

AWS State, Local, and Education Learning Days

Phoenix, AZ

10:15am – 11:15am

200
level

**Large-Scale
Migration &
Modernization
with AWS**

Lessons Learned and
Best Practices



Large-Scale Migration and Modernization with AWS

Best Practices and Lessons Learned

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Agenda



Large-Scale Migrations

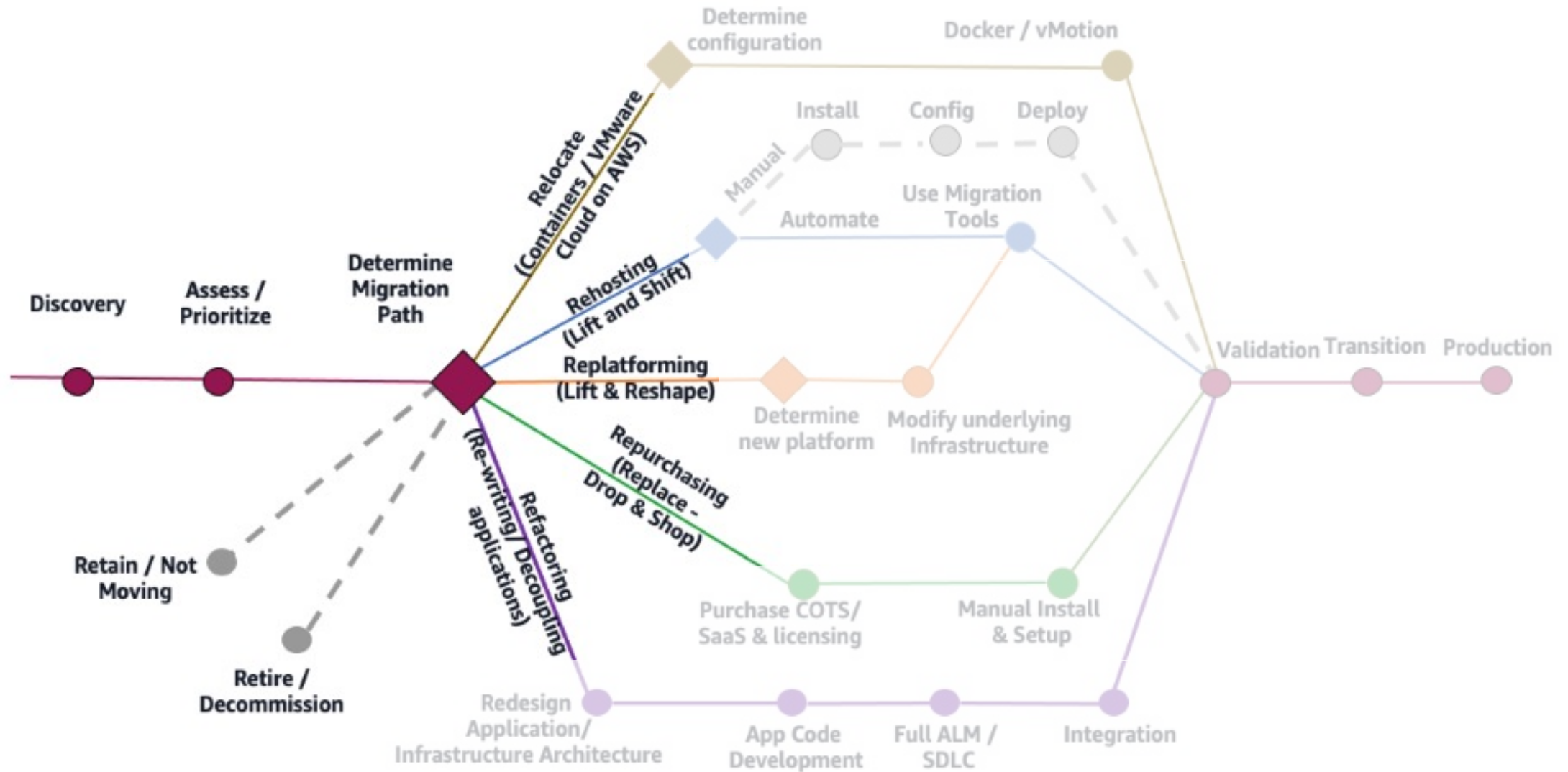
- What is a large scale migration to AWS?
- Choosing AWS for migrations
- How AWS helps with large-scale migrations
- Cloud modernization within migrations
- Q&A

What is a Large-Scale Migration to AWS?



