Migrate Away That Technical Debt (Level 200)

Manav Prabhakar, Practice Manager

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What's ahead?

- Why migrate to AWS? In 5 mins or less…
- Migration Methodology
- Migration Tools & Programs
- It's quiz time!
- What to do next? (and Critical Success Factors)

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WHY MIGRATE TO AWS?

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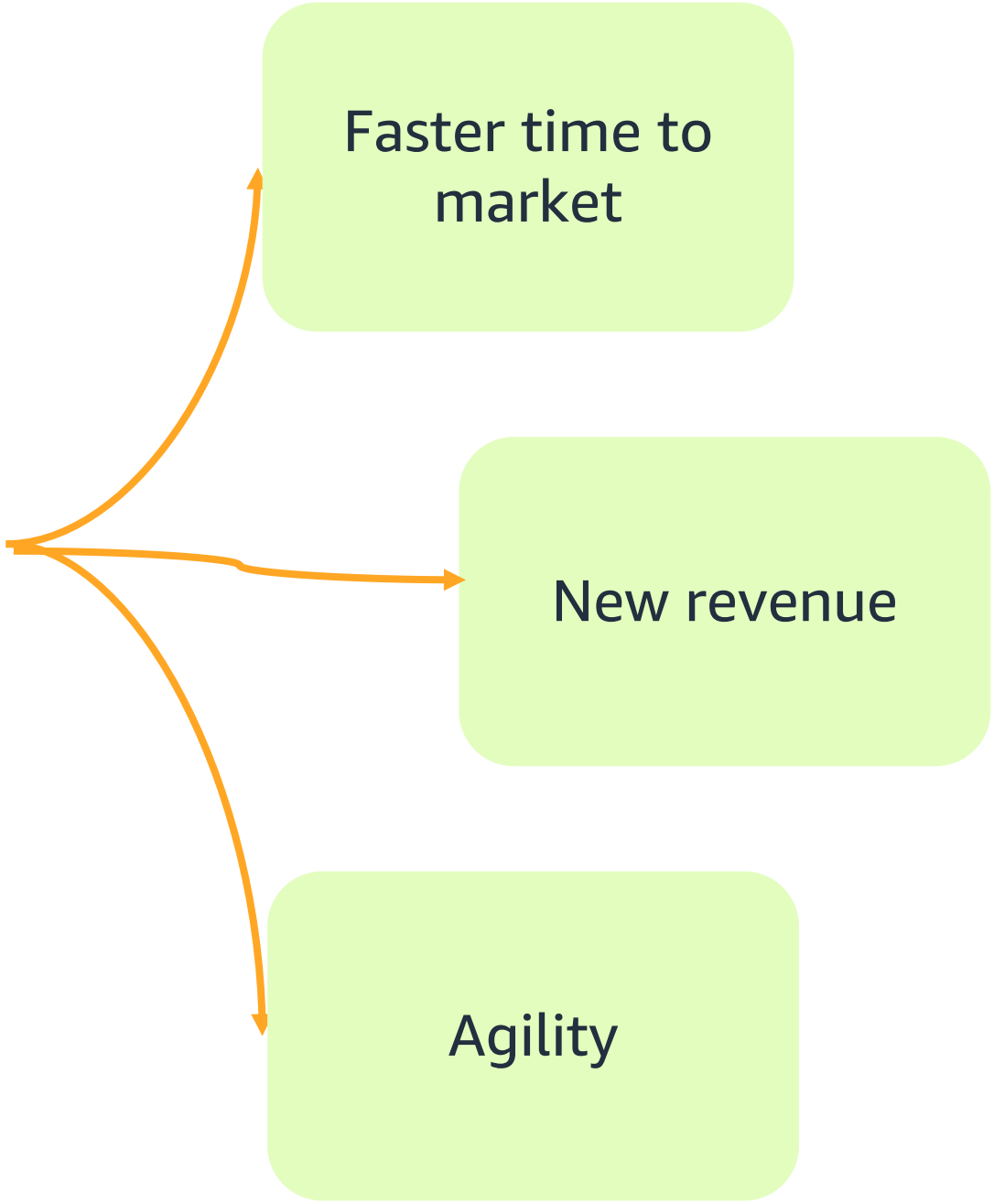
DRIVE BUSINESS VALUE



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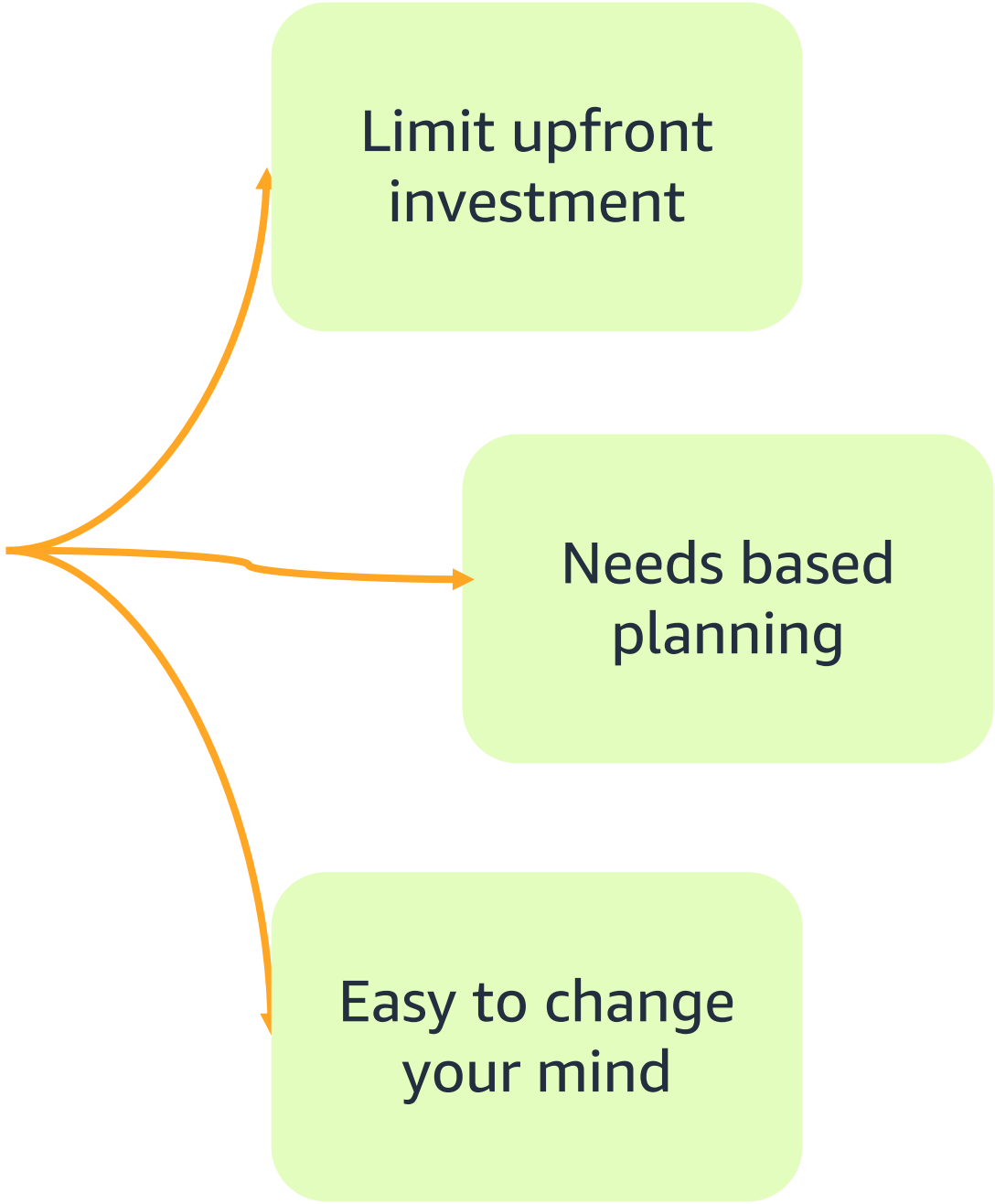
REDUCE RISK



