



SUMMIT
ONLINE

I M M O 1

Enterprise cloud migration meets application containerisation on AWS

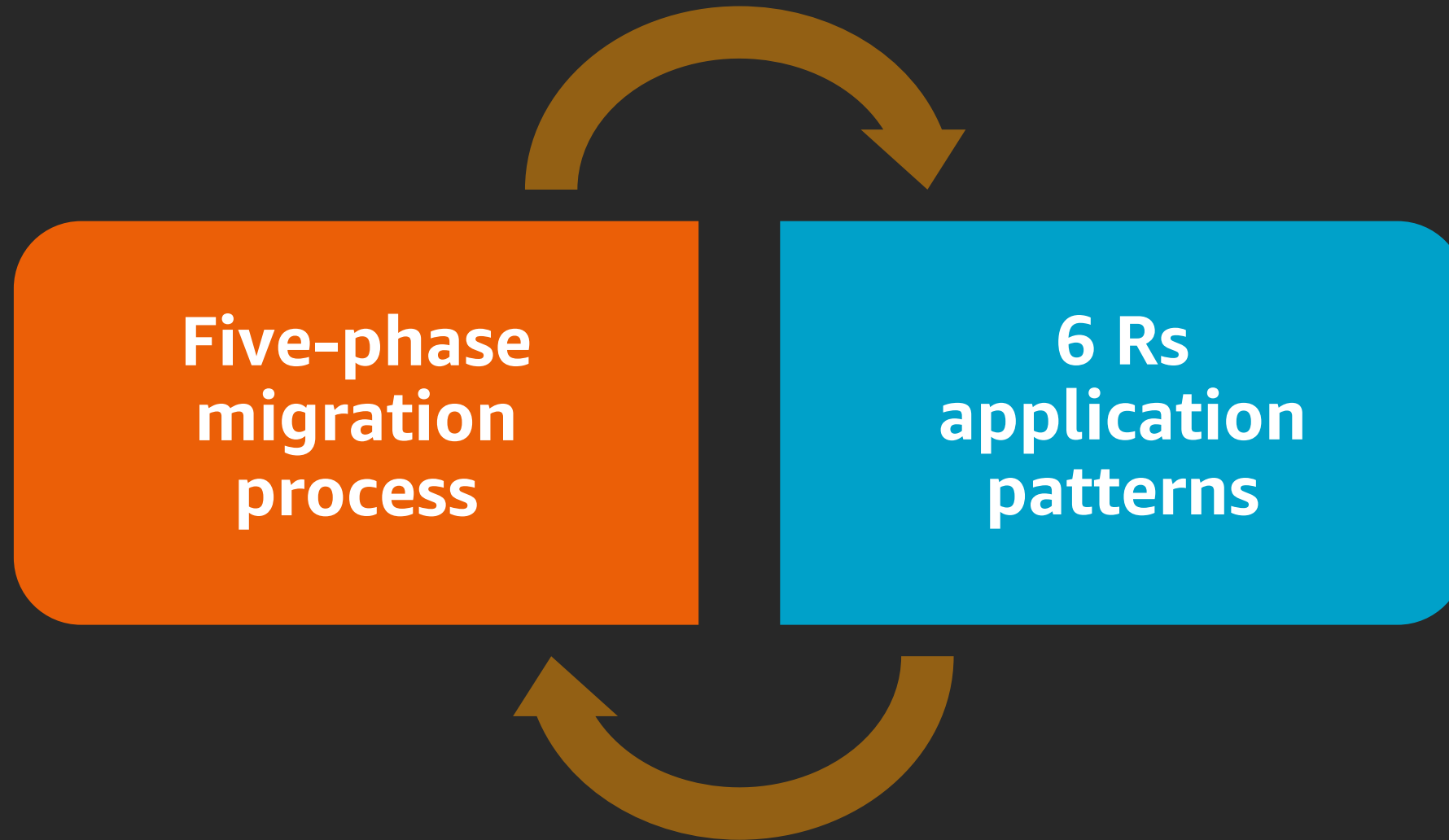
Gaurav Arora

Senior Partner Solutions Architect
Amazon Web Services





AWS cloud migration framework



AWS cloud migration framework

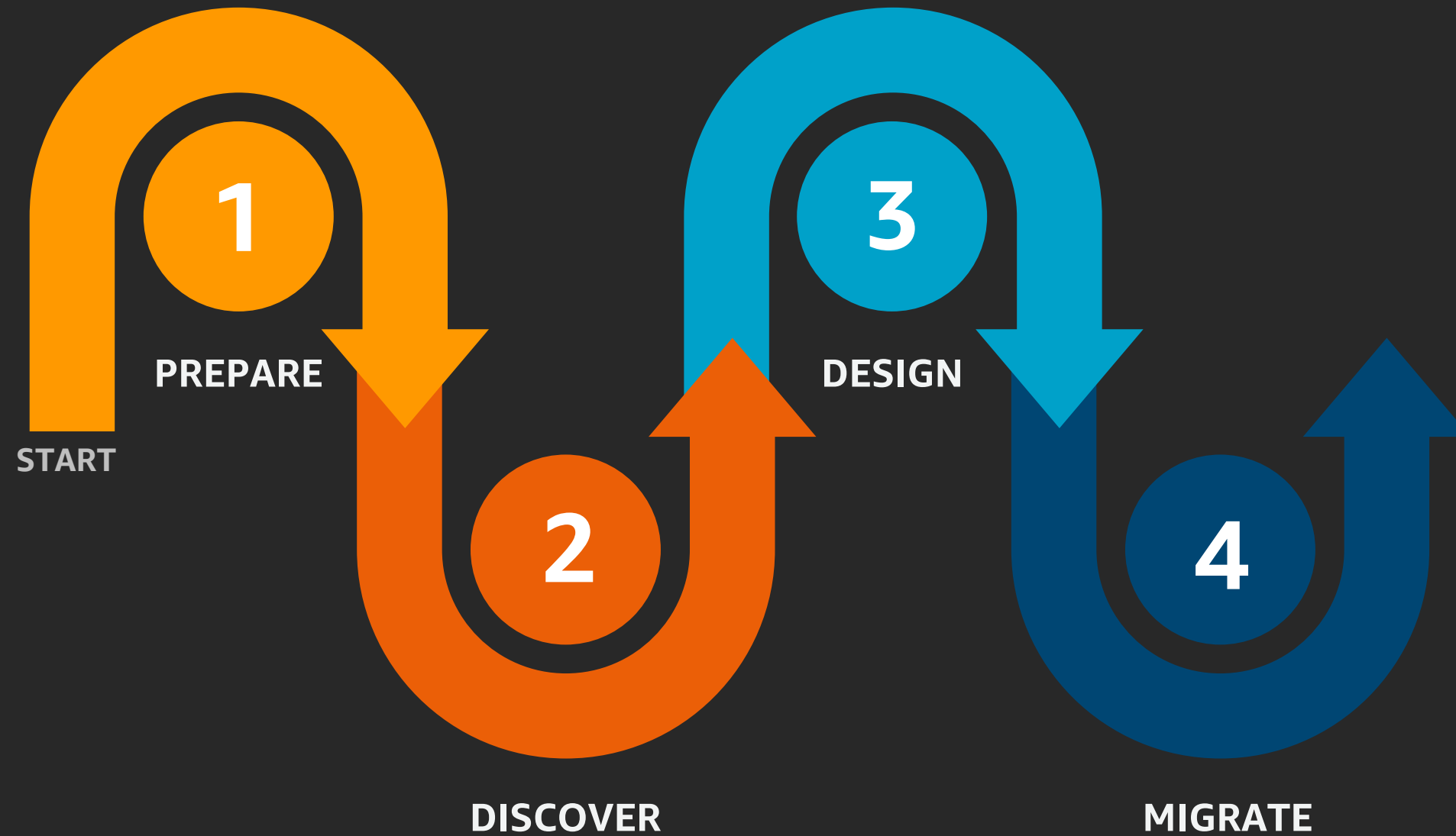
AWS cloud migration framework



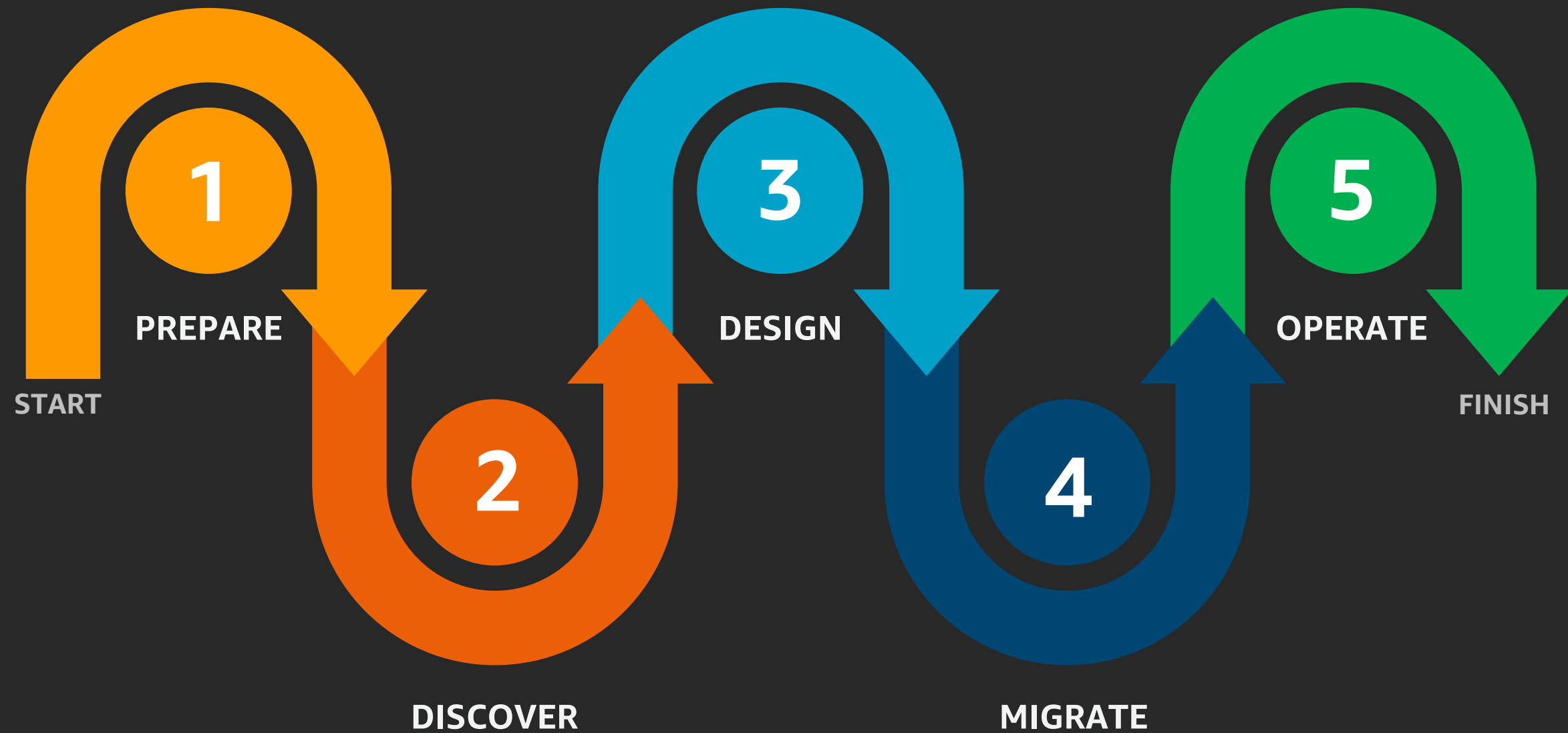
AWS cloud migration framework



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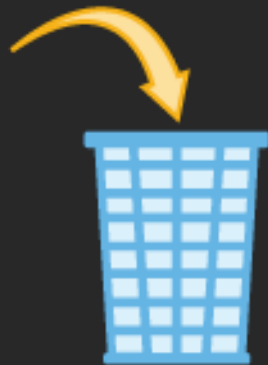
AWS migration patterns ("6 R's")



