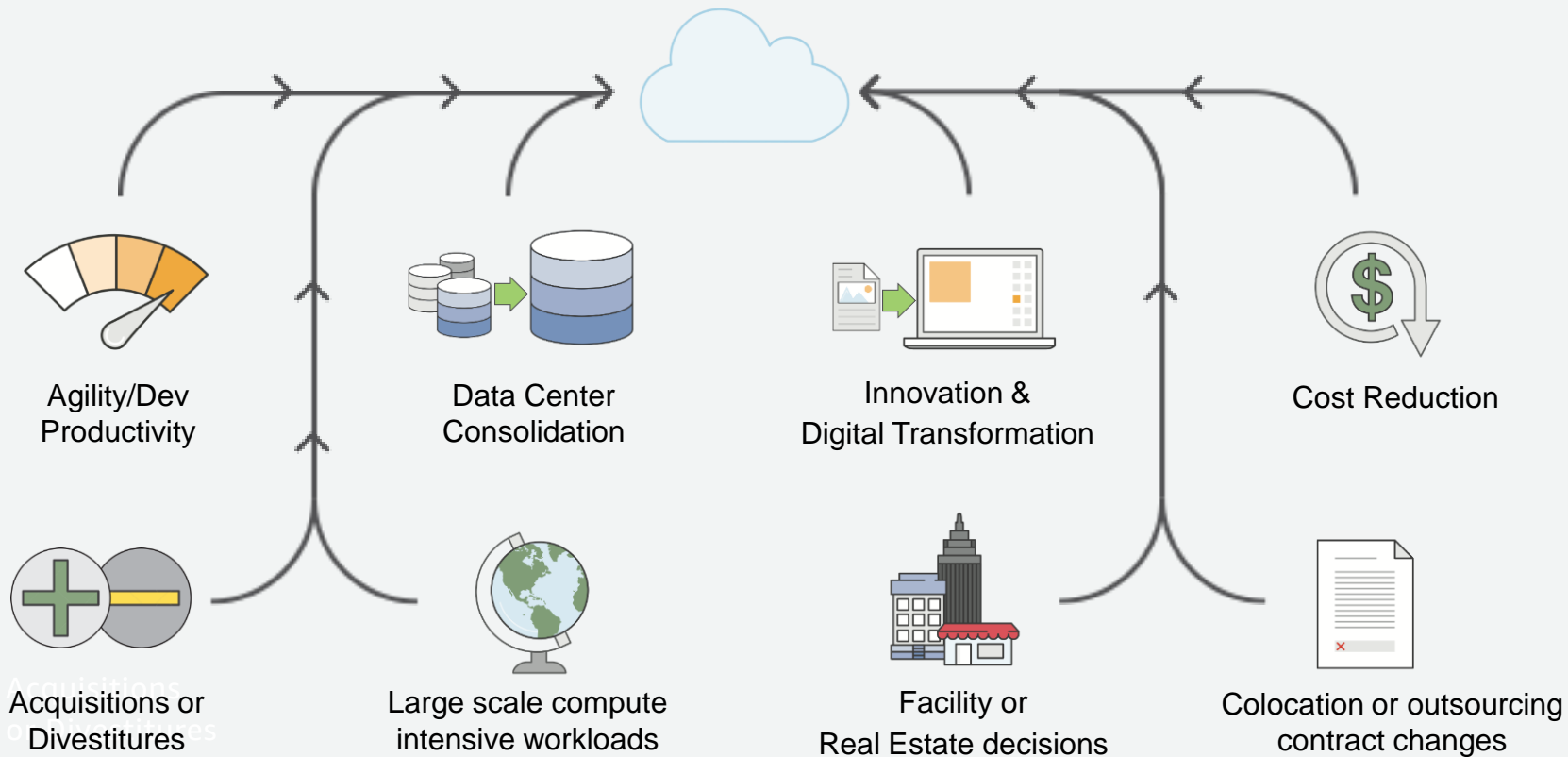




Migration to Cloud

Accelerating your journey to the cloud

Common migration drivers



Achieving Business Value

Cloud Value Framework



Cost savings (TCO)

What is it?

Infrastructure cost savings/avoidance from moving to the cloud

Example

50%+ reduction in TCO (GE)



Staff productivity

What is it?

