Building an Effective Cloud Operating Model on AWS

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Agenda

- Introductions
- Cloud Operating Model
  Digital Transformation - People, Process and Technology
- Creating a Cloud Operating Model
  Org Structure, Roles & Responsibilities, and Tools
- Measuring the effectiveness of a Cloud Operating Model
- Q&A
This purpose of this presentation is to provide education on building an effective Cloud Operating Model for AWS.

This presentation was first delivered at the AWS Summit in Chicago on Wednesday 26th July 2017. For more information, contact us at www.cloudreach.com/contact-us
AN INTRODUCTION

CLOUDREACH
We Enable
for **repeatability**, **consistency** and **security**
for **transforming** requirements into solutions

We Integrate
to increase the **value** of information
for **connecting** applications using business logic

We Operate
for **automation**, **orchestration** and **security**
for DevOps culture and processes aligned to **business needs**
Our Customers

Come to us with and without existing cloud environments. Sometimes starting from scratch, sometimes optimising what they have.
Cloudy Facts and Figures

10 offices across North America and Europe Including Chicago

Blackstone Portfolio Company

Premier Partner with AWS in NA and EMEA

Born in the Cloud

Unique Software and Products

300+ AWS Certifications
Who am I?

Jeff Armstrong

- Lead US Cloud Architect
- 20+ years of experience in IT
- Consulting for 5 years
- Previous life in Executive Management
- Hold 5 AWS Certificates
- Hold CISSP, CEH, CHFI Certifications
- Certificate in Executive Leadership from Cornell
- Masters in Information Security
Digital Transformation - People, Process and Technology

Cloud Operating Model
What is a Cloud Operating Model (COM)?

A vision for your implementation of the cloud

A set of high level guiding principles on it’s use.
What does the COM do?

It allows you to adopt the cloud for what it is -- NOT a datacenter

The cloud is a set of technology tools that levels the playing field between Multinationals and basement startups
What makes up an COM?

It is generally accepted that 3 perspectives are used to describe an operating model

People

Process

Technology
What are the benefits of COMs?

The COM is the future desired state of the organisation.

It provides a big picture of what the future steady state business may look like.

Can be used for internal consistency, engender a sense of purpose and a common mission.

Focuses on both hard and soft skills.
How do you create a Cloud Operating Model?
How does Cloudreach define the COM?

The Cloud Operating Model is made up of the following components which we will take you through in this presentation:

- **Vision**: Organisations Cloud Vision and Strategy
- **Guiding Principles**: Core Principles of using the cloud which will guide the organisation
- **Organisational Structure**: How the organisation will structure its IT organisation to deliver cloud capability
- **Roles**: Detail of roles old and new to deliver cloud capability
- **Responsibilities**: The responsibilities of the roles and how they interact with each other usually documented in a RACI
- **Processes**: Review of processes old and new ones which need to be created to support the new technology and organisational structure / roles and teams
- **Tools**: Any new tooling required to support this technology
The Vision

A sample cloud vision is comprised of the following:

1. Buy rather than build services, favoring **Cloud 1**
2. Simplify by leveraging Cloud capabilities
3. Adopt Cloud compute capability -- demand driven delivery model
4. Deliver cross BU solutions where appropriate
Defined principles

Design principles specify strategic requirements that the operating model must support.
A Cloud Centre of Excellence is a team of people responsible for developing the cloud best practices, governance, and frameworks.

- Establish a core “Cloud team”
- Evangelize internal teams
- Build internal competencies
- Develop Cloud standards
The roles within the organisational structure further define the COM and allow you to start mapping out the various responsibilities.
Processes

The Cloudreach mantra is that moving to Cloud is different and as such, requires new processes to realize the value that Cloud adoption can provide.

- Agile Processes for Cloud Service Team and IT Ops
- Operational Processes for PaaS
- Governance and Security Processes
- A Process for Feature Requests
Firewall rule approval is a common process that needs to be redefined for the cloud

1. Developer creates IaC security group
2. Security group is tested in DEV
3. IaC is validated, Sec reviewed
4. Immutable IaC is deployed to UaT
5. Final Validation
6. Immutable IaC deployed to Prod
Responsibilities

Responsibilities shift in the cloud and those changes need to be reviewed and documented.

- Responsible
- Accountable
- Consulted
- Informed

A RACI chart brings clarity and order by identifying the functional roles and then listing the actions or decisions in the process.
Tools

Patching
Changing from a legacy model to a full CI/CD process requires changes to the patching process and tools.

Logging and Monitoring
Due to the ephemeral nature of the cloud, changes need to be made to the logging tools to capture and correlate data.

Deployment Tools
Again, changes to the deployment pipeline and the availability of IaC requires changes to the deployment toolset.

Sometimes, new Cloud friendly tools need to be procured to support your cloud journey.
How do you measure the effectiveness of a Cloud Operating Model?
Measure Effectiveness

76% Release Timing
Speed deployment of releases

38% Downtime
Reduce downtime for release deployment

53% Business Continuity
Increase availability of BC on application by application basis

86% Job Satisfaction
Increase developer job satisfaction by improving tools and training on new technologies
For more details, download the COM whitepaper.
Thank You