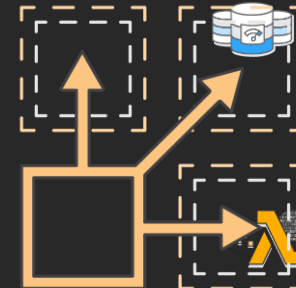
Retain



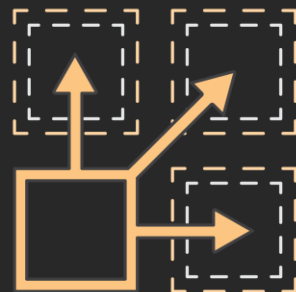
Replace



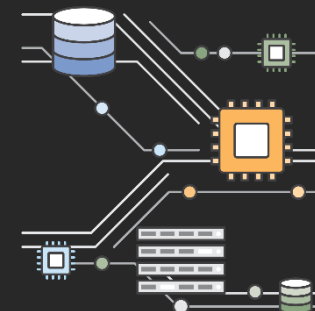
Retire



Replatform



Rehost



Refactor

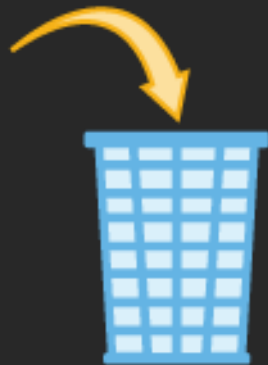
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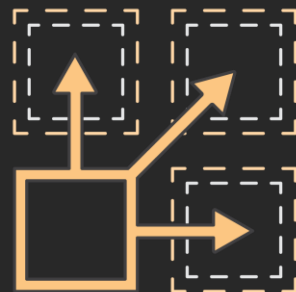
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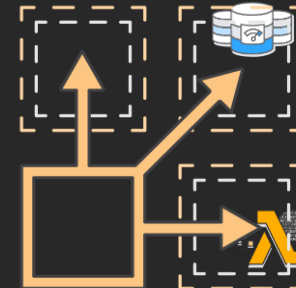


Retire

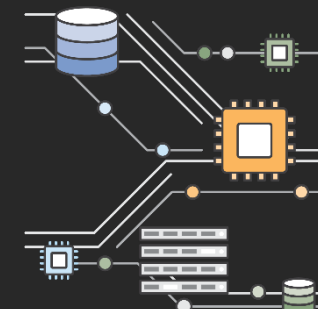


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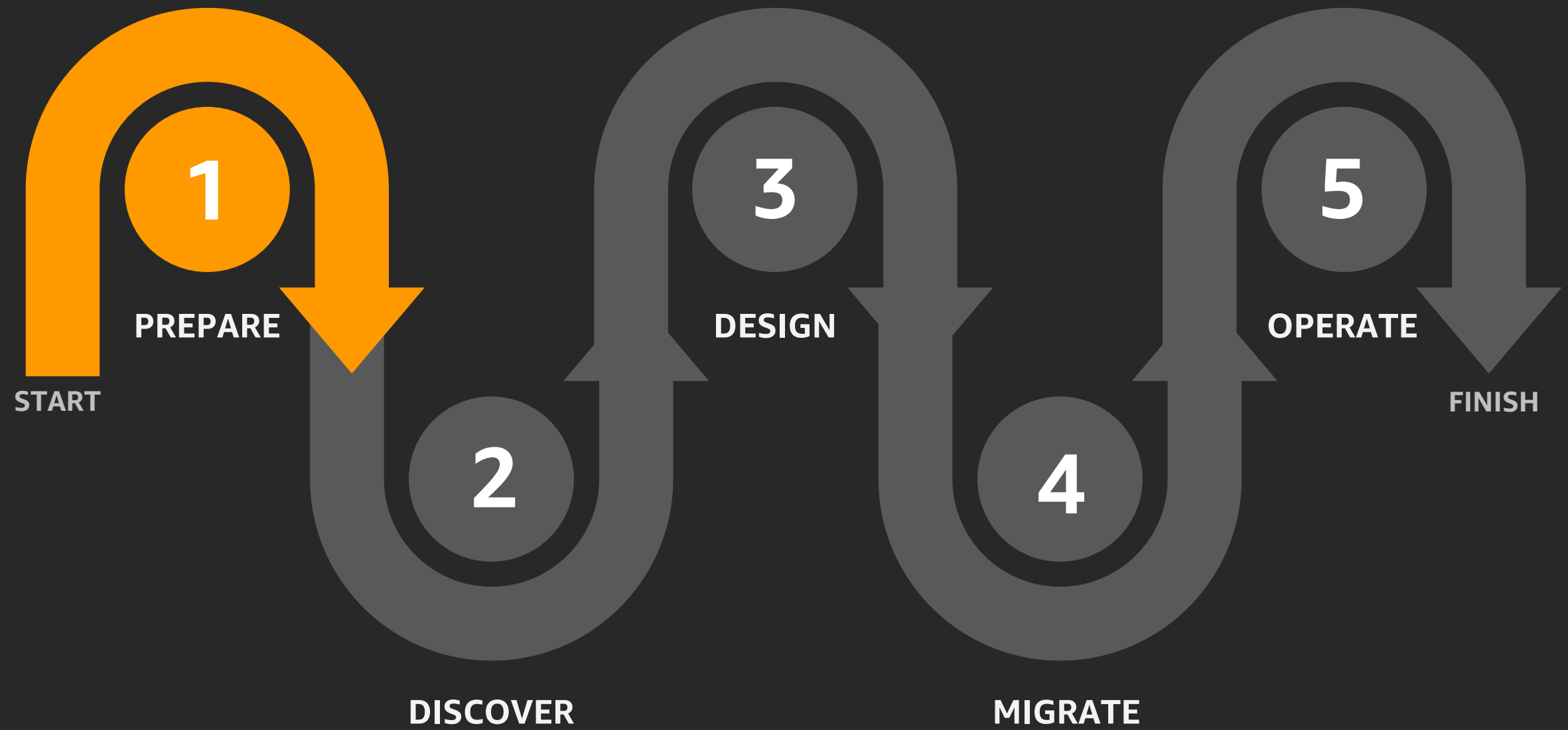
Container Focus