Efficiency improvement by function on a task-by-task basis

Example

Over 500 hours per year of server configuration time saved (Sage)



Operational resilience

What is it?

Benefit of improving SLAs and reducing unplanned outage

Example

Critical workloads run in multiple AZs and Regions for robust DR (Expedia)



Business agility

What is it?

Deploying new features/applications faster and reducing errors

Example

Launch of new products 75% faster (Unilever)

Cost impact

Value impact



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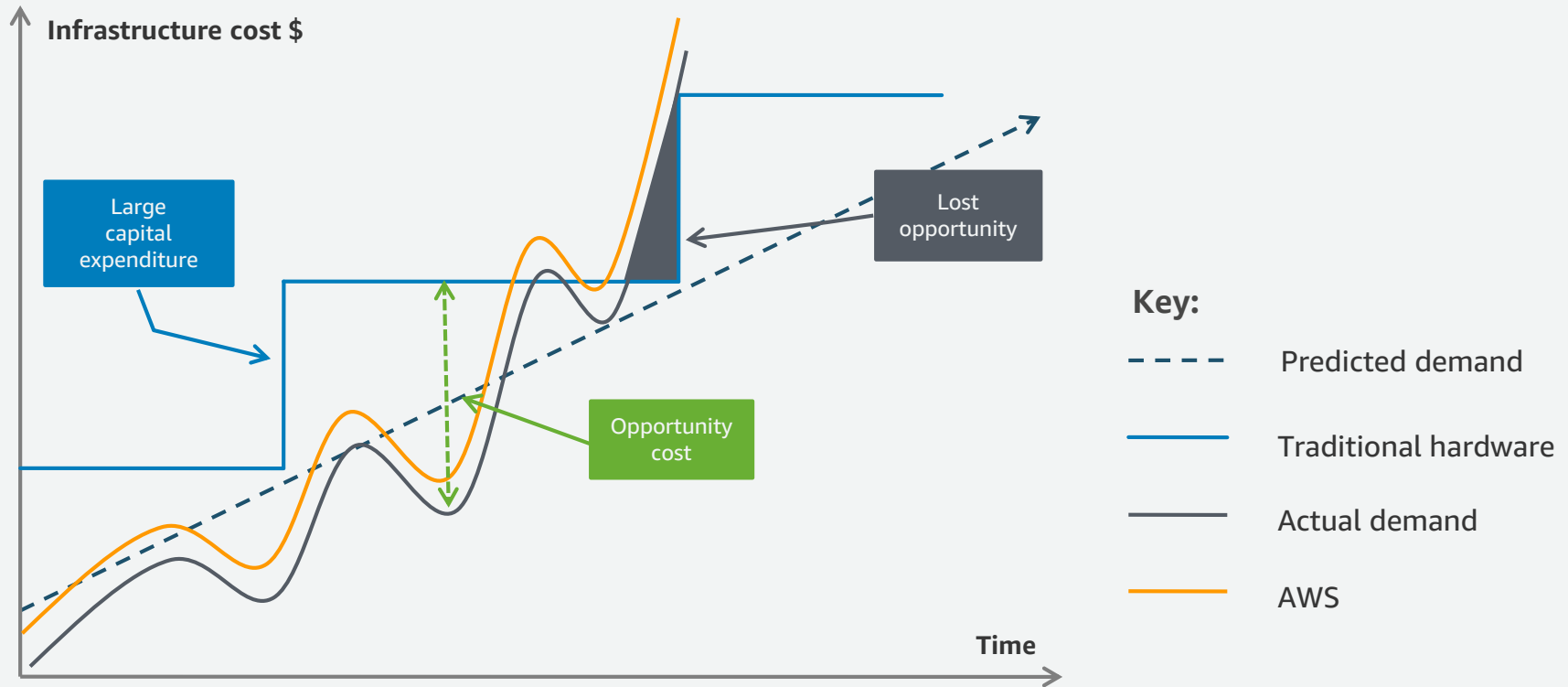
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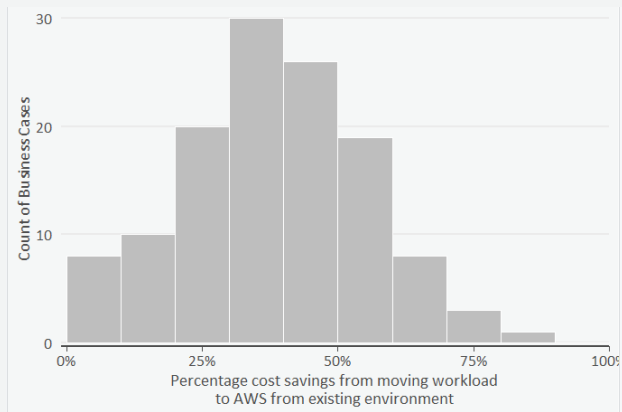
Cost savings: economics of the cloud



