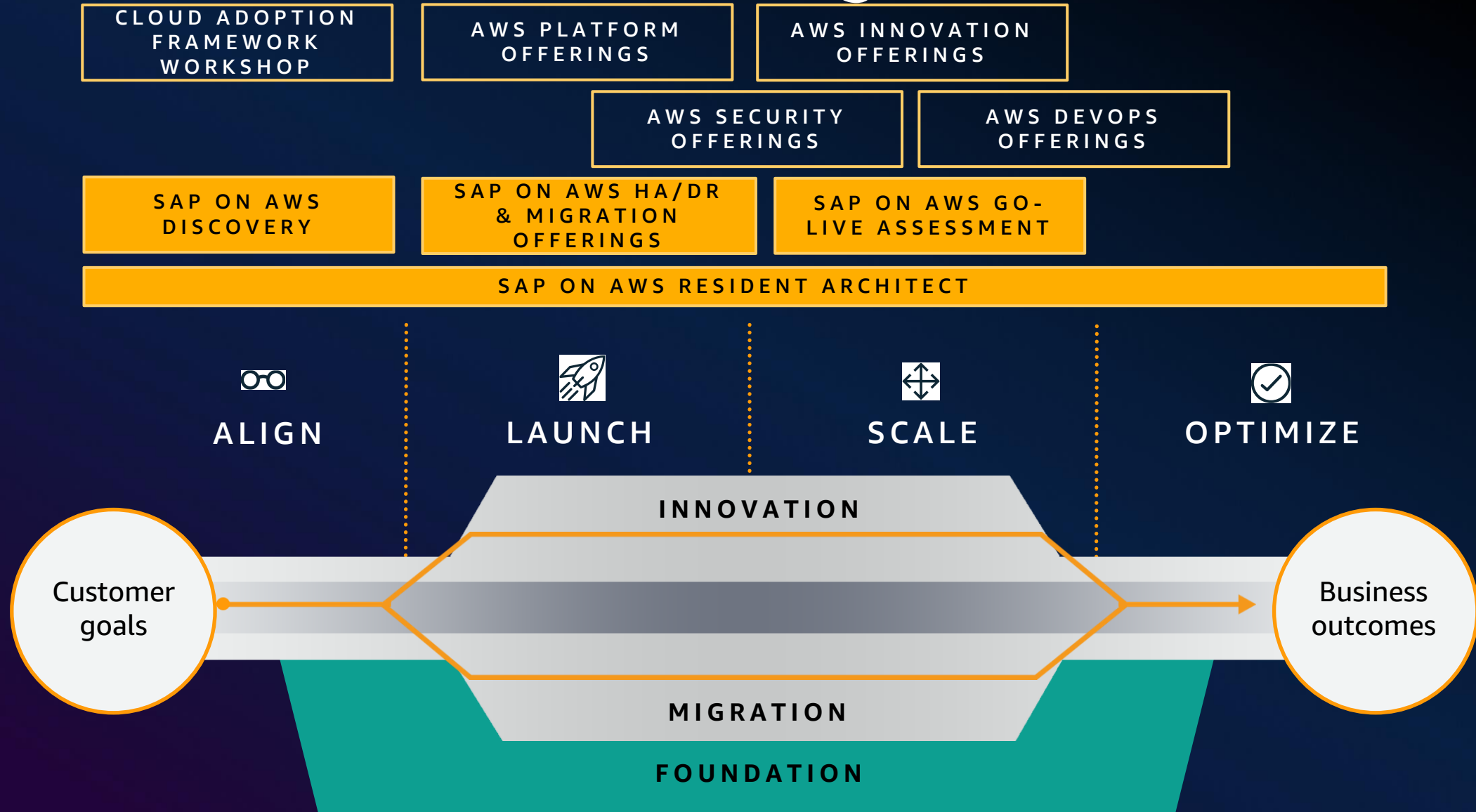
SCALE



OPTIMIZE



# Professional services offerings



# Next steps to start your journey

## Work with us



Complementary discovery workshops



Work with AWS Professional Services SAP/ERP Specialty Practice



Work with an AWS SAP Competency Partner



Explore the AWS Migration Acceleration Program

## Explore SAP on AWS

[aws.amazon.com/sap](https://aws.amazon.com/sap)

[aws.amazon.com/sap/case-studies](https://aws.amazon.com/sap/case-studies)