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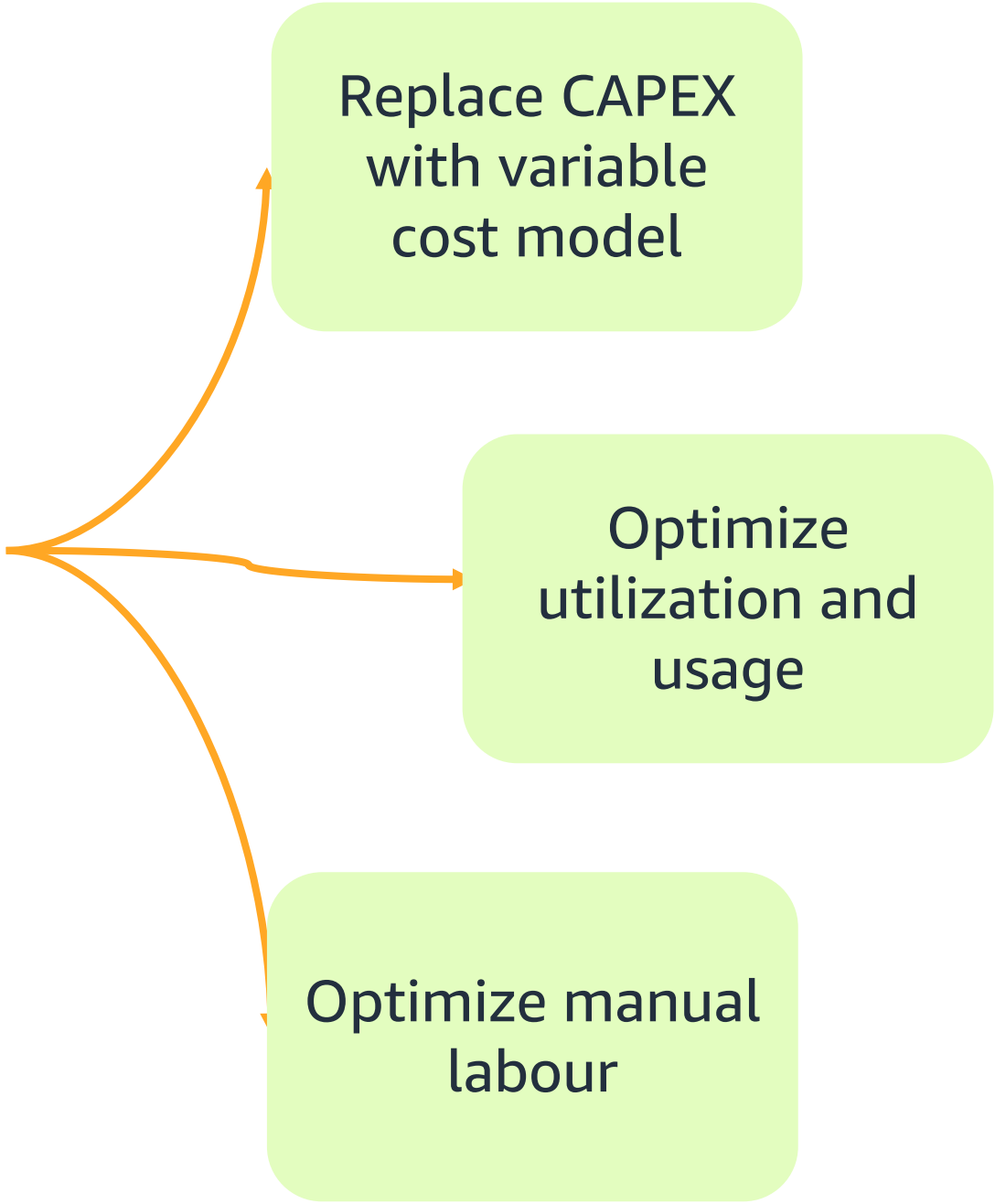
LOWER TCO



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MIGRATION METHODOLOGY

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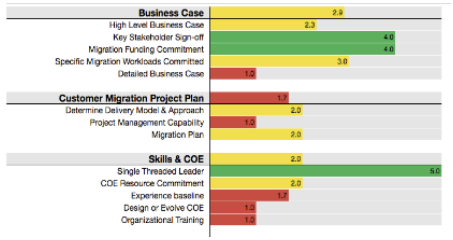
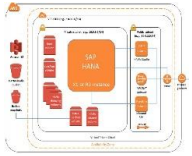
Migration Methodology

MIGRATION READINESS ASSESSMENT (MRA) → **MIGRATION READINESS & PLANNING (MRP)** → **MIGRATIONS & OPERATIONS**



Rapid Discovery

Directional Business Case



Discovery & Planning

Landing Zone

Migrations & Expertise

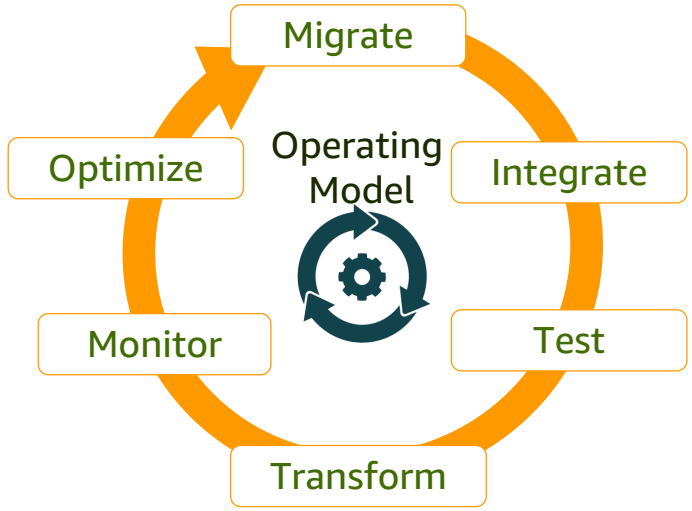
Skills / CoE

Business Case

Migration Plan

Operating Model

Security & Compliance



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MRA based on AWS Cloud Adoption Framework

