
AWS
re:Invent

ENT211

Assess and accelerate your migration plans

Rodney Grilli

Principal Technical Lead, Application Migration and Modernization

AWS

AWS re:Invent

© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Migration planning has come a long way . . .

Cloud_Computing_Business_Use_Case_Template_v3.docx

Business Use Case

1. **Use Case Identification**

1.1. Use Case Name

State a concise, results-oriented name for the use case.

1.2. Agency

Record the agency sponsoring this use case.

1.3. Model Matrix

Identify which intersections of the service/deployment matrix the use case addresses.

		Cloud Service Models		
		Software as a Service (SaaS)	**Platform as a Service (PaaS)**	**Infrastructure as a Service (IaaS)**
Cloud Deployment Models	Private			
	Community			
	Public			
	Hybrid			

1.4. Created By

Supply the name of the person who initially documented this use case.

1.5. Date Created

Enter the date on which the use case was initially documented.

1.6. Last Updated By

Supply the name of the person who performed the most recent update to the use case description.

DRAFT

Core objectives of Cloud Computing

- Amazon CTO Werner Vogels
- Core objectives and principles that cloud computing must meet to be successful:
  - Security
  - Scalability
  - Availability
  - Performance
  - Cost-effective
  - Acquire resources on demand
  - Release resources when no longer needed
  - Pay for what you use
  - Leverage others' core competencies
  - Turn fixed cost into variable cost



Amazon CTO Werner Vogels
(Credit: Dan Farber)

NIST

58

Netflix in the Cloud

Nov 6, 2010

NETFLIX

NIST
National Institute of Standards and Technology
U.S. Department of Commerce

Special Publication 800-145

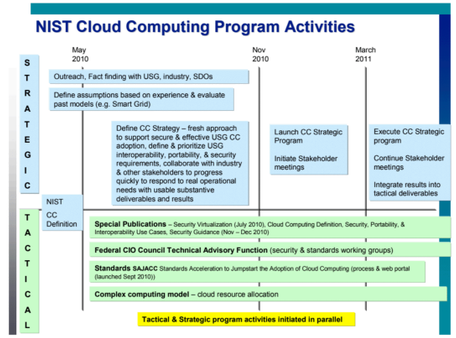
The NIST Definition of Cloud Computing

Recommendations of the National Institute of Standards and Technology

strategy_nist_cc_11_26_2010.pdf

NIST Cloud Computing Program Overview

The NIST Cloud Computing Program includes Strategic and Tactical efforts which were initiated in parallel, and are integrated as shown below:



(circa 2010)