Replatform



Refactor





Business value



kubernetes



docker

=

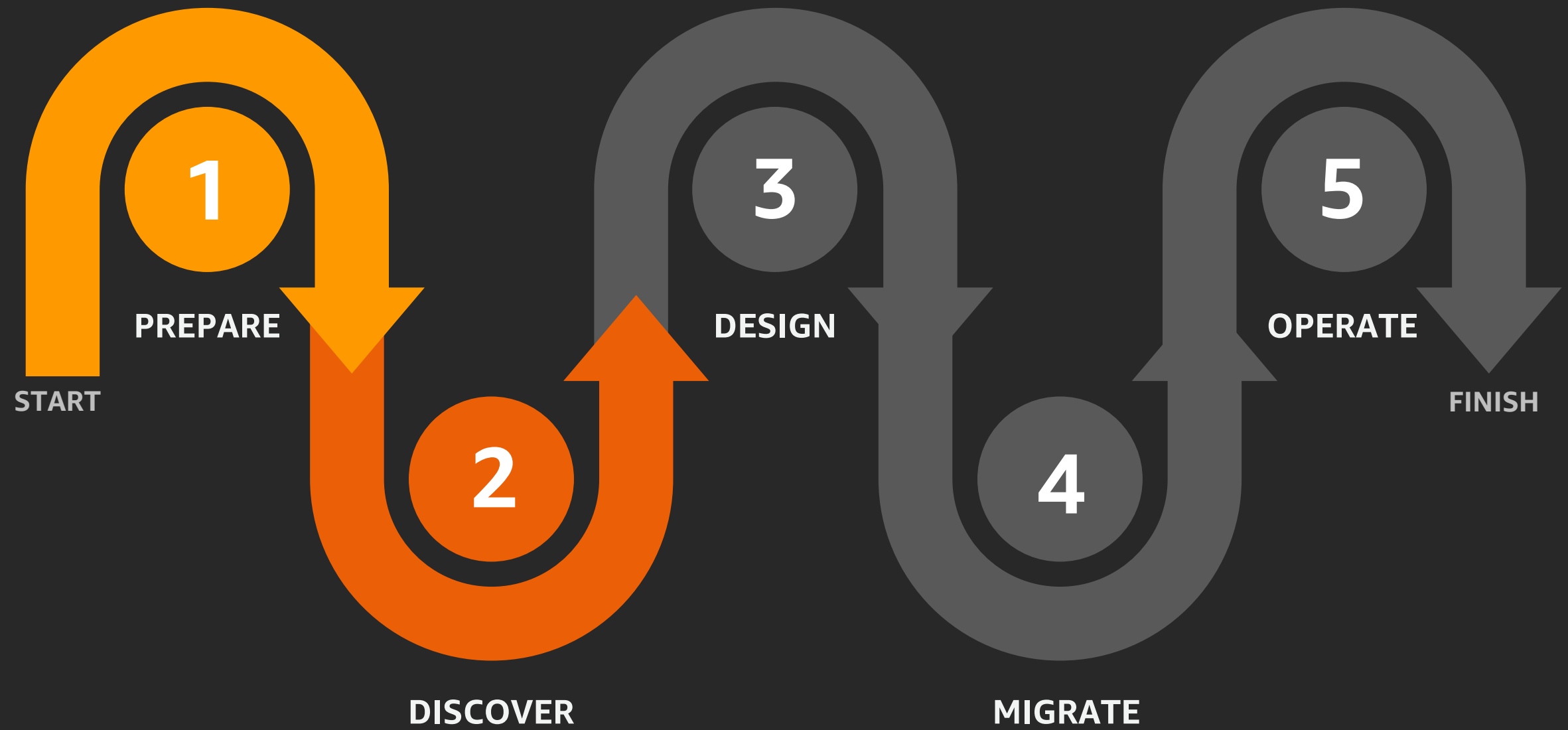
Agility

+

Productivity

+

Cost
Optimisation

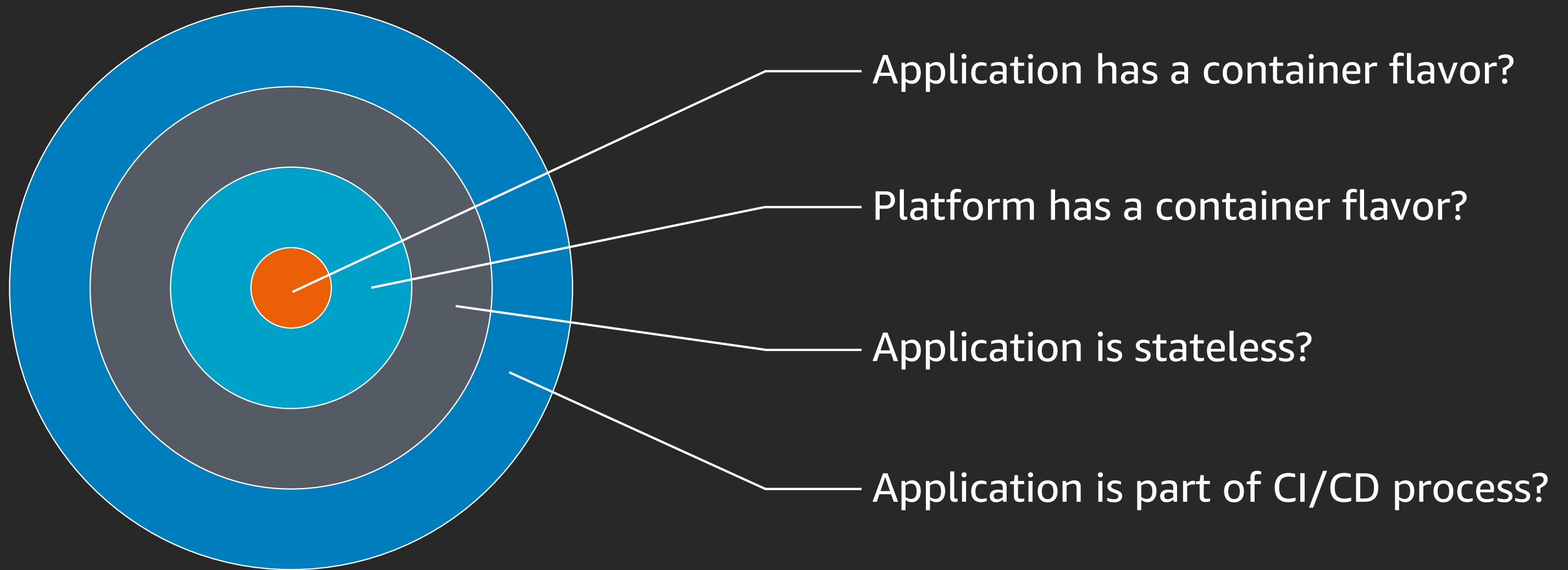


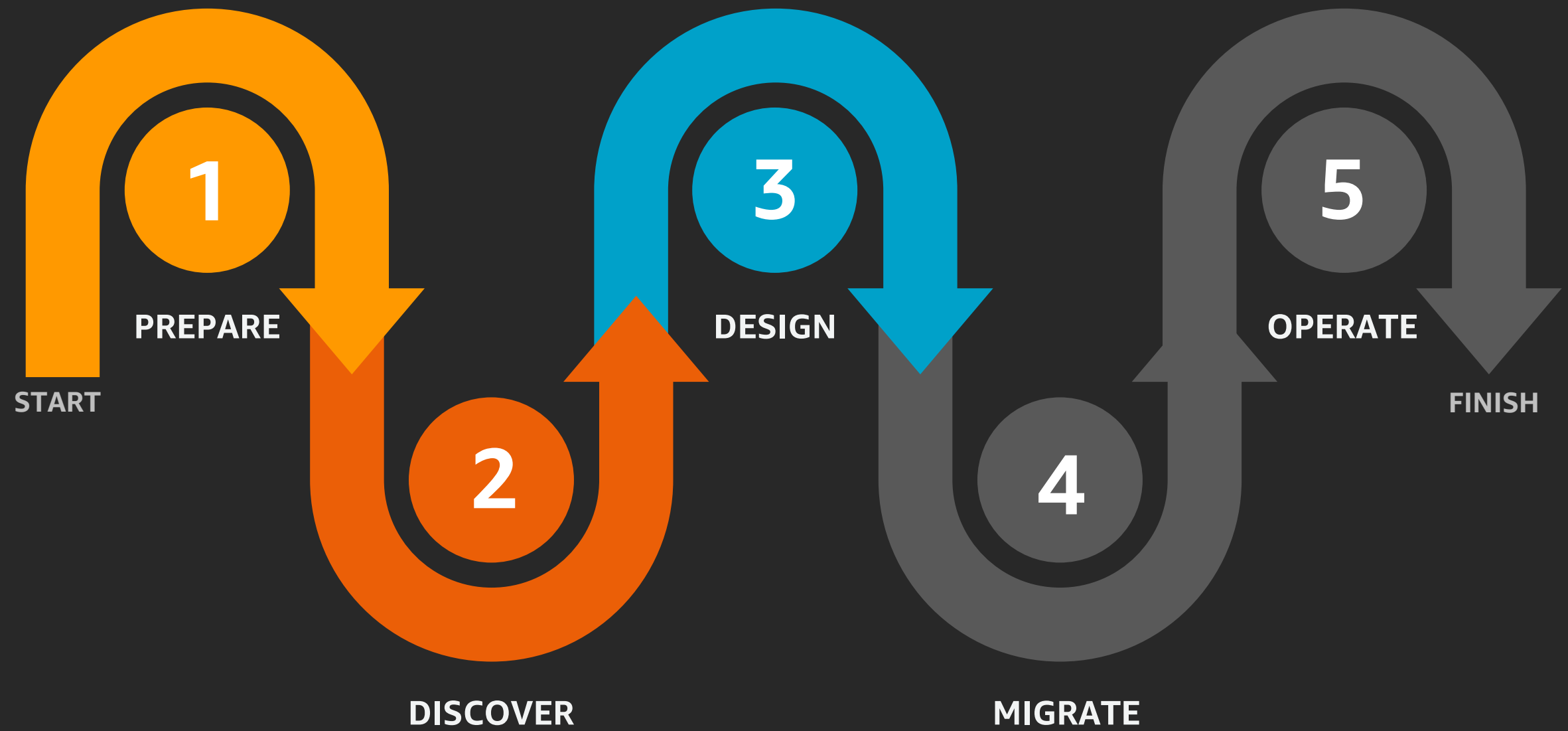
Application discovery

- Application binaries
- Data and configuration
- Application dependencies
- Network protocols
- Licensing restrictions



Application qualification





AWS architecture

AWS Landing Zone

Control
Tower

Accounts

VPCs

Security
Groups

Tagging

Container service

Container Management

Managed
or Self?