Business Capability Focused

Business
Value Realization

People
Roles and Readiness

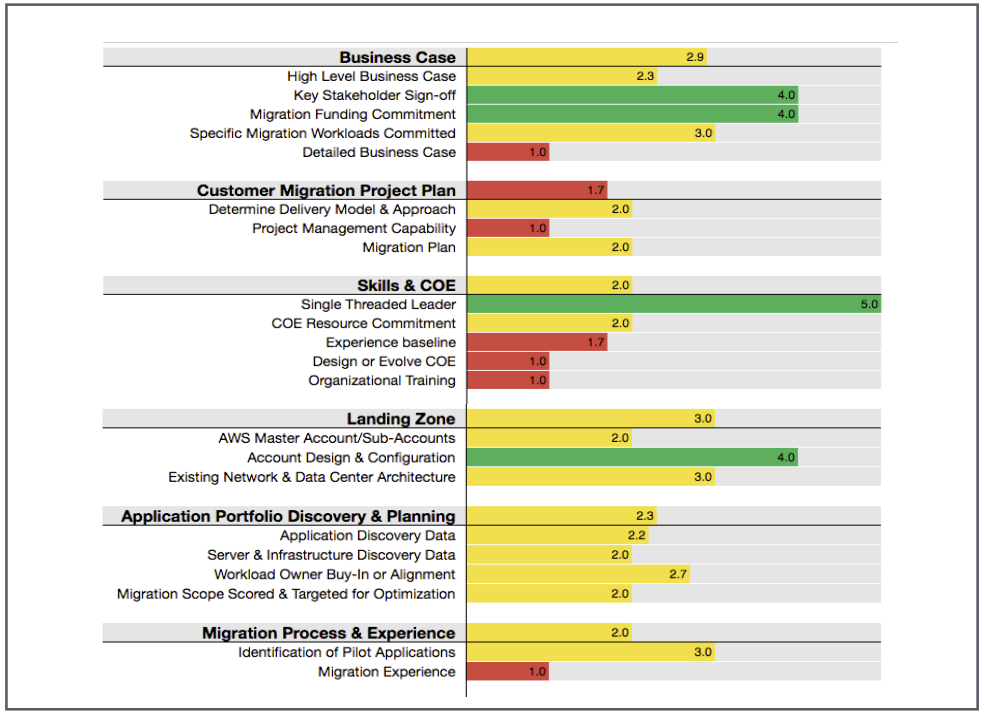
Governance
Prioritization and Control

Technical Capability Focused

Platform
Applications and Infrastructure

Security
Risk and Compliance

Operations
Hybrid and Dynamic



Migration Project Observations and Actions: [Example]

- Determine if CMDB is up to date and covers targeted areas
- Select Cloud project team leader and business area leader
- Establish an security assessment team to review regulatory requirements

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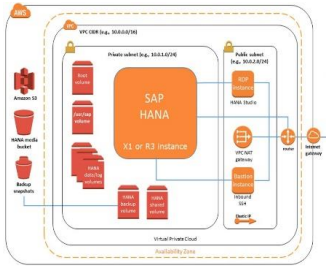
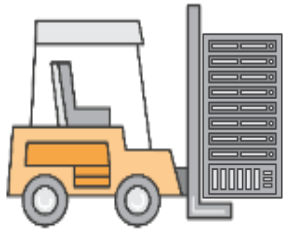
Migration Readiness & Planning Outcomes

Discovery & Planning



Landing Zone

Skills



Migrations Experience

Migration Business Case

Security & Compliance

Migration Plan

Operating Model

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Application Migration Strategies (6Rs)

REHOST	**R**EPLATFORM	**R**EFACTOR
REPURCHASE	**R**ETIRE	**R**ETAIN

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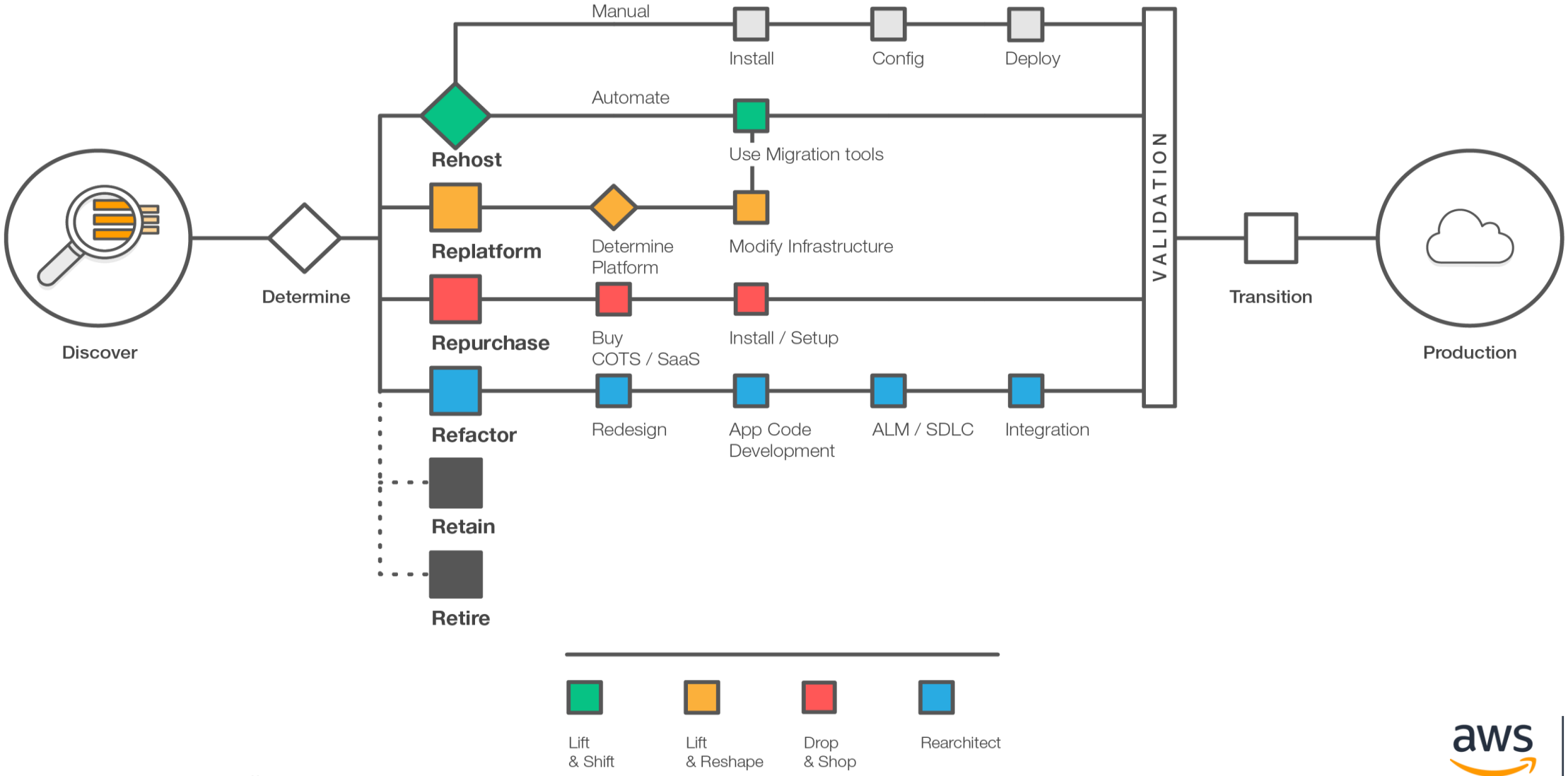
Application Migration Strategies (6Rs)