Agenda

Business drivers

Strategy and best practices

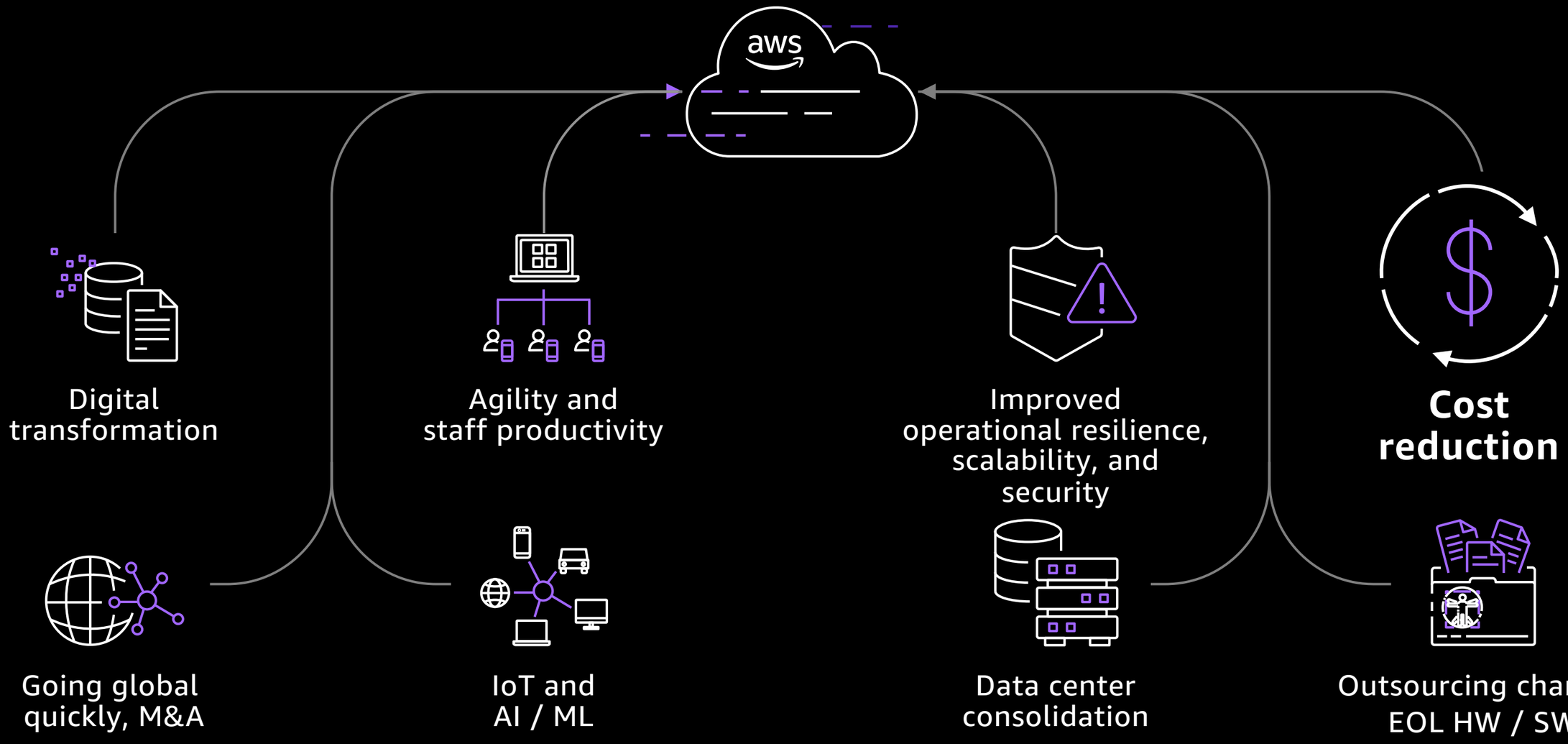
Migration process and tools

Steps to migration success



© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Business drivers for migrating to the cloud



Common questions

How do I create a business case?

How do I get started?

What workloads should I move first?

How do we manage workloads in the cloud?

What do I have in my environment?

What should I move to the cloud?

How do I migrate these workloads?

How do I get my team re-skilled?

How do successful customers do it?



AWS re:Invent

© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Thoughtful, methodical, multiyear plan for cloud migration includes . . .

1. 
   Win the conviction and alignment of senior leadership
2. 
   Don’t overanalyze; make decisions and act
3. 
   Make a plan for your application portfolio
4. 
   Establish a cloud operating model to achieve governance at scale

MAP customer journey

Assess



Rapid discovery



TCO report



Migration Readiness Assessment



Briefings & workshops



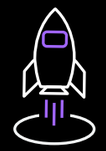
Immersion day

Mobilize

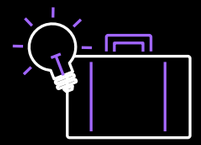
Portfolio



Discovery and planning



Migration plan



Business case / Mig. Evaluator

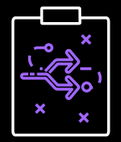
Migrate



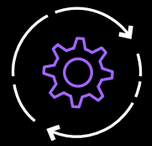
Migration and modernization experience



Skills / center of excellence



Landing zone



Operating model



Security and compliance

People

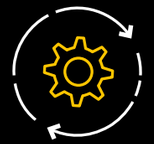
Platform

Migrate & Modernize

Migrate



Operate & optimize



Modernize



Create a case for change

Build readiness through experiences

Accelerate transformation at scale

AWS tools to accelerate your migration

Assess

Decision support

- Cloud Adoption Readiness Tool (CART)
- Migration Evaluator
- Migration Portfolio Assessment
- Migration Readiness Assessment
- AWS Application Discovery Service

Mobilize

Planning support

- Migration Portfolio Assessment
- AWS Application Discovery Service
- AWS Control Tower
- AWS Prescriptive Guidance
- Migration Evaluator
- Automated Landing Zone
- AWS Migration Hub
- CloudEndure Simplified Rehost Migration

Migrate

Migration automation and governance

- AWS Service Catalog
- AWS Migration Hub
- AWS Prescriptive Guidance

Server and database migration

- CloudEndure Simplified Rehost Migration
- AWS Server Migration Service
- AWS Database Migration Service