Business cases estimate cost savings of 26-49%



Projected Cost Savings from moving to AWS



26-49%

n = 125 TCO focused case engagements

- Footprint right sizing based on actual compute needs
- Economies of scale allows AWS to continually lower price
- Flexible pricing models and instance options



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Staff productivity: example

Illustrative



Server Administrator

Task	Typical reduction	Description
Server budgeting and planning	90%	There is no capital server budget or plan in the AWS cloud
Server purchasing process	75%	Instance purchasing requires minimal effort in comparison to server purchasing
Long-term capacity planning	75%	Capacity planning is simply a matter of initiating new instances based on thresholds and much of this can be automated
Project budgeting and planning	75%	Project budgeting and planning effort should be significantly reduced
Prepare detailed implementation plans	75%	Implementation plans will reduced since instance initiation is very straightforward
Arrange repair for hardware in occasion of hardware failure	100%	Not necessary with AWS
Installing/upgrading/removing software	50%	Simplify and automate OS patching/updating

Staff productivity: AWS benchmarking insights



Cloud improves efficiency...

VMs managed on-prem vs. cloud



On-premises

In cloud

2x

Increase in # of VMs managed per admin

TB managed per administrator



On-premises

In cloud

1.8x

Increase in # of TBs managed per admin

This value accelerates with AWS maturity

VMs managed over time



1-2 years on AWS

3+ years on AWS

3.3x

Increase in # of VMs managed per admin over time

TB managed over time



1-2 years on AWS

3+ years on AWS

3.2x

Increase in # of TB managed per admin over time

Source: n = 500 AWS Customers. AWS Cloud Economics Benchmarking, August 2018.



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Operational Resilience: Downtime & Security Costs



\$1.25 to
\$2.5B

Annual Fortune
1000 application
downtime costs
(IDC)

\$500K
to \$1M

Cost/hr of a
critical
application
failure (IDC)

\$3.6M

Average cost of
a data breach
(Ponemon
Institute)

\$141

Average cost
per lost or
stolen record
(Ponemon
Institute)

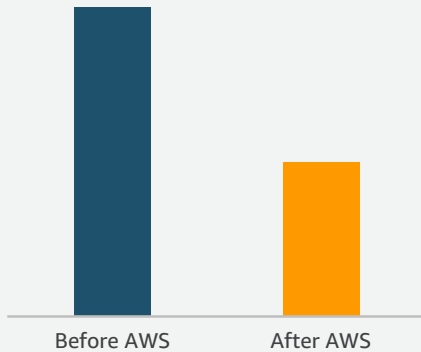
\$474K

Average cost/hr
of downtime
(Ponemon
Institute)

AWS customers reduce monthly incidents



of total monthly incidents



43.4%

Reduction total
monthly incidents

- High infrastructure availability and durability; multi-availability zone fail over
- Automatic configuration and resource management; centrally manage users and credentials
- Built-in DDoS protection and Security Perimeter; 30+ compliance certifications and accreditations

Source: n = 500 AWS Customers. AWS Benchmarking, August 2018.