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MIGRATION TOOLS & PROGRAMS

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Migration Tools & Programs

Integrated discovery tools:

- AWS Discovery Connectors
- AWS Discovery Agents

Integrated migration tools:

- AWS Database Migration Service
- AWS Server Migration Service
- ATADATA ATAmotion
- CloudEndure Live Migration

AWS migration programs:

- Professional Services
- Migration Acceleration Program
- Migration Partners Solutions

Documentation & support:

- User Guide
- Forums
- Contact us

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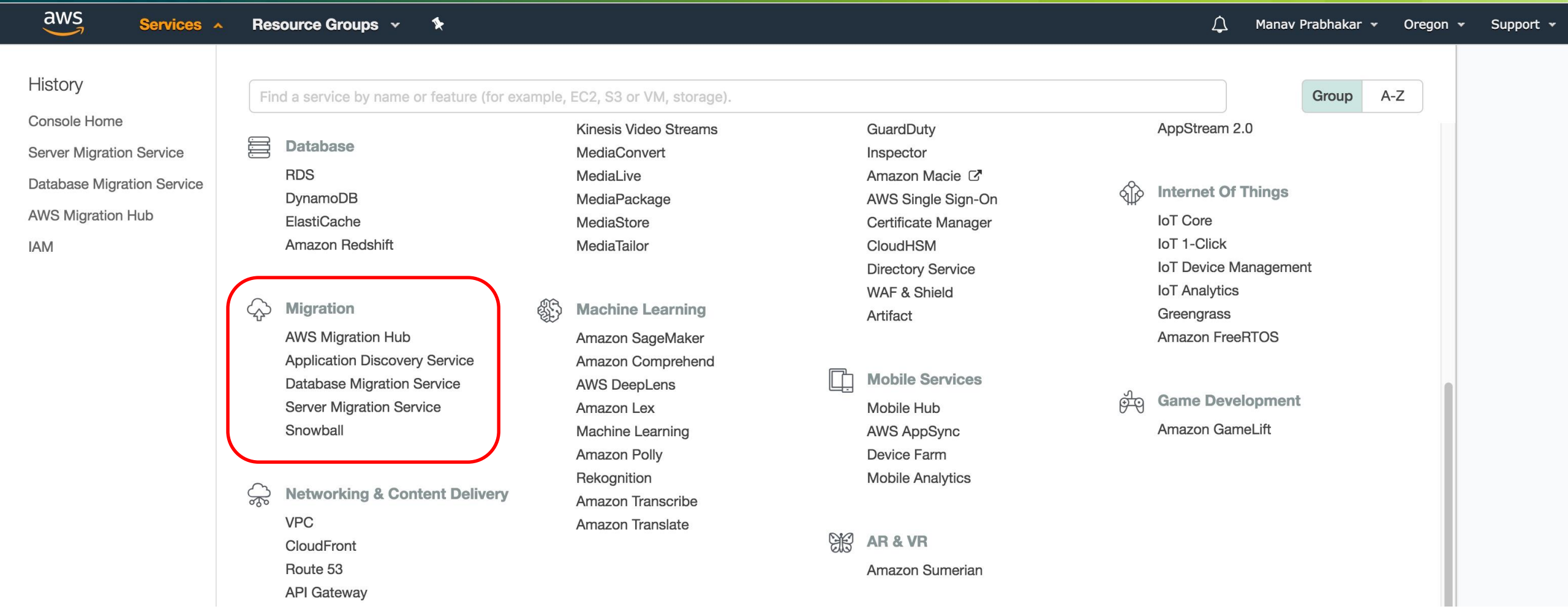
Migration Hub



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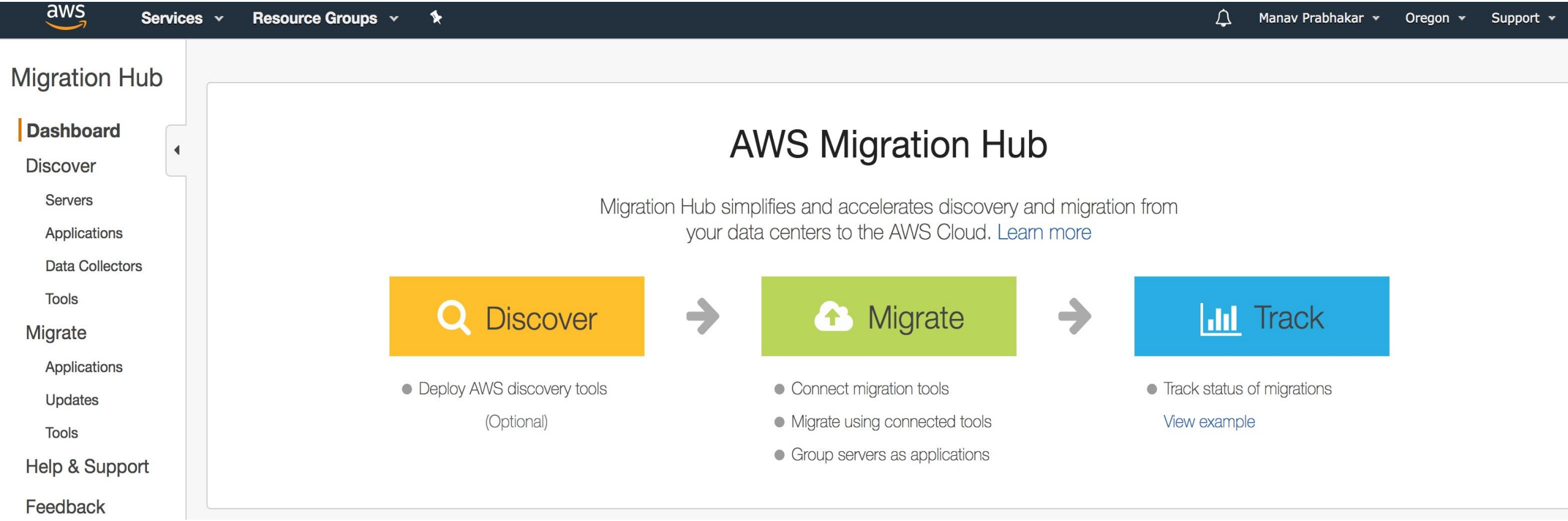
Migration Hub