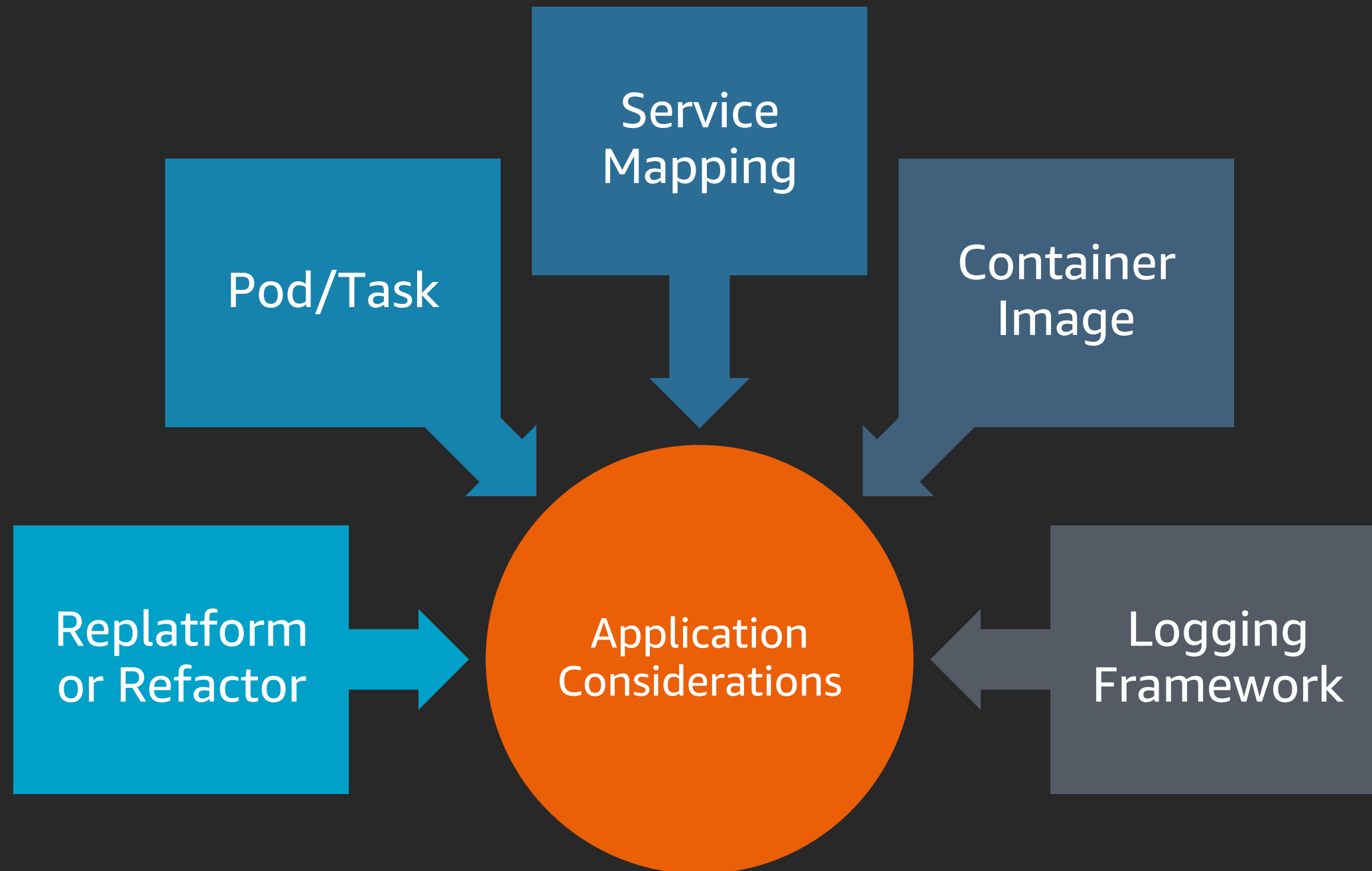
Cluster
Design

Service
Discovery

Pod
Networking

Container
Registry

Application



Security shared responsibility model

Customer

Customer data and applications

Kubernetes configuration (RBAC roles, pod security policies, network policies, etc.)

Network access control, firewall configuration

Linux kernel

Container runtime

Package management

AWS

Kubernetes API server & etc.

Multi-AZ, backups

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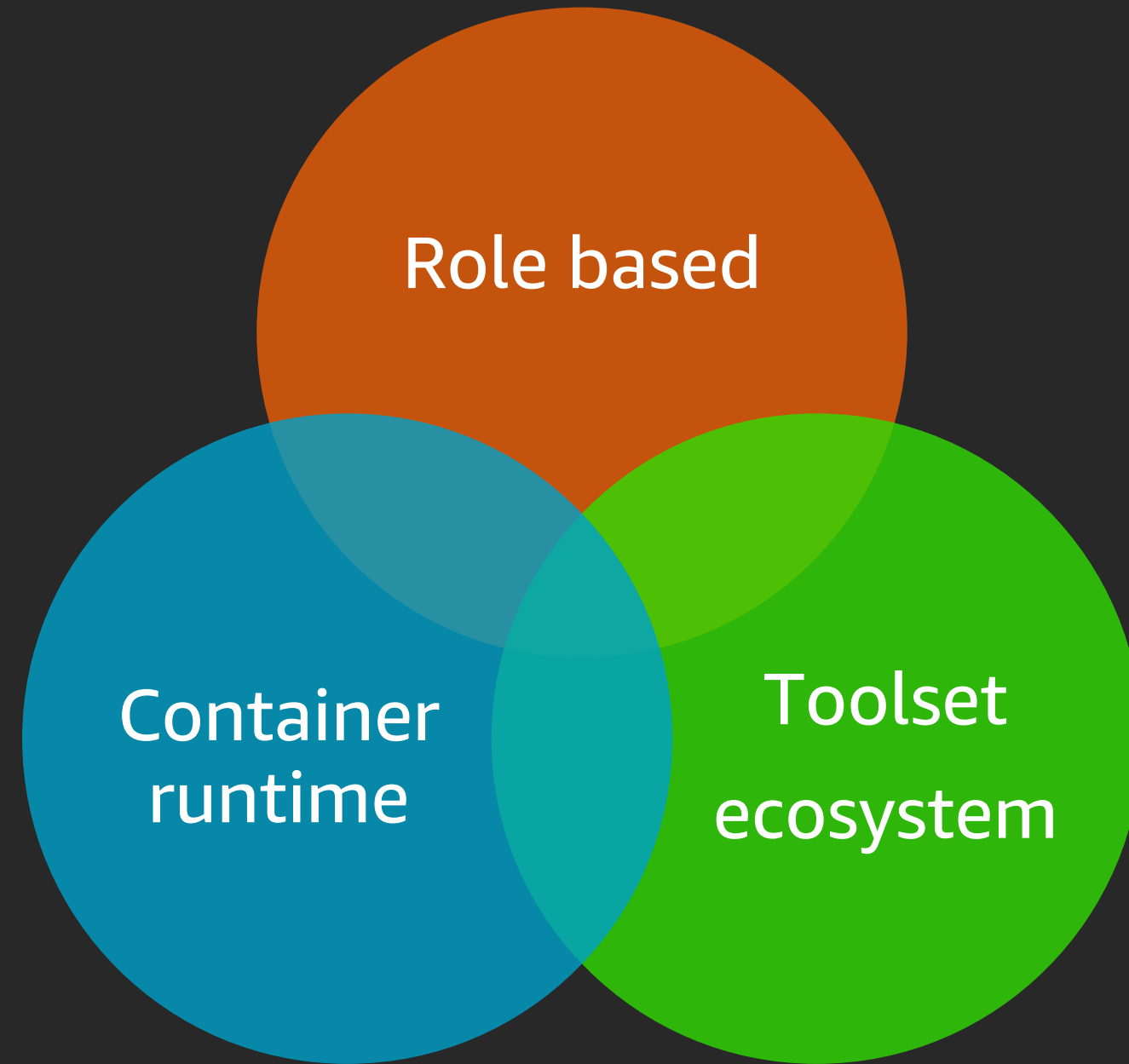
Package management

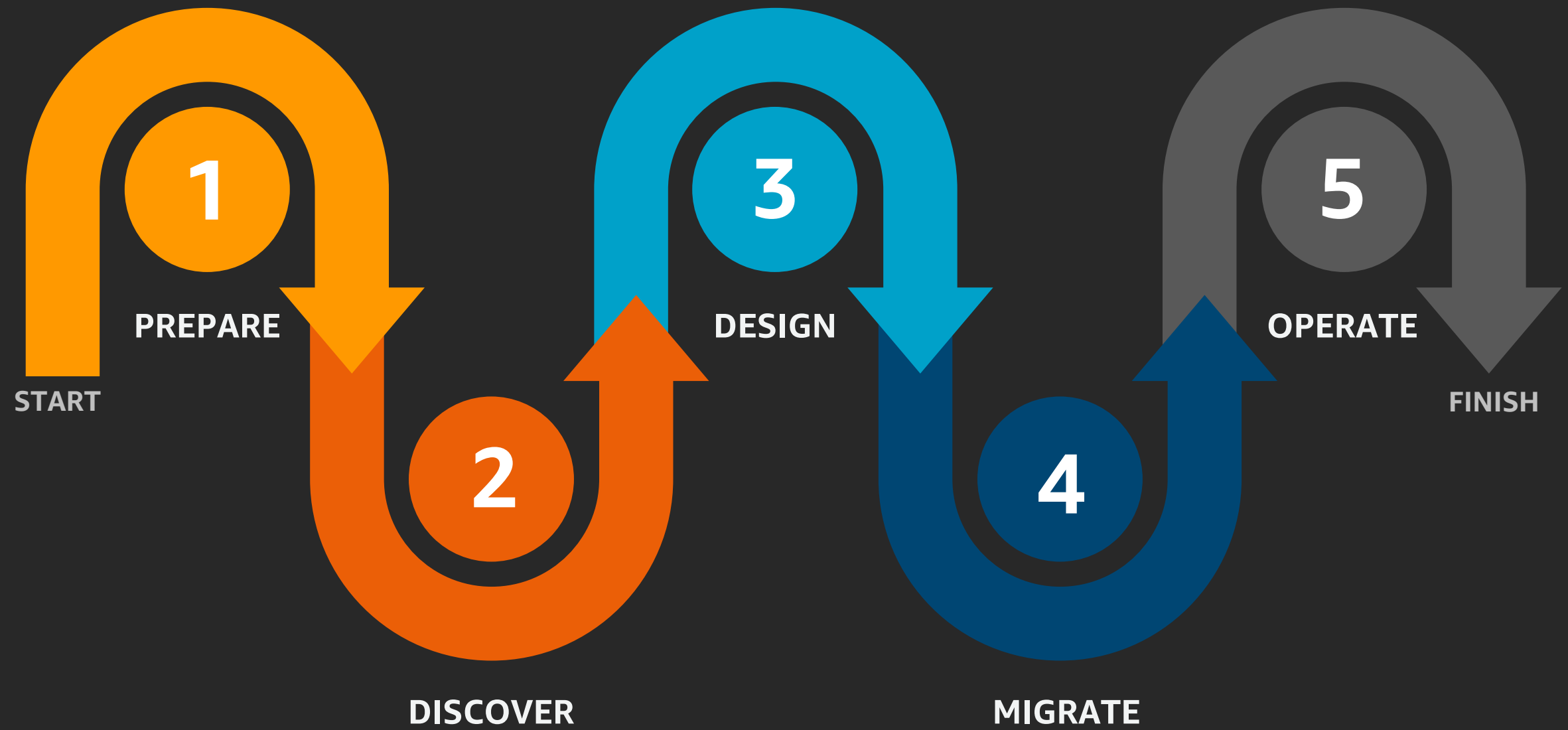
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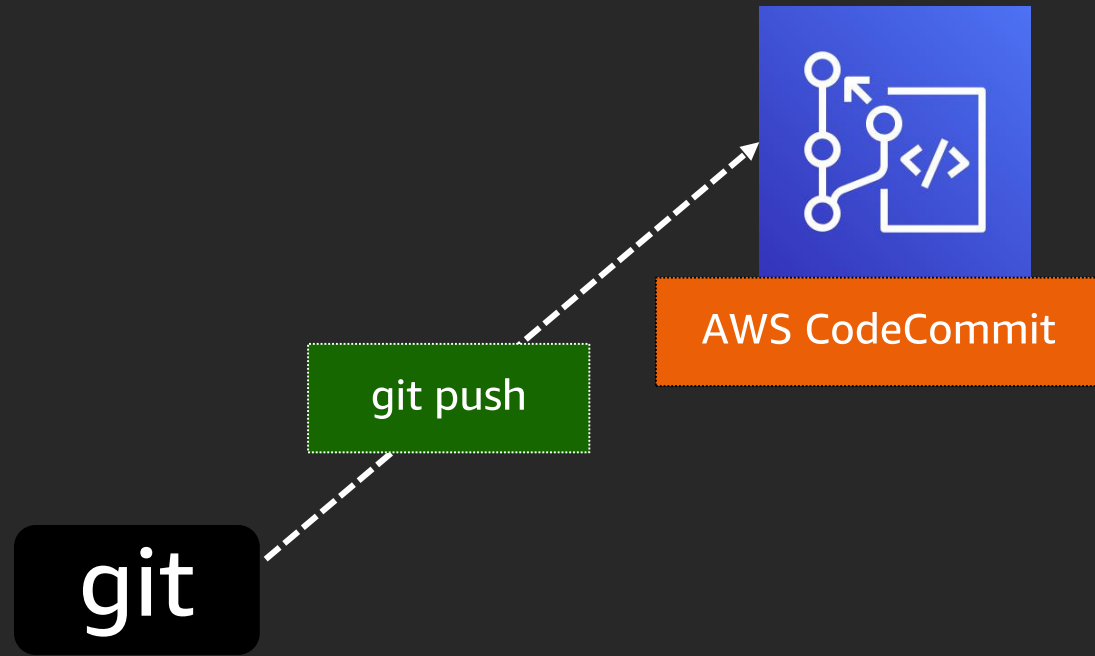
Observability