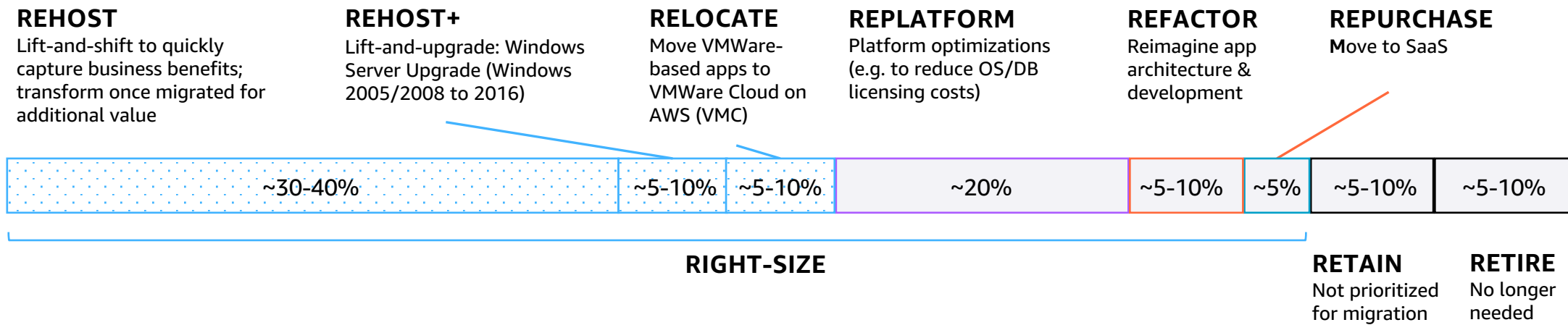
- **Migration:** Transferring on-premises data centers, applications, workloads, and data to AWS cloud infrastructure.
- **Large-scale:** Involves hundreds/thousands of servers, TB/PBs of data, and complex dependencies (e.g., mainframes, hybrid setups).

The 7Rs Framework



Migration and modernization patterns

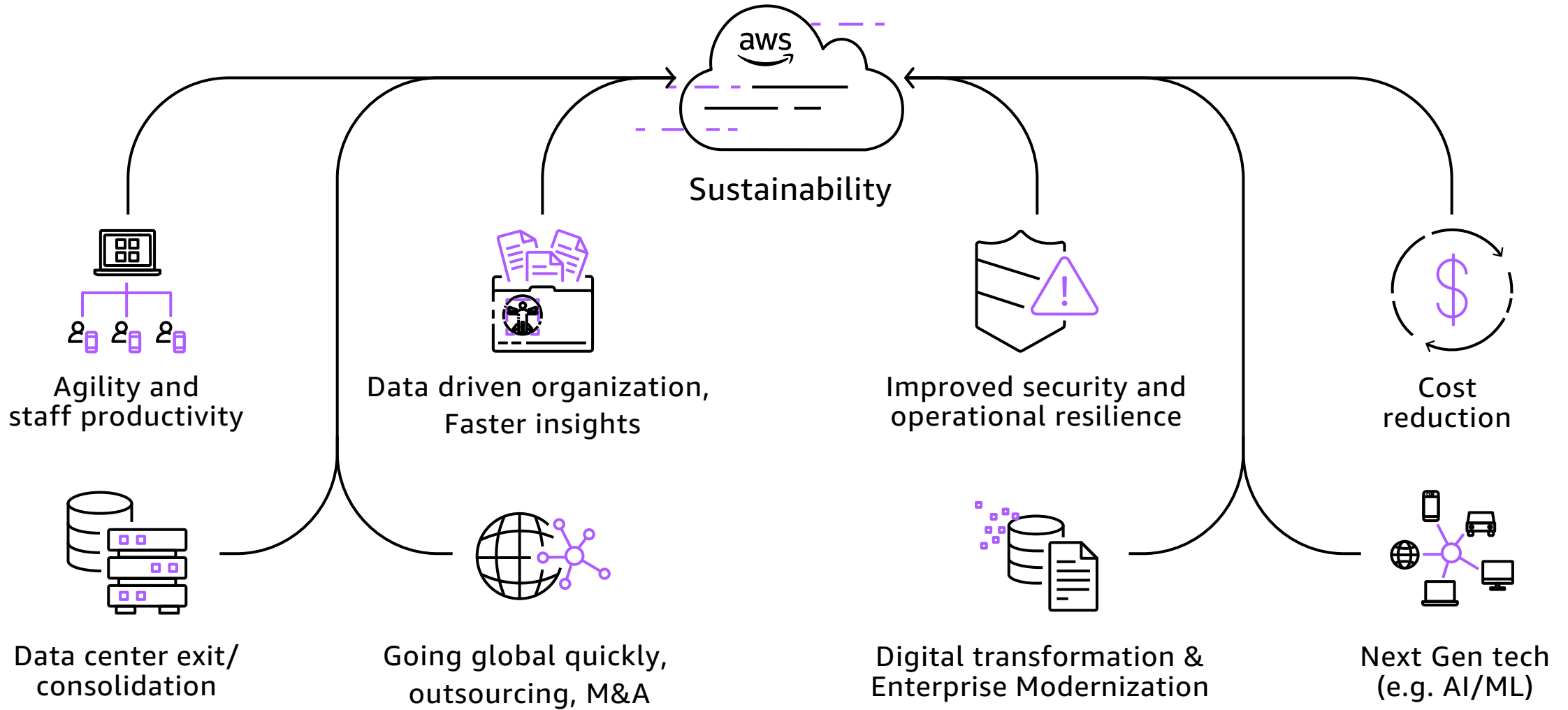
Typical IT environment by migration pattern:



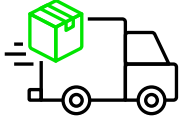
Migration (rehost/relocate) helps you quickly realize cloud benefits; **Modernization** (replatform/refactor) helps you maximize those benefits;
Focus on both, and periodic 'right sizing', to fully realize cloud benefits



Business drivers



Why choose AWS?



Delivery speed improvement



Time-driven data center exit



Acquisition of another business



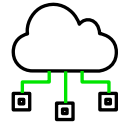
Divestiture of a line of business



Reduce technical debt



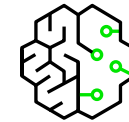
Cost reduction



Moving to multi-tenancy SaaS



Licensing cost reduction



Enabling gen AI solutions



Removing undifferentiated lifting



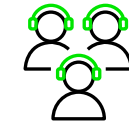
Security improvements



Availability improvements



Moving to data-driven business



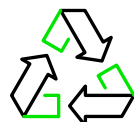
Changing contact center technology



Moving to data as a product



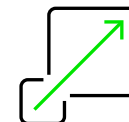
Durability improvements



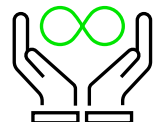
Sustainability improvements



Move to compete globally

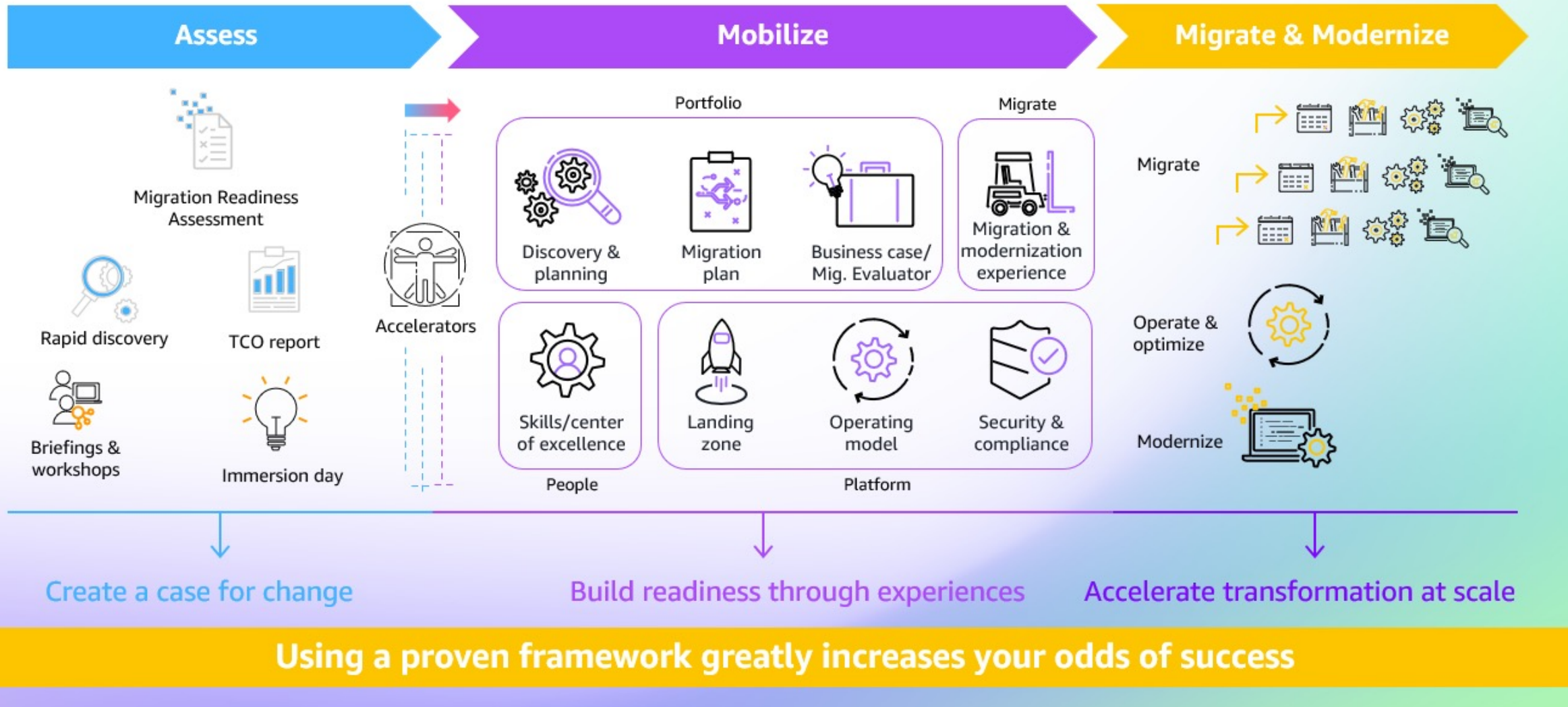


Scalability improvements



All of the above!!

AWS Migration Framework



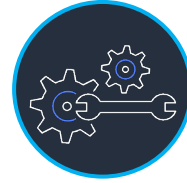
Blockers for cloud value realization



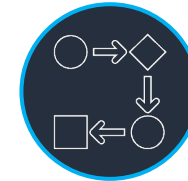
Lack of visible & active sponsorship



Siloed Workflows between orgs



Architectural Entanglement



Undefined operating model



Analysis Paralysis



Talent and skills gaps



Misaligned teams



Unrealistic goals