Third-party software and services

- AWS Marketplace

Hybrid solutions

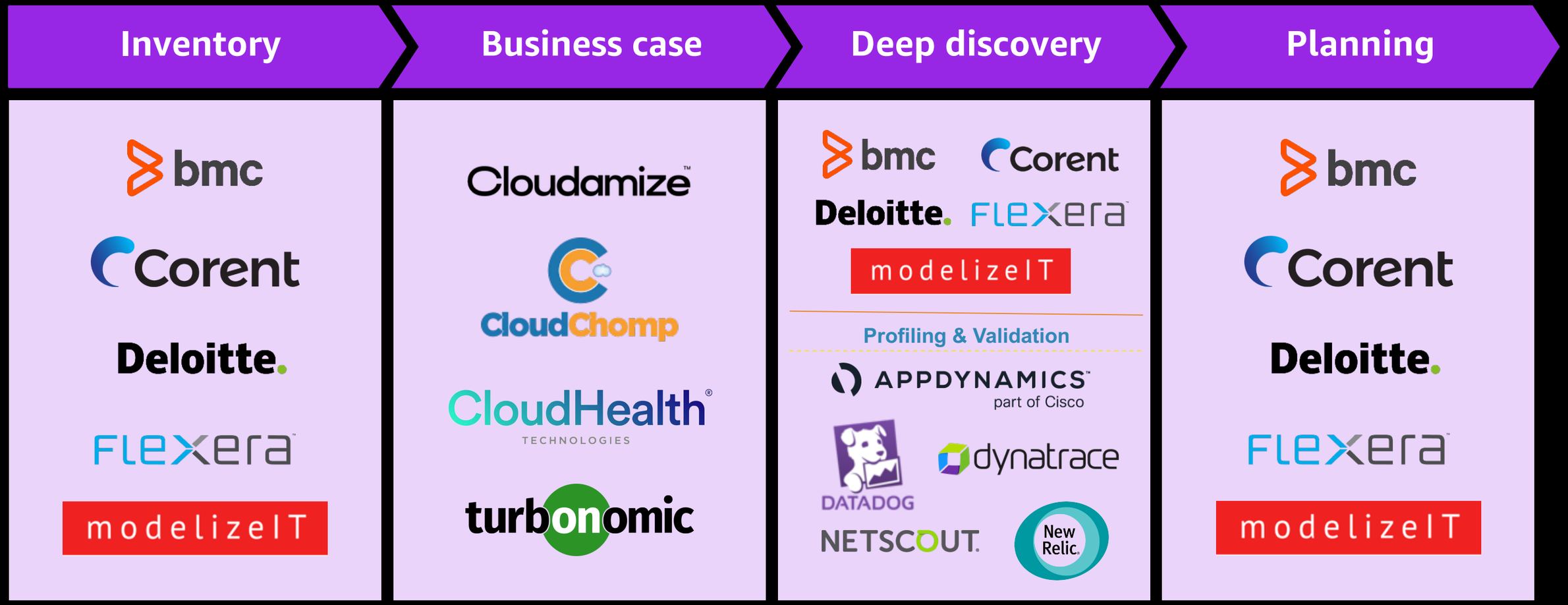
- AWS Outposts
- AWS Direct Connect
- VMware cloud on AWS

Data and storage transfer

- AWS Datasync
- AWS Transfer for SFTP
- AWS Snowball
- AWS Kinesis Data Firehose
- AWS Direct Connect
- AWS Storage Gateway