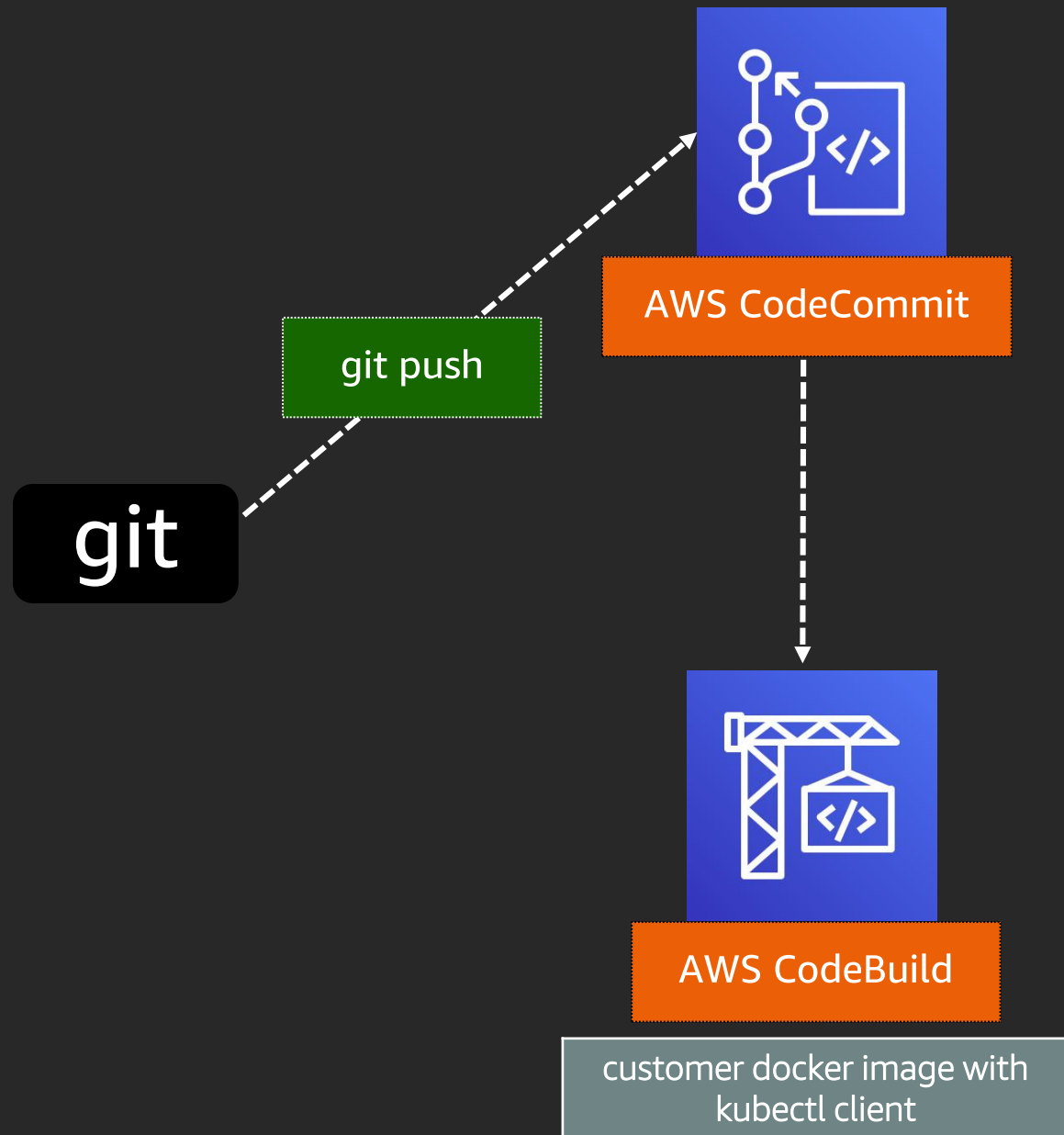


Migration pipeline

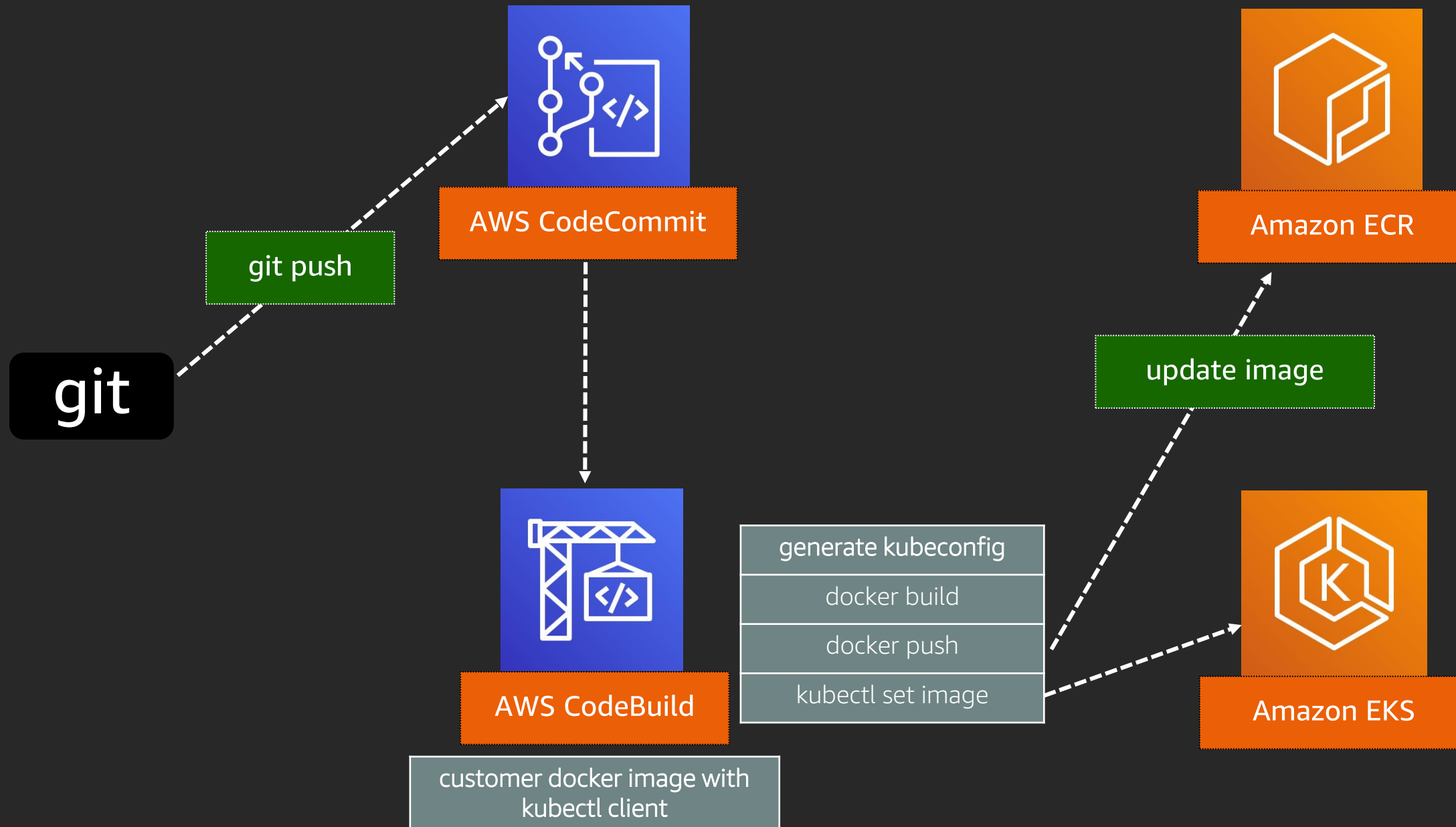
Migration pipeline



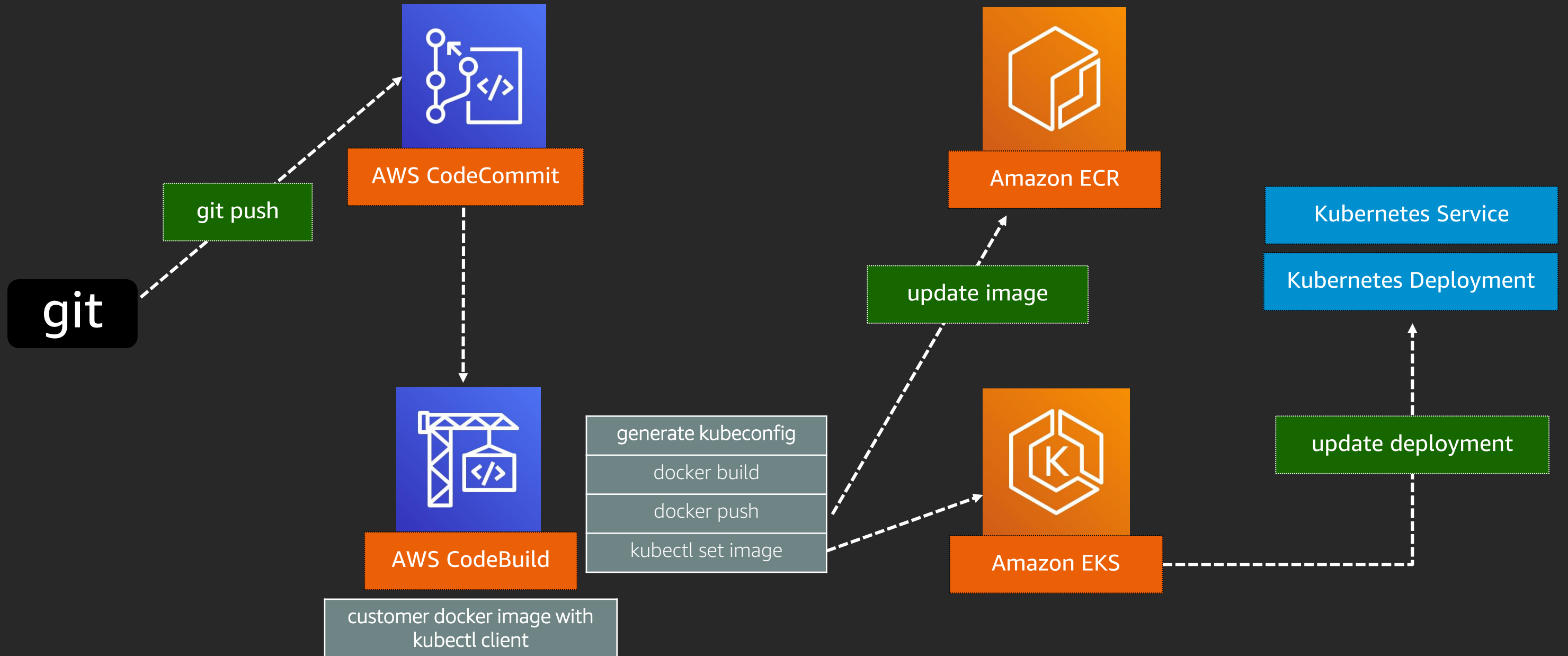
Migration pipeline

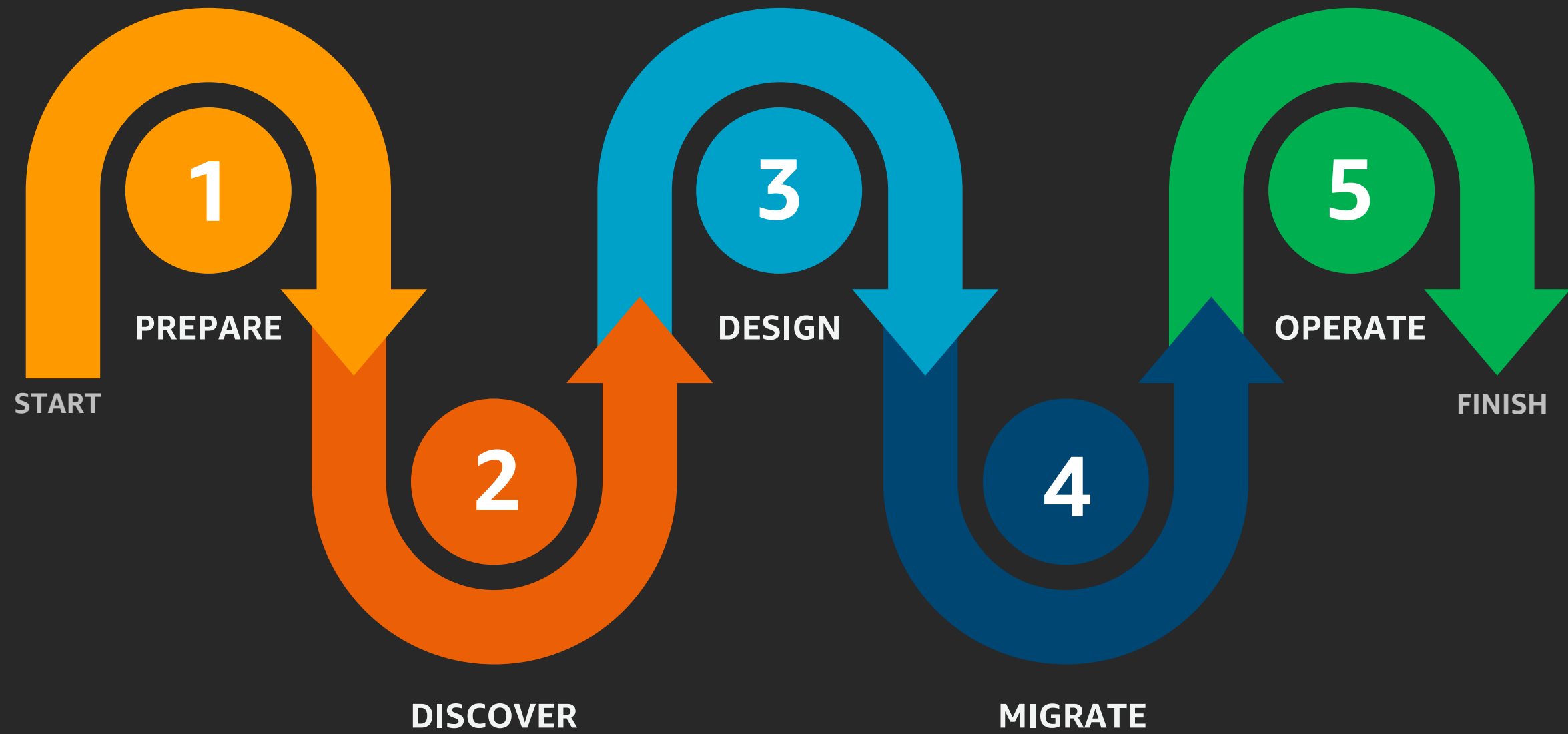


