AWS Cloud Adoption Framework

A Proven Approach to Achieving Value in the Cloud

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Cloud Adoption Journey
Cloud Adoption is more than just technology...

**Why?**
- Cloud Strategy
- Business strategy
- On Demand
- Industry
- Continuous Deployment
- Security
- Fail early & Iterate

**How?**
- Enabler of the Business
- DevOps
- IT as Utility
- Talent Optimization
- Cost Control
- Application Transformation
- Compliance and Governance
- What are others doing?
- Measure
- Cloud Adoption Roadmap
- Operational Effectiveness
- Reporting

**When?**
- Cost Control
- Talent Optimization
- On Demand
- Industry
- Continuous Deployment
- Security
- Fail early & Iterate

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...Cloud adoption is a journey

- It requires detailed planning and an adoption roadmap
- Cloud Adoption strategy should be aligned closely with business goals and objectives
- It can be disruptive and will drive significant change
- Most start small, learn, iterate and expand
- Value can be achieved quickly
Elements of a successful journey

Executive Sponsorship

Align on business requirements; bring all stakeholders with you

Cloud-First Strategy

Create your vision; incentivize team members to follow your lead

Experiment

Define Architectures, patterns, governance; measure, monitor, iterate

Principles & Standards

Publish guidance and guard rails for how to adopt cloud successfully

Cloud Center of Excellence

Provide centralized expertise; guide decentralized innovations

Organizational Change

Define new operating models, policies, processes, economics; provide training

Adoption Roadmap

Start small and iterate, measure, manage and update plan

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# Key Core Execution Activities of AWS CAF

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AWS Cloud Adoption Framework
What is the AWS Cloud Adoption Framework (CAF)?

The AWS Cloud Adoption framework is a simple and agile process to achieving sustainable business value with AWS cloud services. This adaptive four phase framework is designed for small or large cloud transformations. It organizes the planning cycle and aligns the cloud strategy to the business objectives.

1. Align Business & Cloud Strategies
2. Rapid Discovery & Planning
3. Realize & Sustain Business Value
4. Innovate & Transform

Start realizing value as soon as 1-2 months

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Start your Journey

Every journey to the cloud is unique and the AWS CAF’s modular structure & approach enables you to pick and choose where to start based on your unique requirements, maturity, and cloud adoption situation. It is a simple, straightforward, proven process to achieve your goals to sustainable business value in a timely manner.

1. Align Cloud & Business Strategy
   - Understand the business strategy, needs and requirements. Incorporate the business requirements into the cloud adoption strategy. Engage stakeholders, develop business case and TCO.

2. Rapid Discovery & Planning
   - Baseline your capabilities referencing our cloud adoption perspectives. Fully understand and document the opportunities to develop your cloud capabilities. Plan your journey and develop your unique strategic adoption roadmap. Execute the plan.

3. Realize & Sustain Business Value
   - Integrate best practices, run, measure and report the value of your cloud services. Look for opportunities to enhance, simplify, and optimize your environment. Update business case and TCO models.

4. Innovate & Transform
   - Increase the value of the cloud by; Incorporating a DevOps approach of continual improvement. Review your applications and develop a strategy to innovate & transform the application portfolio. Develop a cloud first strategy of agile application development, fail fast and increase application value to the business.

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Align Business & Cloud Strategies

Understand the business strategy and market drivers to incorporate the requirements in development of your cloud strategy and targeted rate of adoption (experiment, test & development, production, all-in). Engage key stakeholders from the start in developing a cloud strategy.

Benefits:
- Business aligned cloud strategy
- Executive Sponsorship
- Stakeholder engagement & Support
- Adoption approach aligned to business and organizational readiness

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Rapid Discovery, Planning, and Migration

Rapid discovery incorporates the cloud adoption strategy, baseline, and gap analysis resulting in the CAF activities matrix. The resulting activities matrix will inform and drive the development of a comprehensive and prioritized cloud adoption roadmap for your cloud adoption journey.

**Discovery**
- **Assess and baseline current cloud/IT capabilities. Level of automation**
- **Define the key cloud adoption capabilities required to achieve business objectives**
- **Execute your strategic cloud adoption roadmap. Adopt new processes, train staff, measure and report success**

**Benefits**
- Launch point for your cloud strategy
- Baseline of current capabilities
- Understanding of capabilities gap
- Prioritized list of activities/initiatives to inform and create your cloud adoption roadmap
- Comprehensive cloud adoption roadmap to guide your journey
Realize & Sustain Business Value

Develop a DevOps approach for iterative and continuous improvement. Consistently measure and monitor your cloud environment. Expand on the successes and the value created for the business. Improve lower preforming capabilities.

Run
- Operate and manage your new cloud environment

Measure
- the value and efficiencies achieved. Look for opportunities to improve and further automate the environment

Improve
- opportunities to automate, efficiencies, and effectiveness of the cloud in achieving the business objectives

Report
- opportunities to automate, efficiencies, and effectiveness of the cloud in achieving the business objectives

Benefits
- Iterative process of improvement
- Proven tools and assets/artifacts that support every phase of the delivery process
- Applies to any cloud adoption (experiment, test/development, production, all-in)

Develop continual improvement plan to address reported opportunities.

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Innovate & Transform

Significant business value is realized from architecting applications to leverage the full breadth of AWS cloud services. Innovating and transforming applications incorporates the best practices and approaches, aligning your cloud application architectures, development, and deployment processes to providing the business agility required to meet market demands and sustainable value creation.