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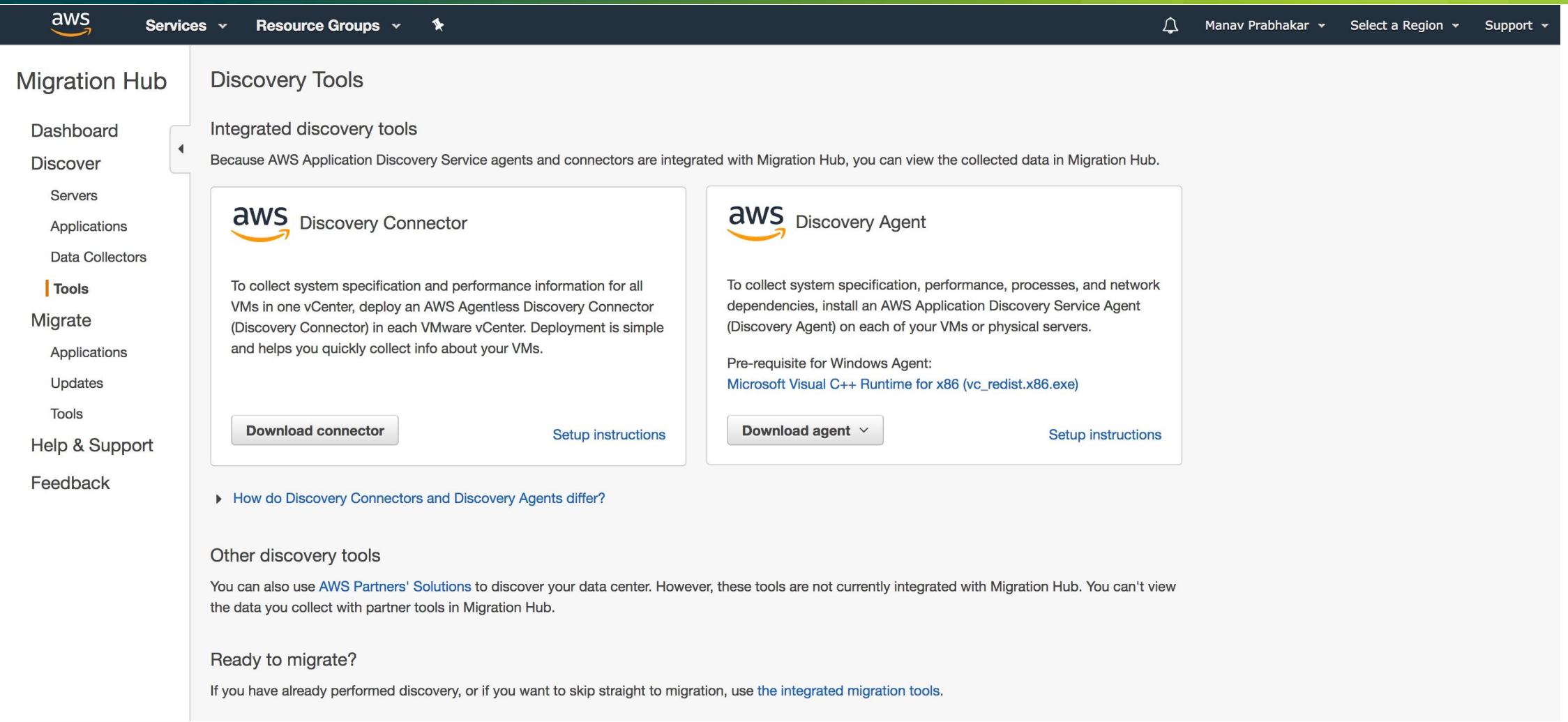
Discovery Tools