Partner tools to accelerate your migration plans

AWS Migration Technology Competency Partners



Migration process: Assess



Assess

Mobilize

Migrate and modernize

Migration Evaluator is a free AWS service to produce data-driven business cases



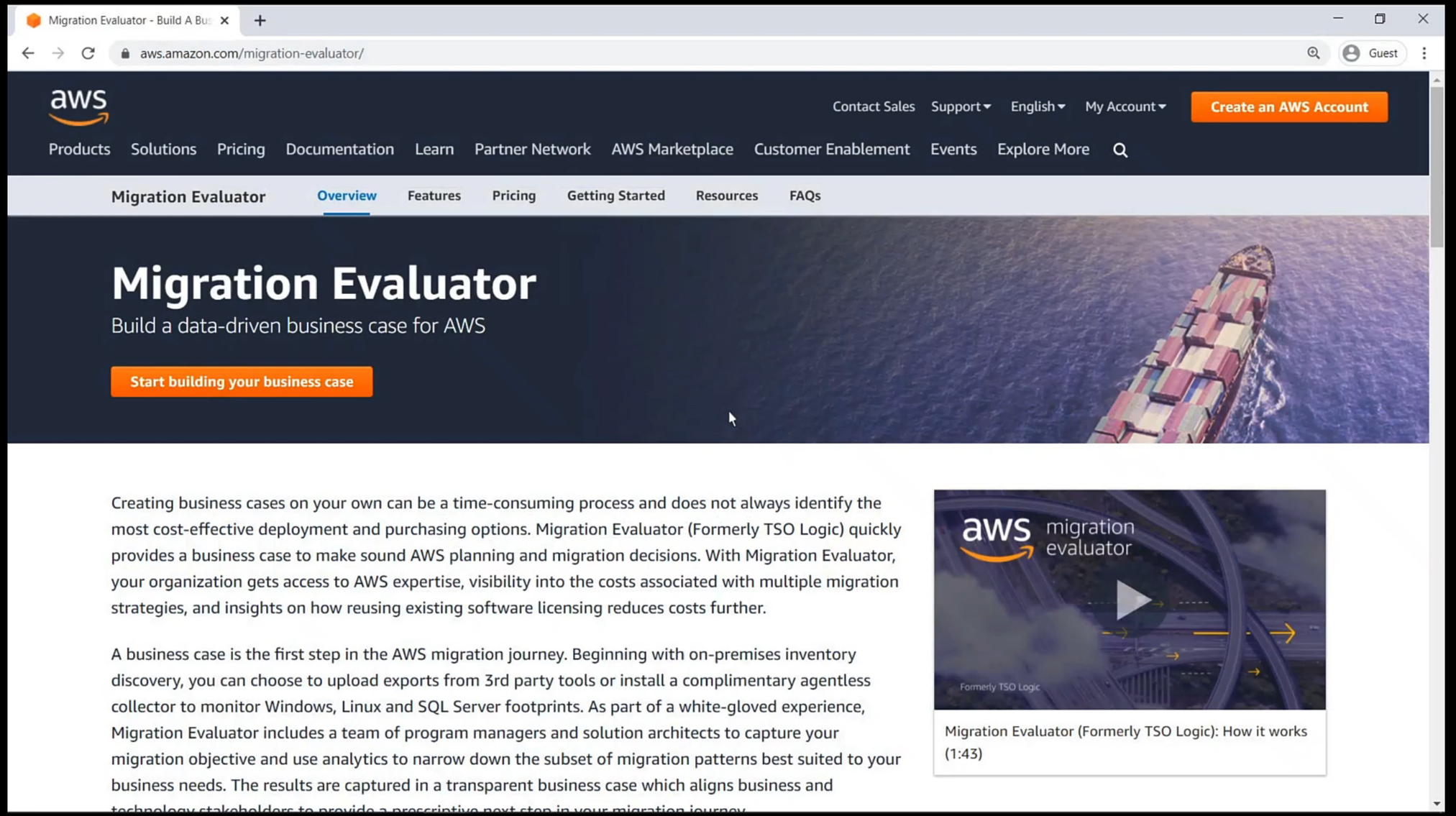
Assess

Analytics drive smarter migrations

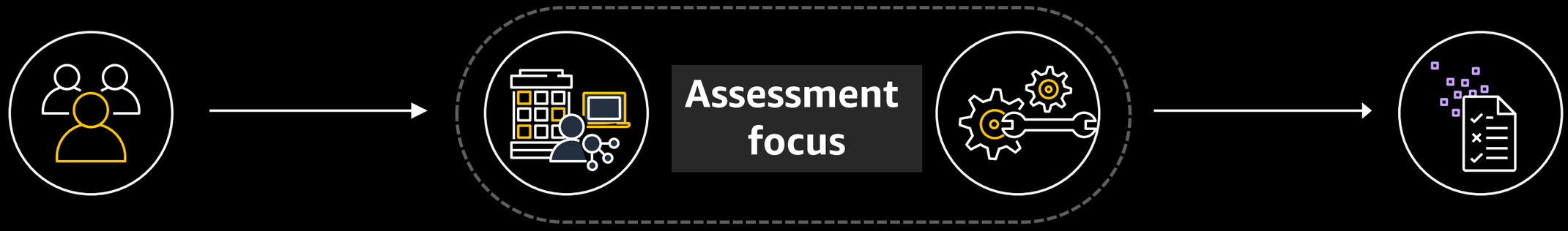
We enable business and IT leaders to:

- Discover compute and storage inventory
- Determine the most cost-effective path to cloud
- Maximize Microsoft licenses for even bigger savings
- Make sound AWS planning and migration decisions
- Align stakeholders on the next step in their migration journey
- Get insights from AWS experts