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Business agility: track and measure KPIs



KPI

New applications launched per year

Time to market for new applications

Time to provision new environments (days)

Deployment frequency (revs/year)

Time to deploy to production (weeks)

Time to deploy to test (days)

Features per release

Total # of incidents/defects

% of total defects found in test

Mean Time To Resolution (MTTR) in hours

Response time to defects (hrs)

Customer retention (%)

Adoption of new features (%)

“Value” per release (\$ revenue potential)

Employee retention (%)

Employee absenteeism (%)

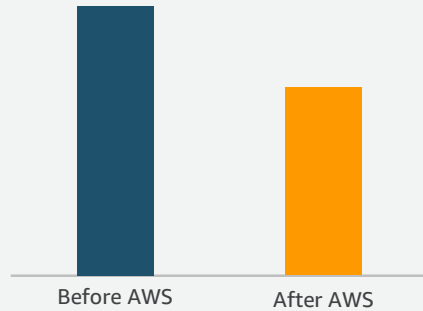
Employee NPS/satisfaction

Customer NPS/satisfaction

AWS helps customers accelerate time to market



Time to market for new applications in months



18.8%

Accelerated time to market

- Shortened finance & procurement cycles
- Accelerated testing processes across development, deployment and production
- Reduced developer time spent on environment setup and non-coding tasks

Source: n = 500 AWS Customers. AWS Cloud Economics Benchmarking, August 2018.

Migration projects can be challenging

Enterprise migrations are complex:

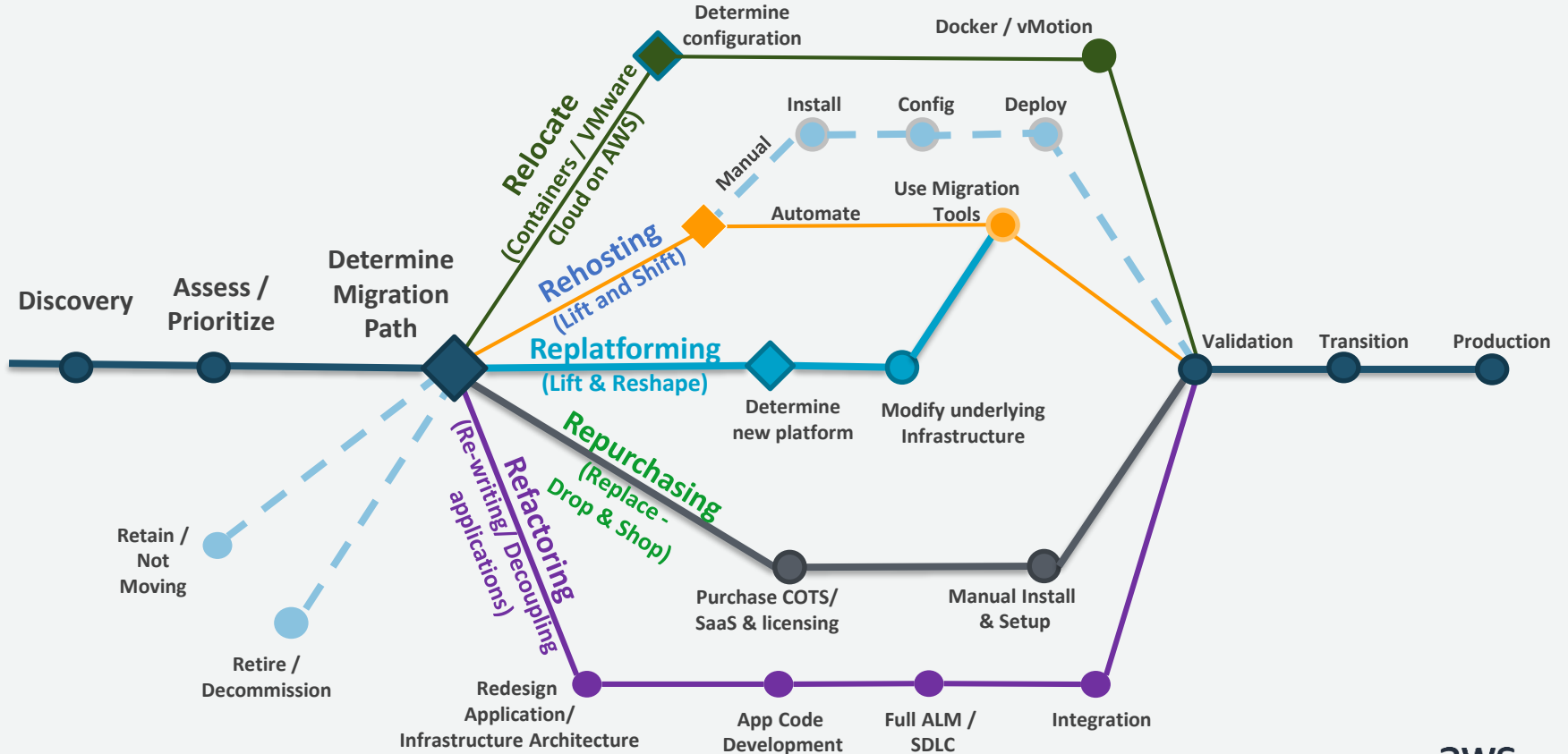
- Deconstruct the on premise technical environment
- Performance and relationship of migrating applications
- Understand the current operational processes
- Policy issues and business rules
- Security policies
- Embedded tribal knowledge
- People/culture issues
- Regulations