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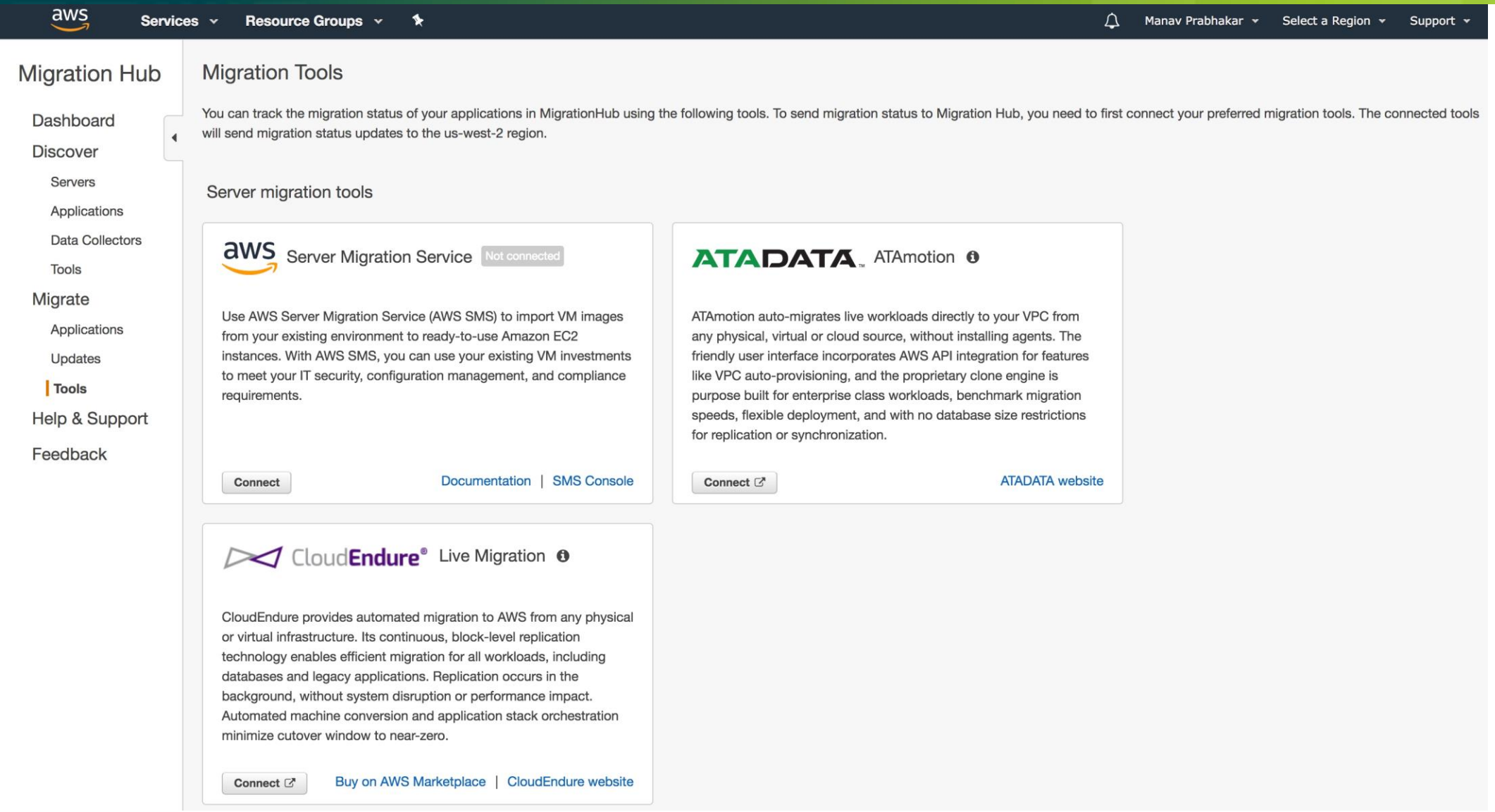
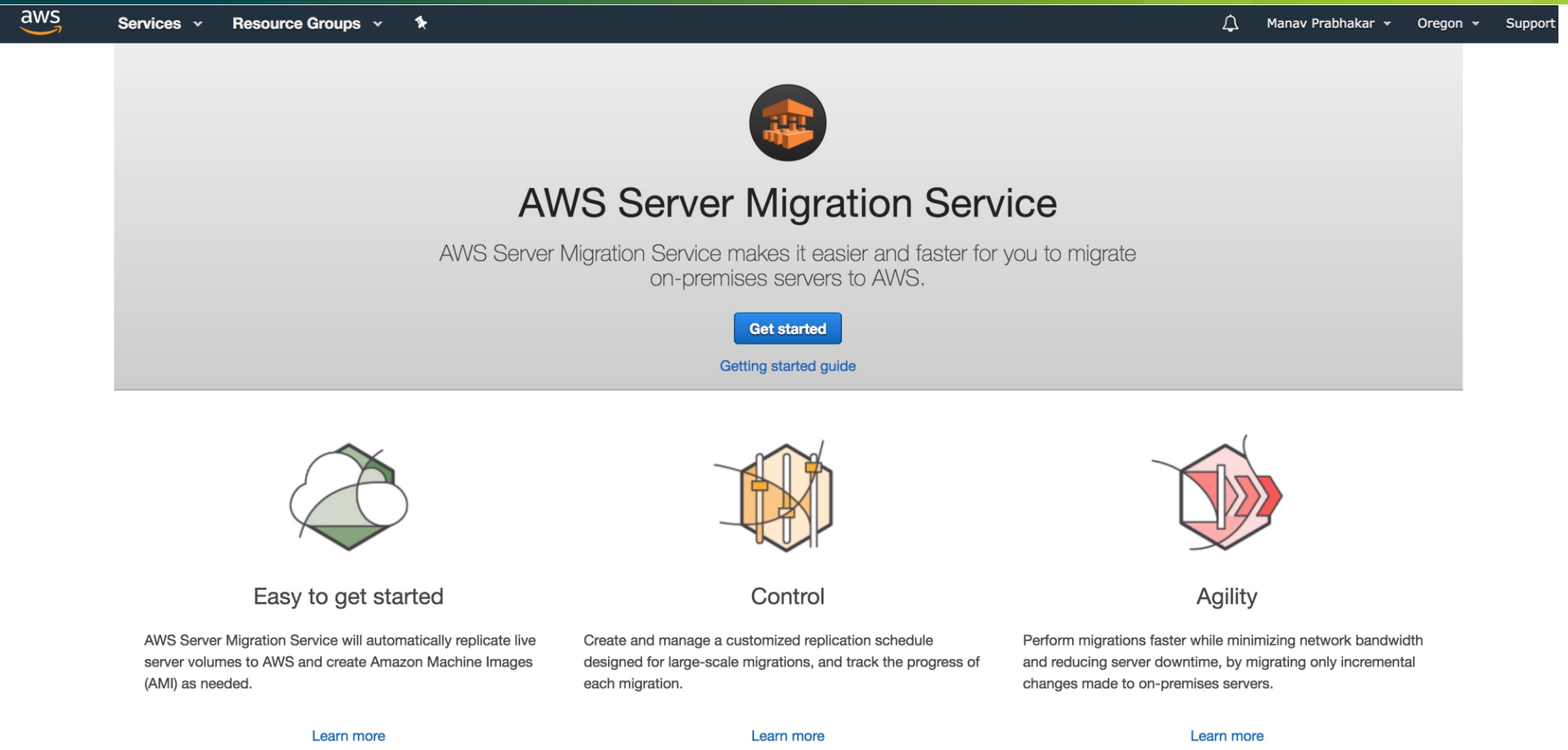
Migration Tools



AWS Server Migration Service



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AWS Database Migration Service

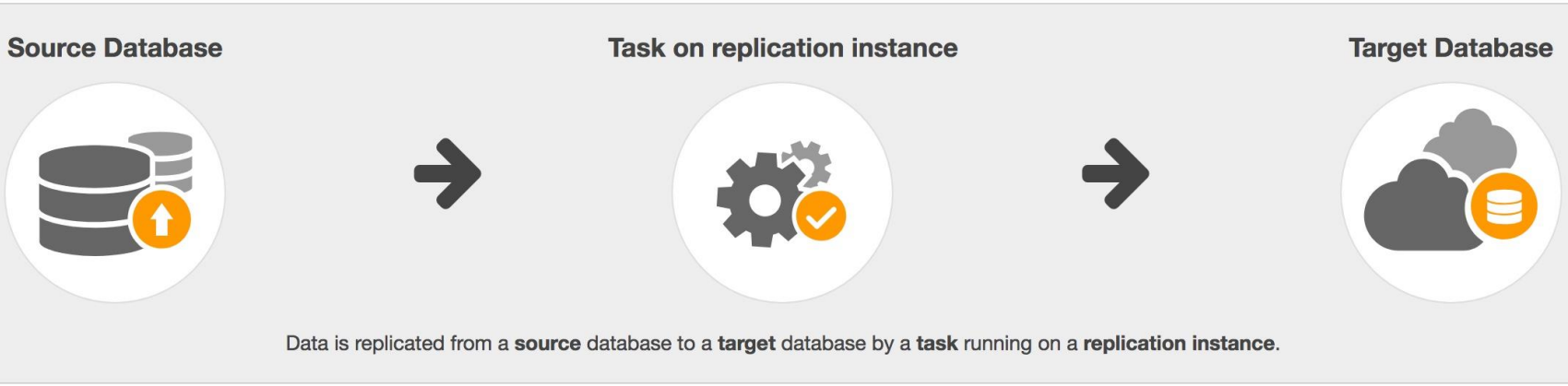
aws Services Resource Groups Manav Prabhakar Oregon Support