Migration Evaluator Demo



Migration readiness assessments highlight key areas of focus



Customer data sources

Self-service and guided assessments

Stakeholder conversations and cross-functional teams consensus

Alignment on business strategy, IT drivers and tactical execution needs

Business capability assessment

Business
Value realization

People
Roles and readiness

Governance
Prioritization and control

Technical capability assessment

Platform
Applications and infrastructure

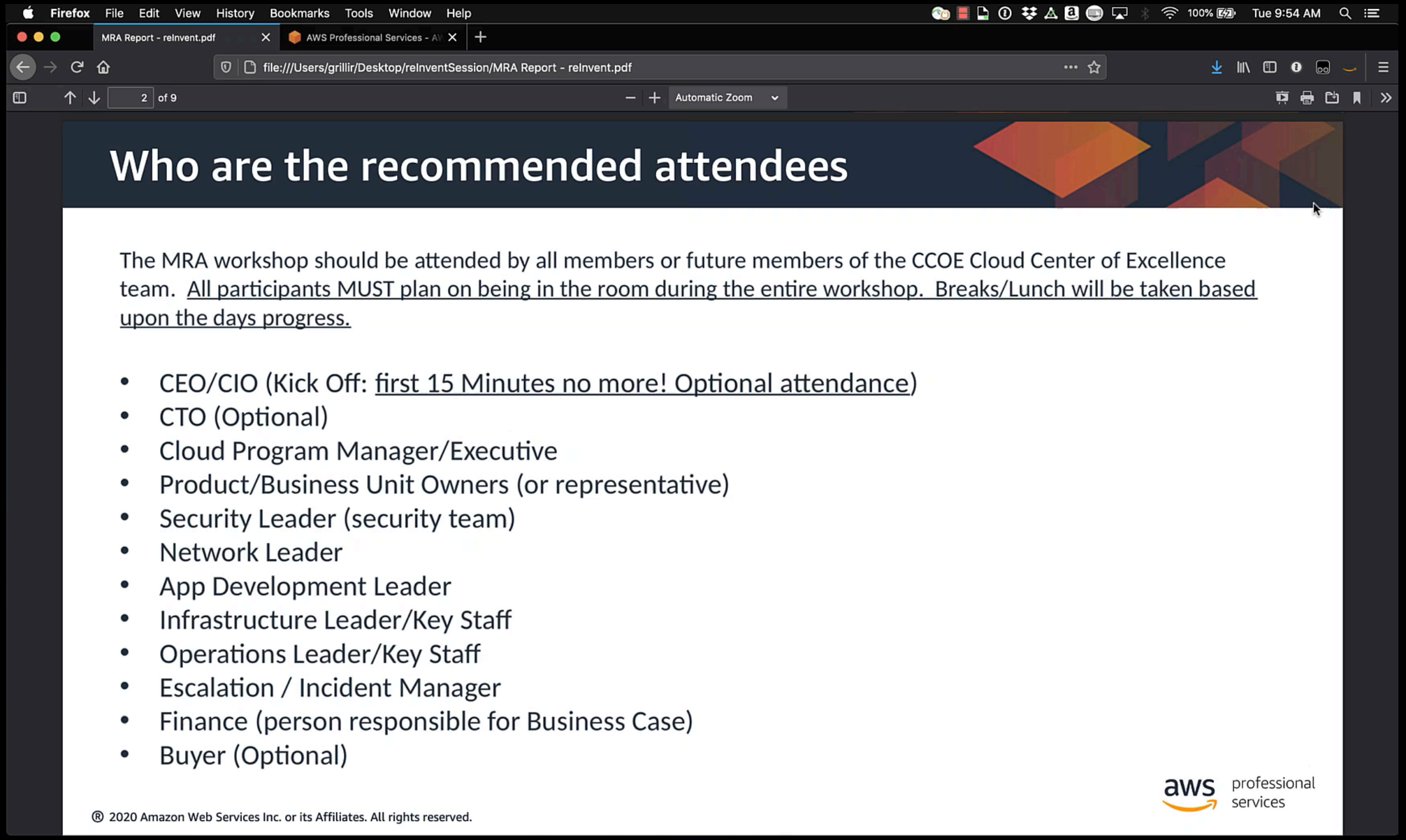
Security
Risk and compliance

Operations
Hybrid and dynamic

Readiness assessment results and roadmap of critical-path actions

Assess

Migration Readiness Assessment Demo