Migration pipeline



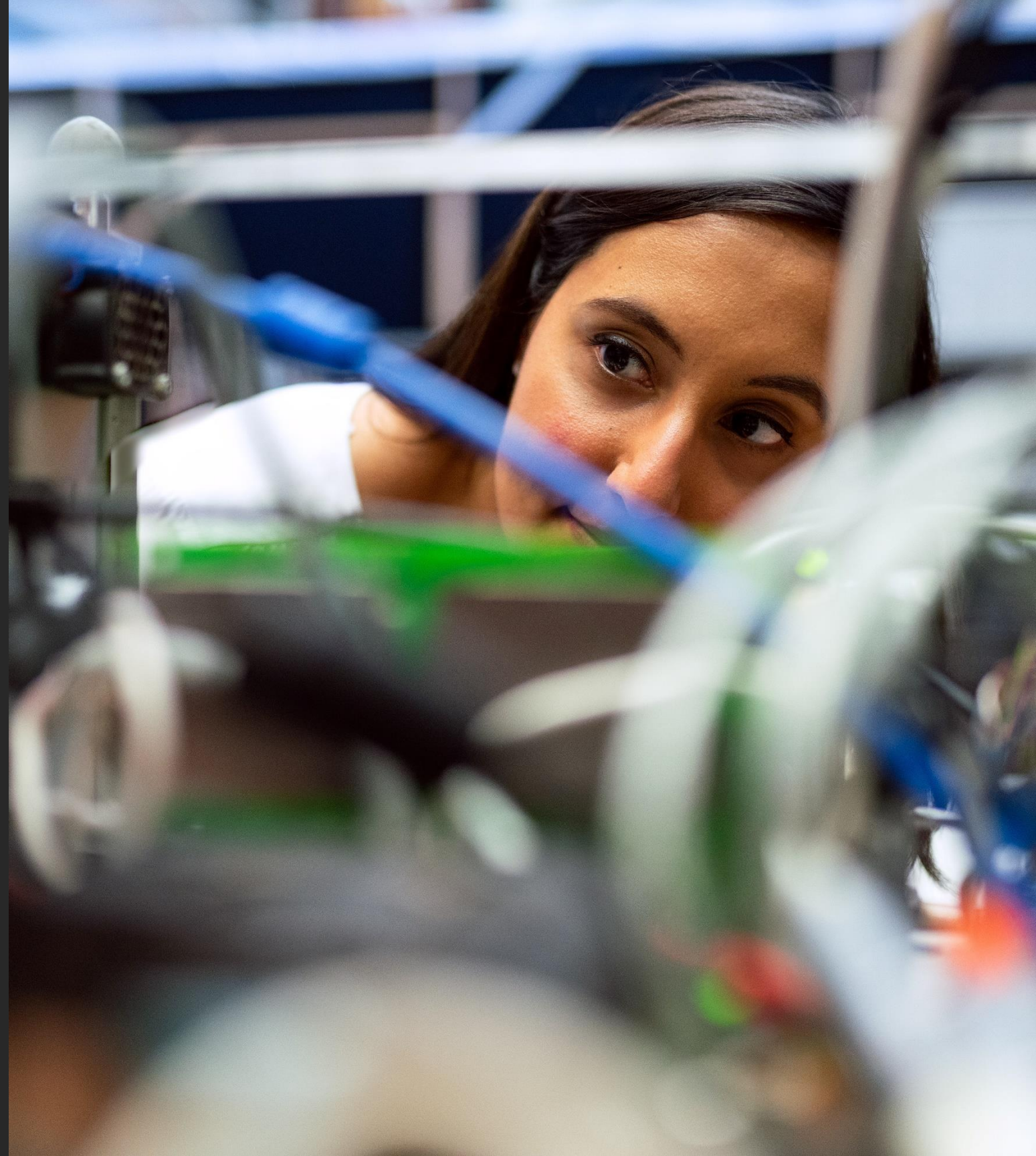
Migration pipeline





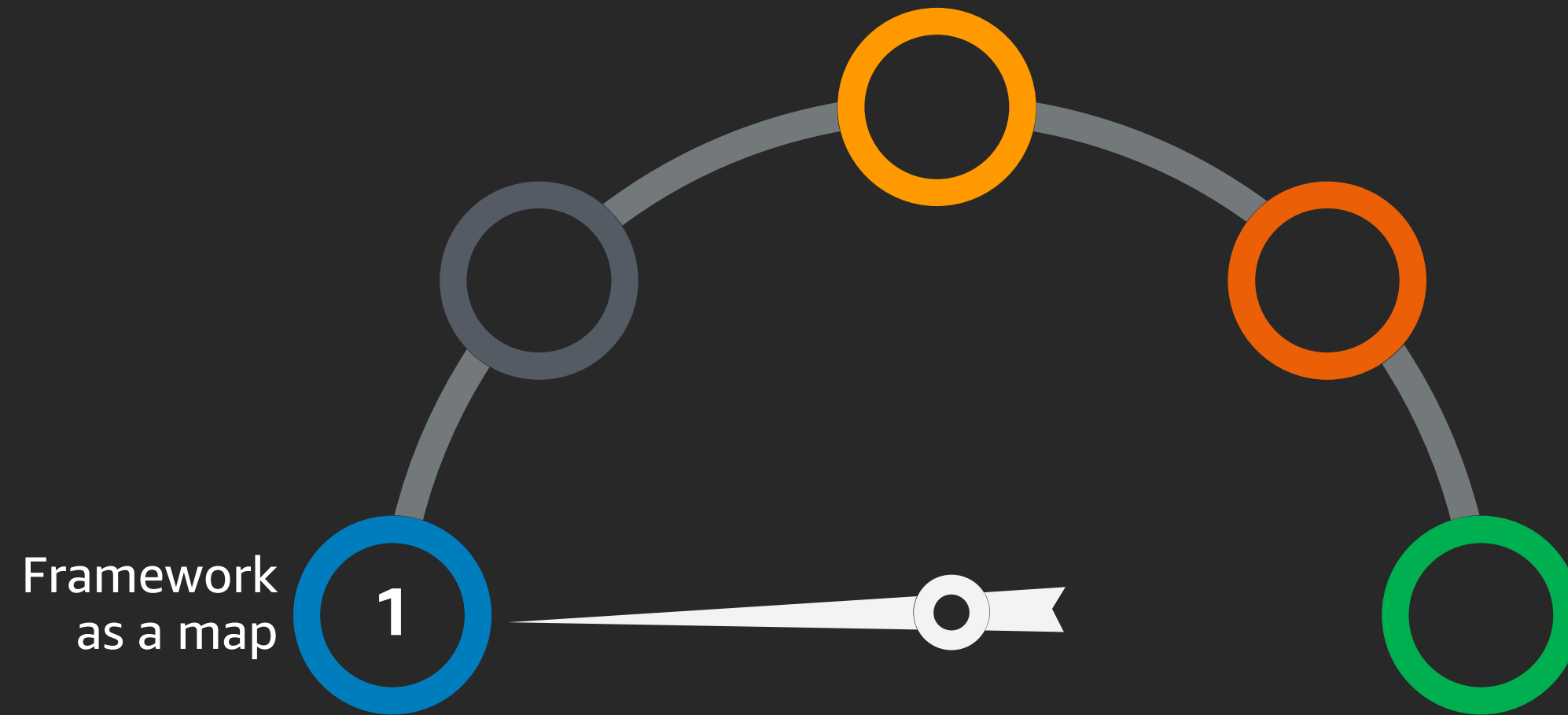
Operations

- 12-factor principles
- Cluster maintenance
- Container image tagging
- Configuration as-a-Code