Setting up your first replication task

- **Step 1: Welcome**
- Step 2: Replication instance
- Step 3: Database endpoints
- Step 4: Task

Welcome to AWS Database Migration Service

AWS Database Migration Service tasks require at least a source, a target, and a replication instance. Your source is the database you wish to move data from and the target is the database you're moving data to. The replication instance processes the migration tasks and requires access to your source and target endpoints inside your VPC. Replication instances come in different sizes depending on your performance needs. If you're migrating to a different database engine, AWS Schema Conversion Tool can generate the new schema for you. Download AWS Schema Conversion Tool



Cancel Previous Next

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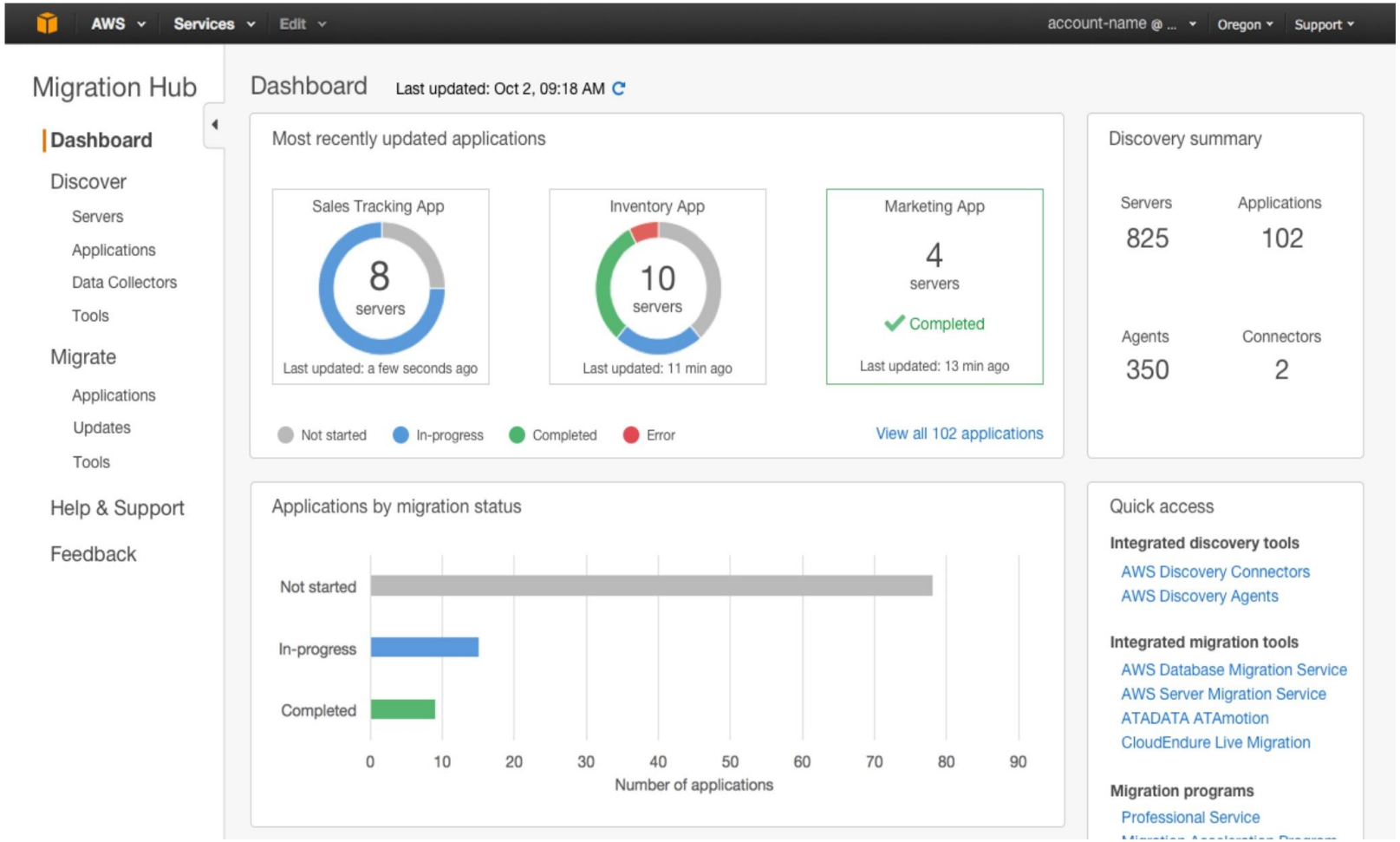
Migration Hub Dashboard

Migration Hub dashboard example

X Close



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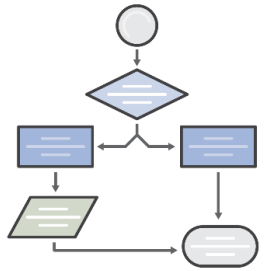
Migration Acceleration Program



Migration Methodology

AWS and Partner Tools

AWS Partners

AWS Training

AWS Professional Services

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Migration Partner Solutions

- 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

https://aws.amazon.com/migration/partner-solutions

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IT’S QUIZ TIME!!

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Scenario 1

- Web based 3 tier application
- X86 virtualized
- Supported OS e.g. Microsoft Windows Server 2012
- Little to no dependency on other apps that are running on-premise
- Database (DB) can be migrated to Amazon Relational Database Service (RDS) on a supported engine
- Well understood and documented architecture

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Scenario 1

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REHOST

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Scenario 2

- Web based 3 tier application
- Non x86
- OS not supported e.g. AIX, Solaris
- Little to no dependency on other apps that are running on-premise
- App server runs on WebLogic
- DB can be migrated to Amazon RDS on a supported engine
- Well understood and documented architecture

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Scenario 2

- 3 tier application
- Non x86
- OS not supported e.g. AIX, Sol
- Little to no dependency
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- App server runs
Logic
- DB can be migra
to Amazon RDS on a supported engine
- Well understood and documented architecture

REPLATFORM

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Scenario 3

- Client-server application
- Non x86
- Runs on Mainframe
- Several dependencies on other applications
- DB can be migrated to Amazon RDS on a supported engine
- Architecture not well understood
- Faces variable spikey demand
- Difficult to make code changes

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Scenario 3

- Client-server application
- Non x86
- Runs on Mainframe
- Several dependencies on [illegible]plications
- DB can be migrated [illegible]on RDS on a supported engine
- Architecture no[illegible]derstood
- Faces variable spikey demand
- Difficult to make code changes

REFACTOR

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WHAT TO DO NEXT?