Migration process: Mobilize



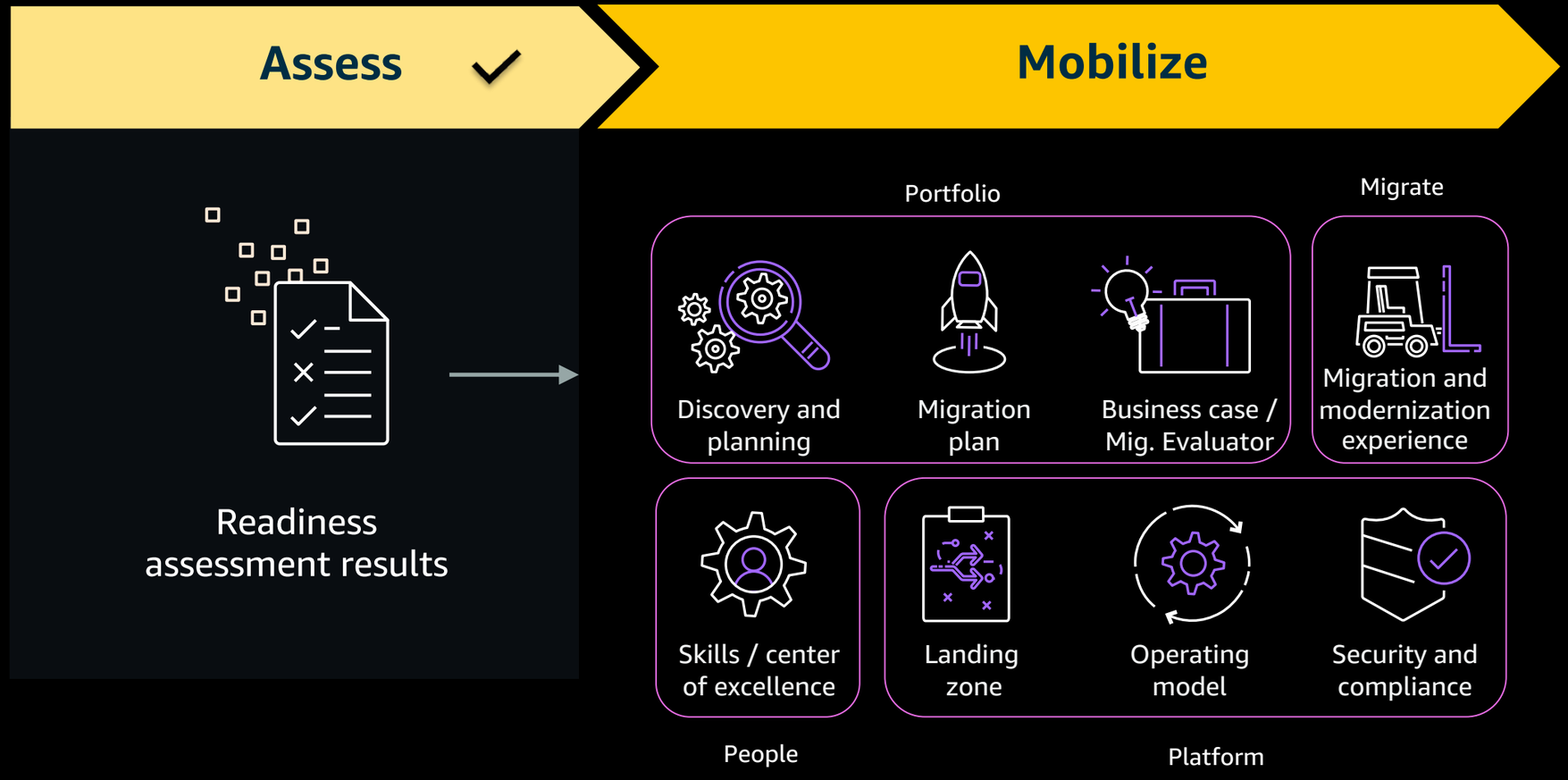
Assess

Mobilize

Migrate and modernize

Use assessment results to improve your migration readiness and mobilize resources





Make a plan for your application portfolio

FOCUS ON YOUR DIFFERENTIATORS

Different organizations in different industry sectors may pivot to a different directional priority at the moment

Or pursue two and reconcile the strategic tension between them



Determine the right migration pattern for your apps

Mobilize

Disconnected and incomplete data

- Asset inventories
- Performance information
- App configuration data
- CMDB
- SLA/OLA
- Architecture
- Tribal knowledge