Best Practices

- **Demonstrated leadership**
- **Set clear business goals**
- **Develop cloud skills / address gaps**

**The highest risk has been in a stalled project or a false start
..... these can set a cloud program back by months, even years**

Application Migration Strategies

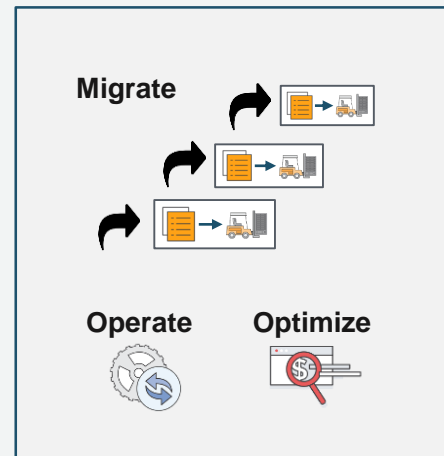
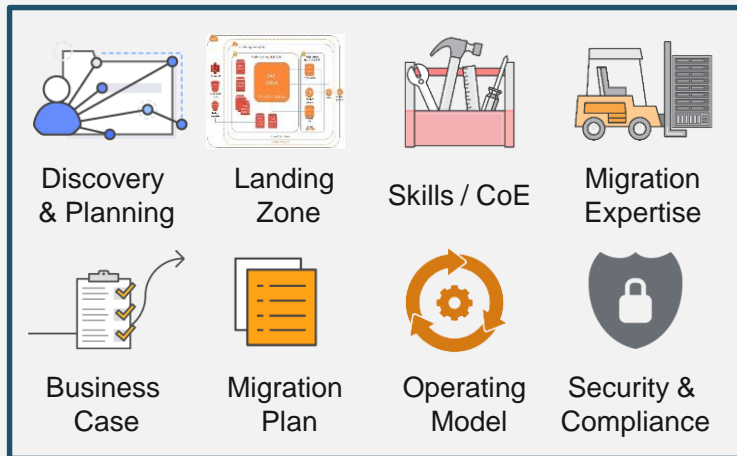
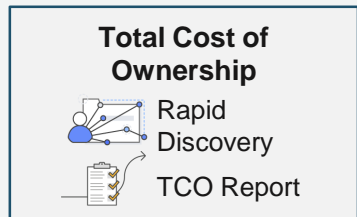
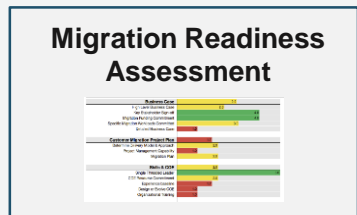


Customer Migration Journey

Migration Assessment

Migration Readiness & Planning (MRP)

Migrations & Operations

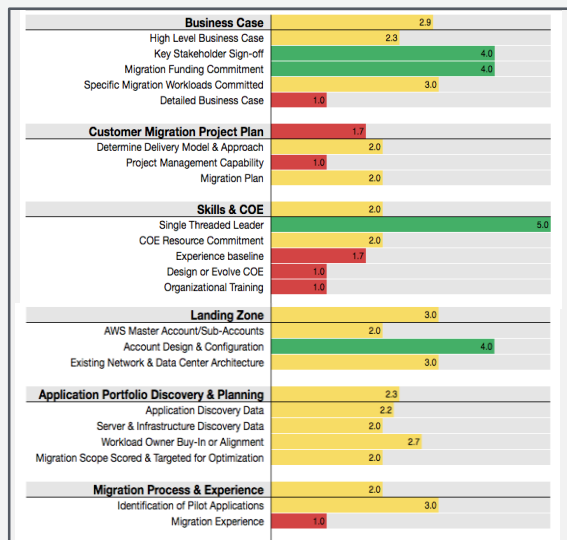


Timing: 2 - 6 Months, Partner, and/or AWS ProServe consulting project

Migration Readiness Assessment (MRA)