AWS deploys proven mechanisms, developed over hundreds of customer engagements, to unblock and accelerate cloud journey

Specialized offerings to improve migration success

PROFESSIONAL SERVICES

- Rapid Migration Offering
- Modernize with AWS
- Application Modernization Lab
- Enterprise Transformation
- Contact Center on AWS
- SAP on AWS
- Modern Data Strategy
- Gen AI Innovation Center
- Generative AI on AWS
- AI/ML on AWS

SUPPORT & MANAGED SERVICES

- AWS Enterprise Support Plans
- AWS Incident Detection & Response
- AWS Countdown Premium
- AWS Unified Operations
- Industry Support Solutions
- AWS Managed Services

SECURITY & COMPLIANCE

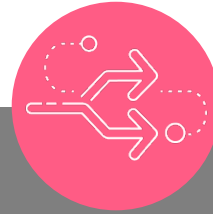
- Security Professional Services
- AWS Security Assurance Services
- AWS Security Incident Response

Our comprehensive approach to enablement



In-Person Immersion Days

- Workshops tailored to team needs or project objectives
- Taught by AWS Solution Architects and subject matter experts
- Access to regional higher ed learning days + seminars



Personalized Plans

















































- Learning Needs Analysis for data driven plan creation
- Customized for each staff member based on role and team requirements
- Incorporates individual career goals



Skill Builder + Lab Access

- Self-Paced courses, Labs, and Digital Classroom access
- Gamified learning with AWS Cloud Quest and Jams
- Full-length AWS certification practice exams

AWS Partner Network

DevOps	Security	Storage	Networking	Database	Business Apps	AWS Data Exchange	Professional services
							
							
							
							
							
							