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#1 Build a Business Case

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#1 Build a Business Case
Directional and then Detailed if required

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#2 Analyze your Application Portfolio

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#2 Analyze your Application Portfolio
No Analysis Paralysis, please!

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#3 Build a Migration Plan

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#3 Build a Migration Plan
Make sure to cover Tech, People, and Processes

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#4 Don’t ignore the Operating Model

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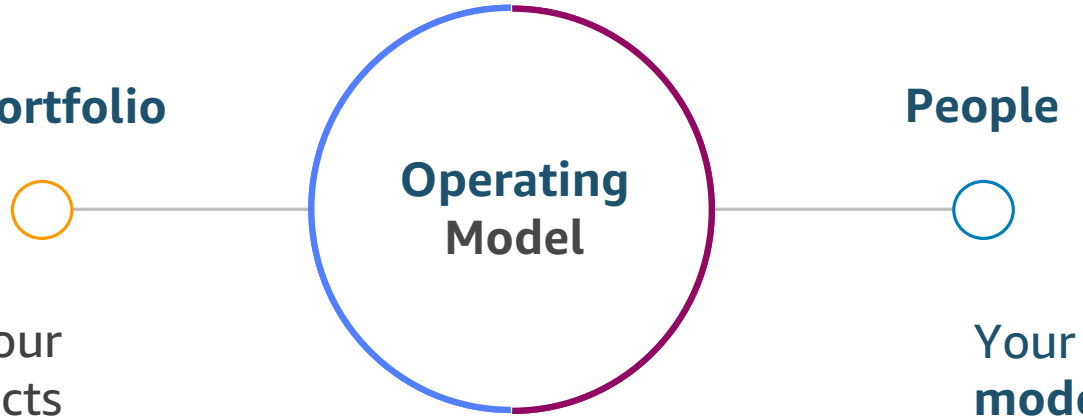
What is an Operating Model?



The characteristics of your **application portfolio** impacts the flexibility of your future-state **operating model**.

Your future-state **operating model** impacts your approach to transforming your **people, skills,** and **organization**.

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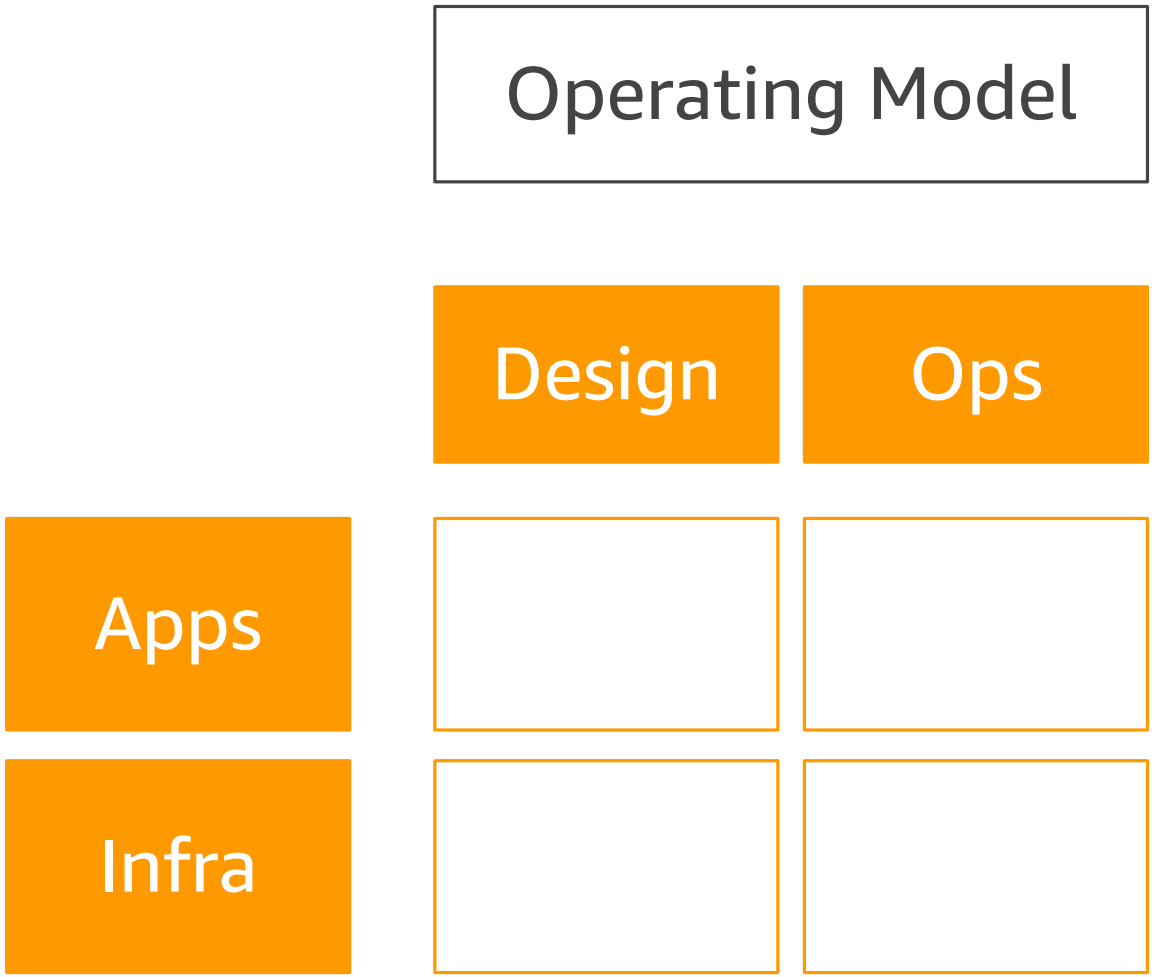
Building an Operating Model



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#5 Start Migrations

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#5 Start Migrations
Integrate Learnings, Migrate Faster

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#6 Ask for Help!

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#6 Ask for Help!
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Classroom Training

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AWS Certification

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AWS Competency Partners

APN Partners who have demonstrated technical proficiency and proven customer success in specialized solution areas.

AWS Marketplace

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AWS Service Delivery Partners

APN Partners with a track record of delivering specific AWS services to customers.

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