- **Innovate**
  - Unlock the value of your application portfolio
  - Transform your business applications

- **Transform**
  - Cloud aligned Application (Infra & Apps)
  - Business Applications

- **Benefits**
  - Cloud aligned application architectures
  - Innovative application solutions
  - Shorter development cycles and driving increased business value
  - Applications that leverage the agility of cloud computing
  - Advanced cloud and application services

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AWS CAF Perspectives
One of the core component of the AWS CAF is the seven Core Perspectives.

These perspectives or points of view provide high level guidance and considerations for developing a comprehensive adoption roadmap. They are based in the experience AWS has acquired delivering hundreds of cloud adoption projects.

https://aws.amazon.com/professional-services/CAF/perspectives/
Perspectives Overview

- **Business** - Identifying, delivering, and measuring **business impact** using architectural approaches that align delivery to business imperatives
- **Security** - Defining and implementing the required levels of **security, governance, and risk management** to achieve compliance
- **Platform** - Represents the **technology services** of the AWS cloud platform. Provides patterns, guidance, and tools for optimal use of the technology services and services to implement
- **Operating** - Represents the structure and approaches to managing an agile and scalable cloud environment aligned to enabling the business strategy. Provides process, guidance and tools for optimum operational **service management**
- **Process** - Managing **portfolios, programs and projects** to deliver expected business outcome on time and within budget
- **Maturity** - Defining the **target state** architecture of the organization and developing a balanced scorecard and roadmap to support the adoption of cloud services
- **People** - Defining the **organizational structure, skills and competencies** needed to adopt and manage an AWS cloud environment

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Cloud Discovery Workshop
Cloud Discovery Workshop

Objectives
- Provide foundational AWS Cloud Adoption Framework overview as it relates to your environment
- Develop a clear understand of current state and desired future state
- Assess WHAT workloads will yield best value
- Assist with cost/benefit modeling to confirm WHY
- Advise on HOW best to architect for success
- Recommend training and assistance for those WHO will joint the journey
- Provide draft plan for WHEN results can be realized

Deliverables
- High level baseline of environment
- High level actionable Roadmap
- 5 workloads identified to get started

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**Discovery & Planning**

- **Discovery Working Sessions**
  - Kick-off
  - Customer Goals and Objectives
  - Customer Current State Technology Stack
  - AWS Platform Overview
  - Customer application overview
  - Customer Monitoring / Management
  - Initial Application selection

- **Rapid Discovery & Roadmap**
  - Customer environment deep dive (technology, Apps, operations)
  - Balanced Score Card
  - Initial Cost Benefit Model (TCO)
  - Activities Matrix
  - Cloud Adoption Roadmap
  - Skills assessment

**Customer Review of Roadmap**

- 5 initial workloads
- Initial Cost/benefit Model
- High Level Design (HLD)
- Reference Architecture
- Training Plan
- Adoption Roadmap

**2-3 Weeks**

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Application Discovery & Portfolio Assessment
Overview

Define Sourcing Strategy & Model
- The decision flow for determining how to source the business and technical operations for each workload

Application Portfolio Assessment
- The decision flow, segmentation and prioritization of workloads that should move to AWS

Application Migration Factory
- Tools, processes and people required for mass migrations

Cloud Transformation Framework
- Building the enterprise-wide IT transformation program

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Application Portfolio Assessment

Step: 1 Collecting Application Portfolio Inventory
- Conduct application discovery workshop
- Interview application owners
- Implement tool-based discovery

Step: 2 Defining Segmentation and Prioritization Criteria
- Profiling application inventory
- Identifying complexity, criticality and preferences
- Clustering and prioritizing

Step: 3 Determining Application Migration Options
- Driven by prioritization, skills and best practices
- Use best patterns
- Capture inter-dependencies
- From ‘lift and shift’ to ‘drop and shop’

Step: 4 Creating Application Migration Roadmap
- Expect complete IT transformation
- Include IT process changes and organizational change management
- Focus on new Operations model

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Application Migration & Disposition Options

**Application Discovery**

- Application Interviews
- App. Automated Discovery
- App. Analysis
- App. Migration Options

**Migration & Disposition Options**

- **Retain**
  - Description: This is the “do nothing” option. Legacy costs remain and obsolescence costs typically increase over time
  - Complexity: Low

- **Retire**
  - Description: Decommission and archive data as necessary
  - Complexity: Low

- **Rehost**
  - Description: “Lift and Shift” or “Forklifting.” Automated and scripted migrations are highly effective
  - Complexity: Med

- **Repurchase**
  - Description: Either a replacement through procurement, or/and upgrade
  - Complexity: Med

- **Replatform**
  - Description: Opportunities to address significant infrastructure upgrades can be realized which positively affects compliance, regulatory and obsolescence drivers
  - Complexity: High

- **Refactor**
  - Description: Re-architecting and recoding require investment in new capabilities. Potentially significant business disruption
  - Complexity: High

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Activity Matrix & Roadmap
Develop and prioritize key initiatives for your cloud adoption roadmap to guide your execution.

**Key Activities:**
- Develop **prioritized** set of recommendations and initiatives
- Develop **cloud adoption roadmap** with function dependencies and timelines
- Develop **communications plan** and schedule
- **Organize** resources, partners, etc.
- **Track progress**, measure and report success often.
Activity Matrix

AWS CAF Matrix:

- Collection of sequenced activities aligned to the 7 perspectives and organized into 4 phases
- Includes high-level activities that may be performed by the customer, partners, and/or ProServe

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Cloud Adoption Roadmap

AWS CAF Roadmap

- List of initiatives derived from AWS CAF Matrix assigning time/duration, owners, and swim lanes
- Contains the who (customer, partner, and/or ProServe) will do what, milestones, cost, etc.
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