- Conducted as a 1-day workshop and/or interviews with stakeholders
- 60-70 question survey aligned to AWS Cloud Adoption Framework (CAF)
- Provides actions close gaps, forms MRP project plan provided by ProServe/partner
- Suggested to do Total Cost of Ownership analysis in parallel

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



<https://aws.amazon.com/professional-services/CAF/>

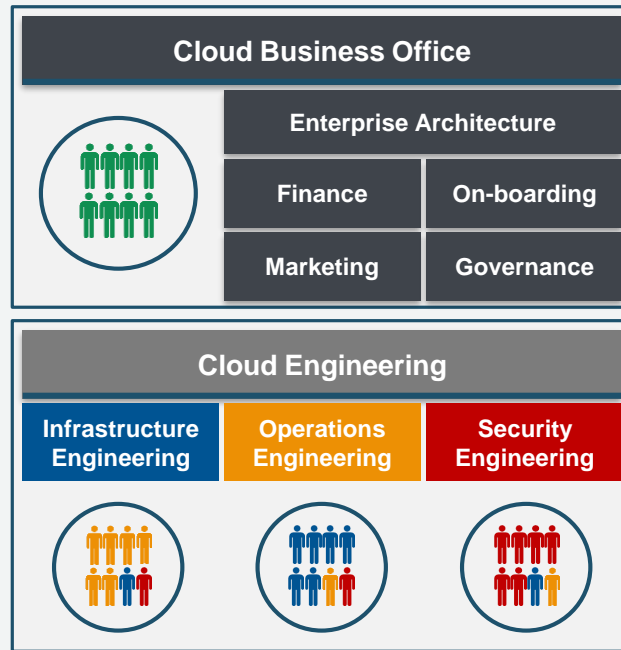
Implementing a Cloud COE to lead the journey

Cloud Tiger Team (0-6 months)