Discover and organize data

- Applications
- Performance
- Infrastructure

7 Rs

- Refactor
- Replatform
- Repurchase
- Rehost
- Relocate
- Retain
- Retire

Level of effort

Migration plan
(Backlog)

Common strategies for transforming an enterprise application portfolio

Reduce the size of your estate*



Retire



20%



SaaS



20%

Move to AWS

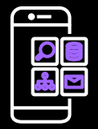


Lift and shift





50%



Replatform

Transform on AWS



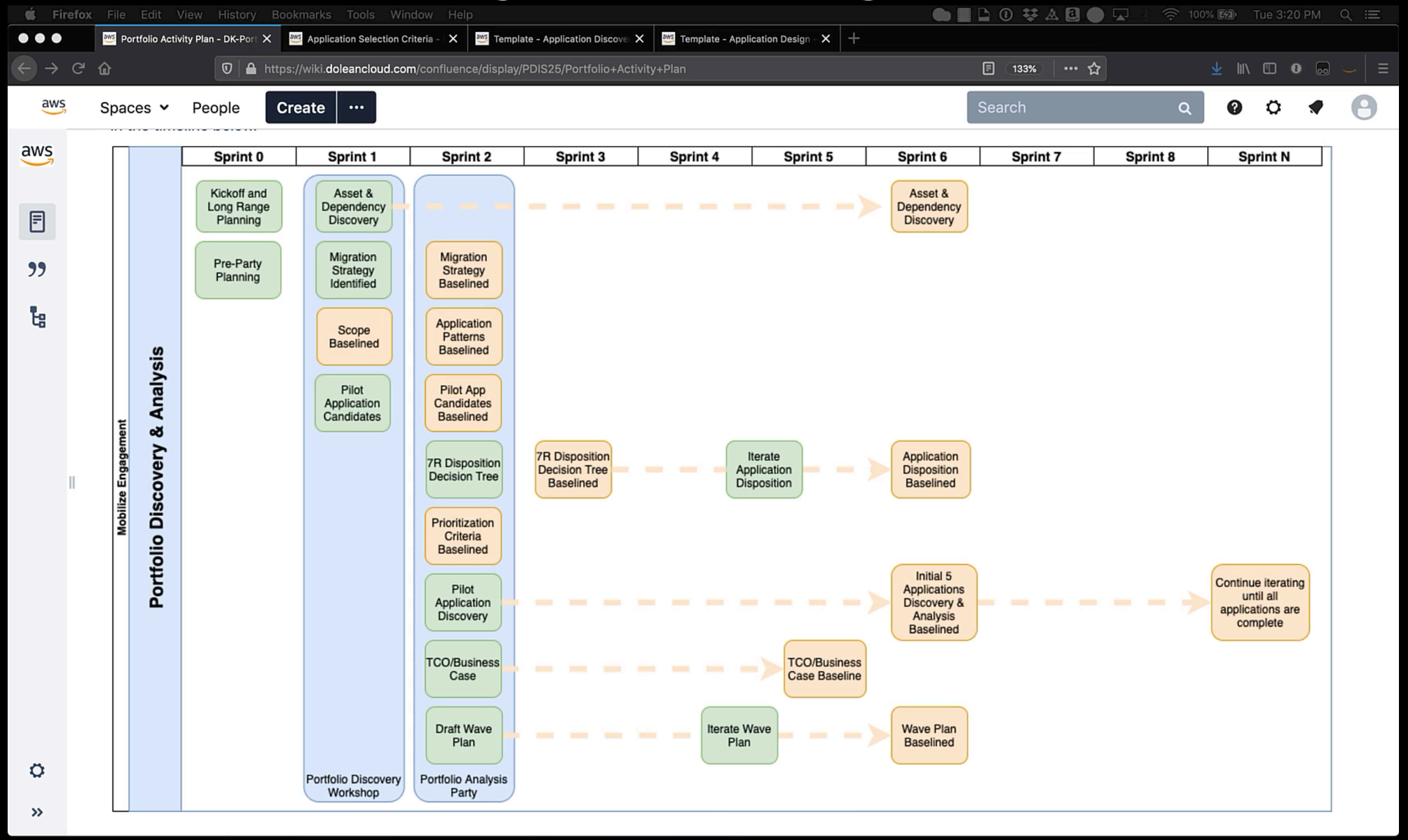
Modernize

Serverless / Containers



10%

Portfolio Discovery and Analysis Demo



Migration process: Migrate and modernize



Assess

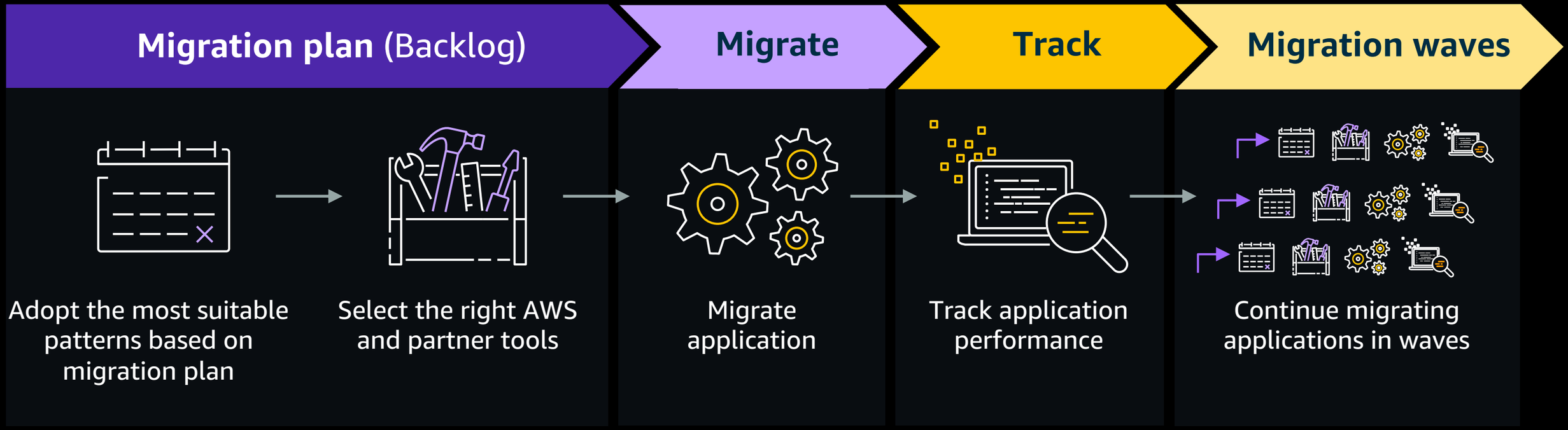
Mobilize

Migrate and modernize

Application migration workflow



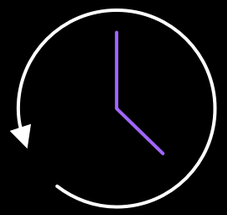
Migrate and modernize



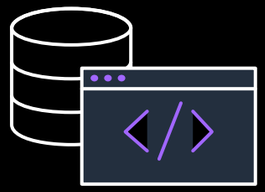
Simplify and accelerate migration with CloudEndure Migration



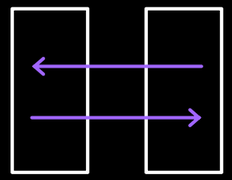
Migrate and modernize



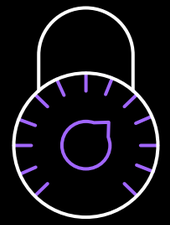
Fast



Flexible



Non-disruptive



Secure

CloudEndure Migration is **free** to all AWS customers and can be automated further using the CloudEndure Migration Factory Solution (https://aws.amazon.com/solutions/implementations/aws-cloudendure-migration-factory-solution/)

Steps to migration success

1.  Develop a sound financial business case
2.  Analyze the environment and workload requirements
3.  Walk before you run
4.  Use each migration to enhance your cloud playbook
5.  Skill up your team and consider bringing in a migration / transformation expert

https://aws.amazon.com/cloud-migration

AWS Migration Accredited Partners to help you migrate



- AWS Migration Competency Partners (80+)
- Established AWS migration practice
- Current managed services or DevOps competency
- At least advanced level AWS Consulting Partner
- AWS certifications and certified consultants
- Audited annually against competencies

AWS professional services

Accelerate customer business outcomes



Resources

Cloud Migration Homepage: https://aws.amazon.com/cloud-migration/

Additional Migration Resources, AWS Prescriptive Guidance, AWS Enterprise Blog Collection:
https://aws.amazon.com/cloud-migration/resources/

Migration Immersion Day: https://migration-immersionday.workshop.aws/en

All AWS workshops available here: https://www.workshops.aws/

Thank you!



AWS re:Invent

© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.



Please complete the session survey

AWS re:Invent

© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.