University of Newcastle

- Emergency migration of **139 applications** to **AWS in 9 months** due to data center demolition, requiring partnership with AWS, Deloitte, and CSA
- Leveraged AWS services to **re-platform 72% and refactor 23% of applications**, including NUSTAR student management system serving **39,000 users**
- Achieved rapid infrastructure deployment through AWS (**from 8 weeks to 6 minutes**), implemented high availability with Amazon RDS Multi-AZ, and **reduced infrastructure costs by 20%**

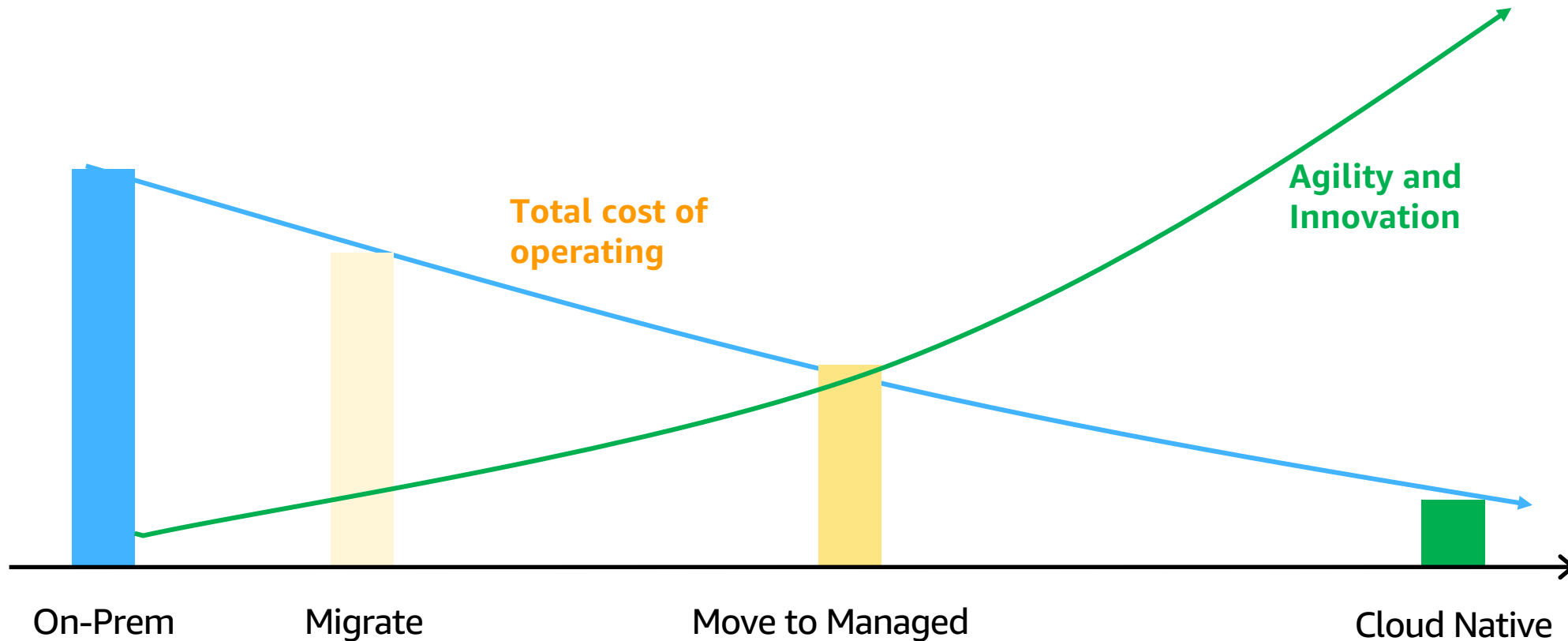


Minnesota Department of Health

- Migrated **150 applications** to AWS in **20 months** due to aging data center equipment and escalating costs
- Partnered with AWS to implement DevOps model with **high-level process automation**
- Achieved **50% reduction in data center power consumption** and decreased IT infrastructure costs by **\$150K annually**



Both migrating and modernizing are important to fully realize the benefit of cloud





Q&A



Thank you!

Dirk Timmermann

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Please complete the survey
for this session



**Large-Scale Migration
and Modernization
with AWS**

Coming up next

11:30AM-12:30PM

300
level

**Cloud architectural
patterns: Platform
and application
best practices**

Introductory session
covering an overview of
core cloud design
strategies, essential
architectural patterns,
security best practices and
operational frameworks.