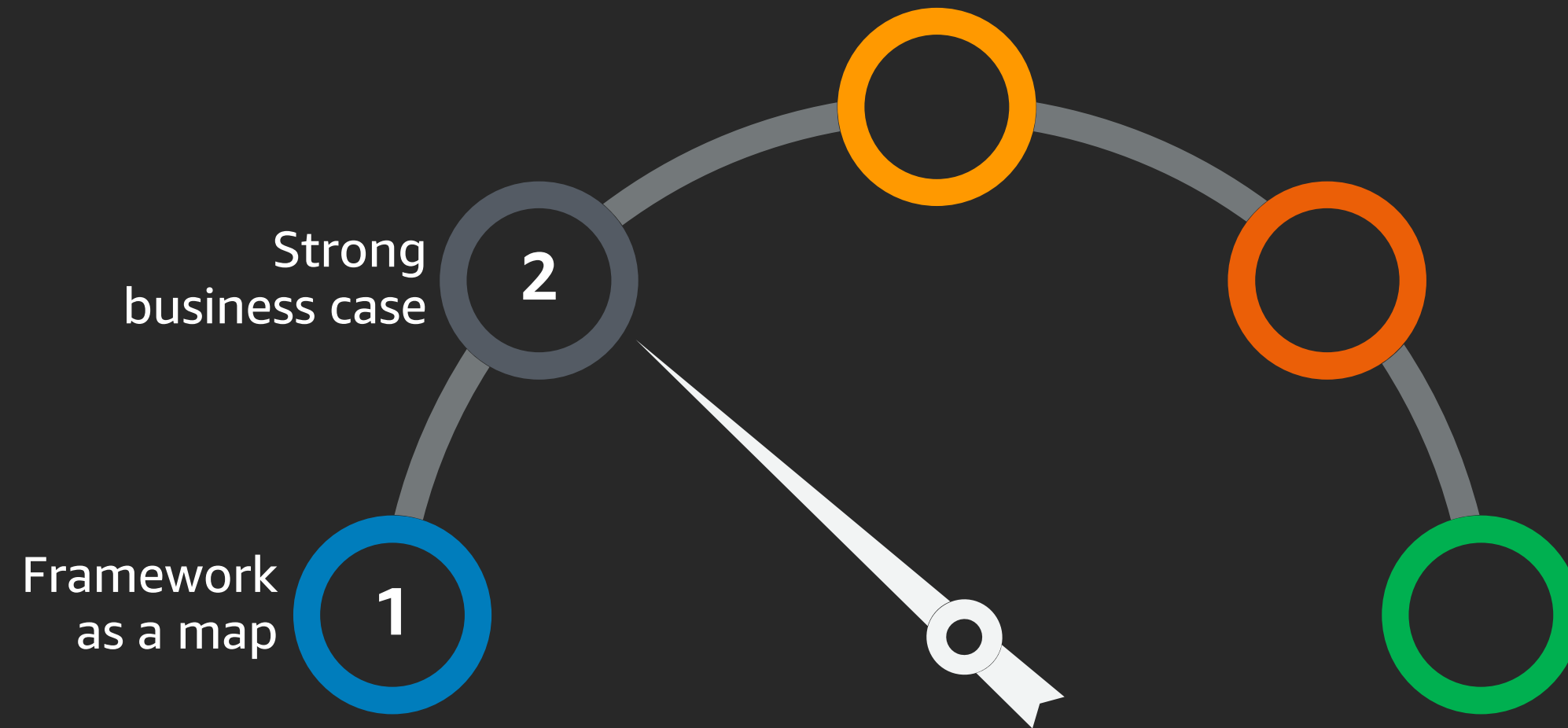


Summary

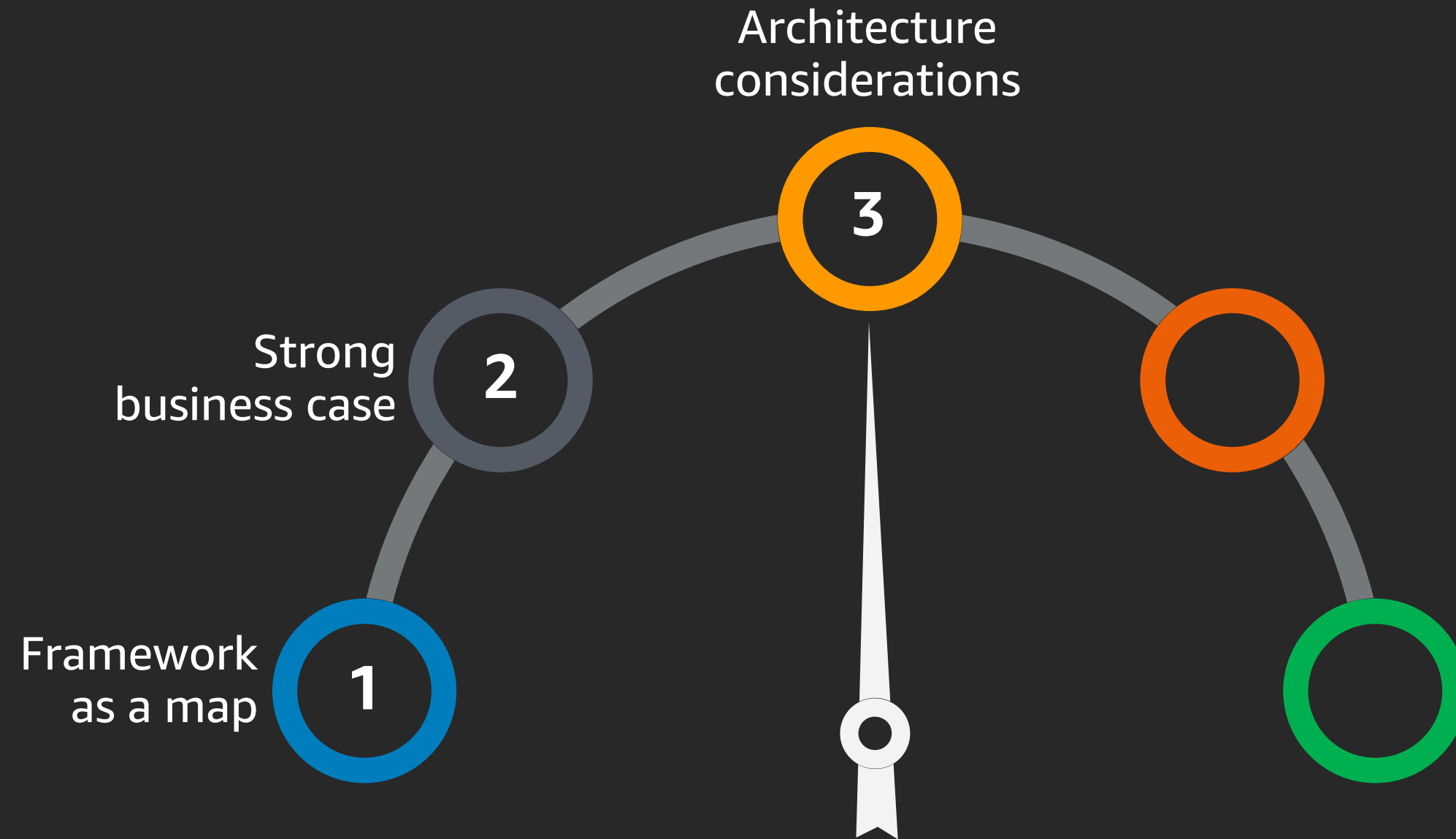
Summary



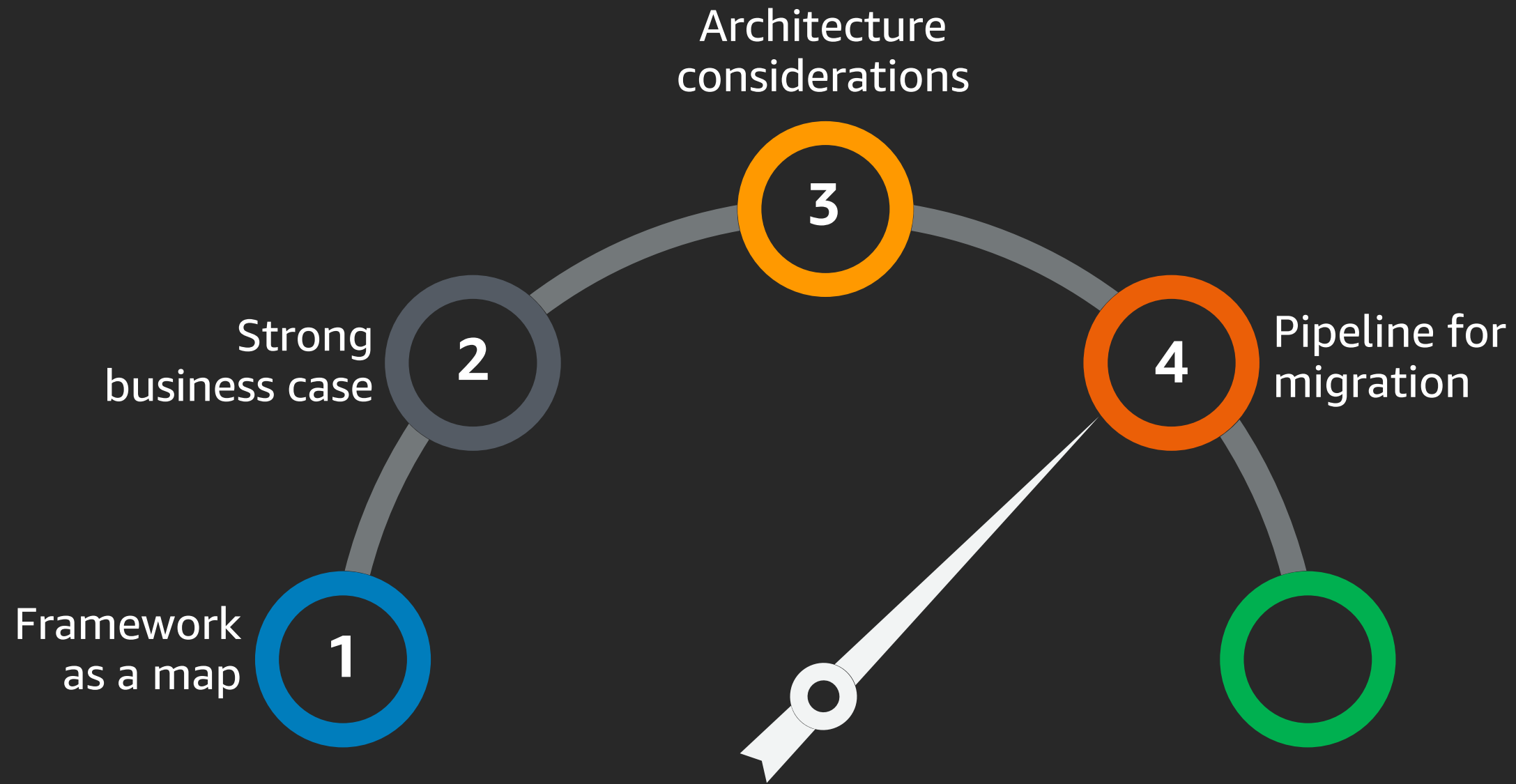
Summary