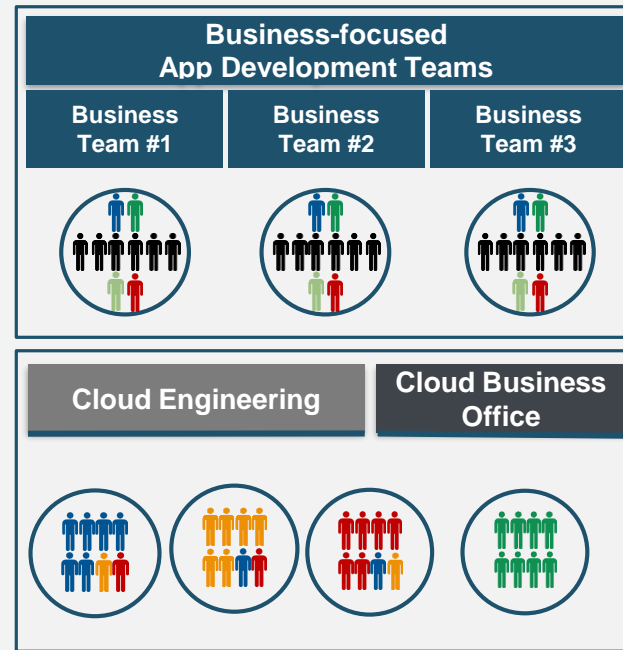


- Leadership
- Infrastructure
- Security
- Operations
- Applications

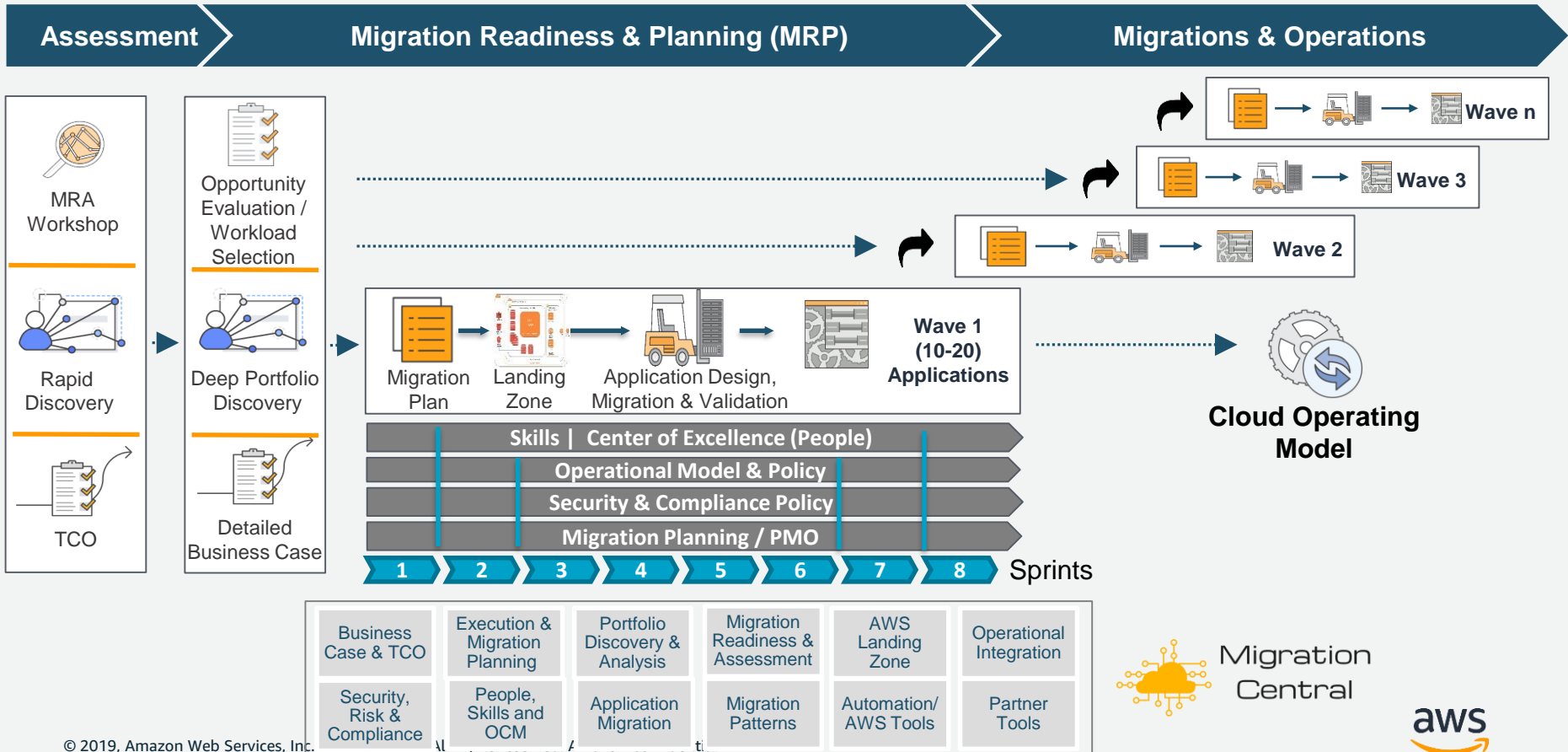
Initial Cloud COE (6+ months)



Cloud-Enabled Organization (18+ months)



Executing the migration journey



Migration Central



Tools to accelerate migration

AWS MIGRATION HUB



A single location to track the progress of application migrations across AWS and partner solutions

AWS MIGRATION SERVICES

- AWS Application Discovery Service
- AWS Server Migration Service
- AWS Database Migration Service
- AWS Schema Conversion Tool
- VMware Cloud on AWS

AWS DATA TRANSFER

- S3 Transfer Acceleration
- AWS Storage & File Gateway
- AWS Snowball & Snowmobile
- AWS Direct Connect
- Amazon Kinesis Firehose

Inventory



Business Case



Deep Discovery & Planning



App Dependency Mapping



Workload & Data Migration



Validation



Partner migrations tools found on **aws**marketplace

Thank you!