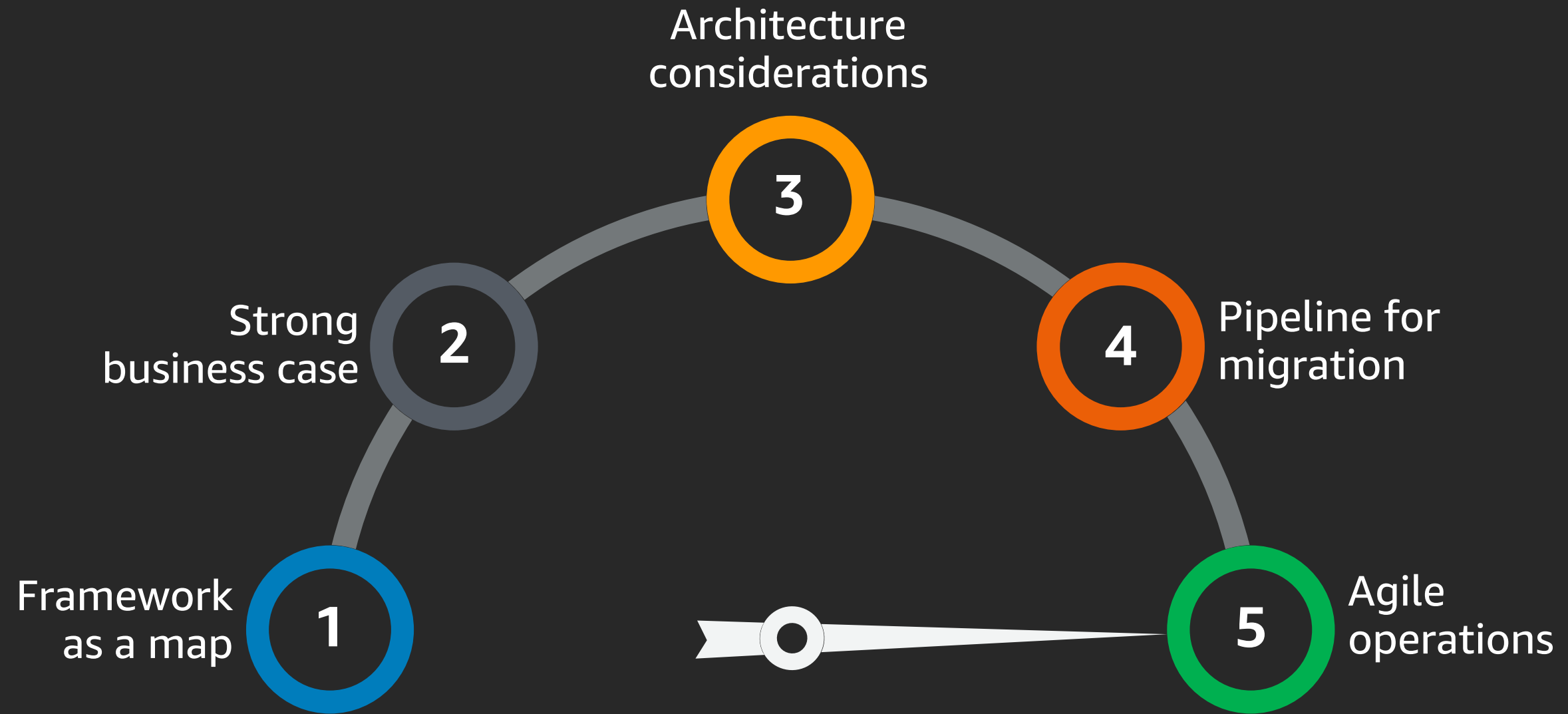
Summary



Summary



Summary



Thank you!

Gaurav Arora

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