

# AWS for Project Managers

## What You Need to Know to Lead Cloud Projects Successfully

Cloud adoption is no longer optional-it's a business imperative. Many organizations move to AWS for scalability, cost savings, and flexibility.

Project Managers don't need to be cloud experts, but understanding key AWS concepts helps you communicate with stakeholders, mitigate risks, and manage scope effectively.

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# nagers Lead Cloud



## **Core AWS Services**

#### Compute

EC2 (virtual machines), Lambda (serverless computing), and ECS/EKS (containers).

#### Storage

S<sub>3</sub> (object storage), EBS (block storage), and Glacier (archival storage).

#### Databases

RDS (relational database), DynamoDB (NoSQL), and Redshift (data warehousing).

#### Networking & Security

VPC (virtual private network), IAM (identity management), and CloudTrail (audit logs).



# PM Tip: Understanding Services

### ${\sf Ask}\,{\sf Questions}$

Speak with architects about which AWS services they plan to use and why. 산장

See the Big Picture

Understanding service relationships helps manage dependencies and risks.



### Document Decisions

### Keep track of service choices and their business justifications.



## Business Alignment

What business problem are we solving with AWS?

Ensure cloud adoption addresses specific business needs, not just technical interests.

What are the performance, security, and compliance requirements?

These requirements will shape your AWS architecture choices.

Are we migrating legacy systems or building cloud-native apps?

The approach differs significantly based on this strategic decision.

What's the expected ROI on this AWS investment?

Define clear metrics to measure success of your cloud initiative.

## AWS Well-Architected Framework



Security assets.

2

3

Reliability

Use computing resources efficiently to meet requirements.

#### Protect information, systems, and

### Ensure a workload performs its intended function correctly.

### Performance Efficiency



# Managing AWS Costs

#### Track Expenses

Use AWS Cost Explorer to monitor and analyze cloud spending patterns.

#### Right-size Resources

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Avoid over-provisioning EC2 instances and other resources.

#### **Reserved Instances**

Leverage Reserved Instances & Savings Plans for predictable workloads.

#### Budgets & Alerts

Set up budgets & alerts in AWS to prevent unexpected cost overruns.

# Security & Compliance



AWS follows a Shared Responsibility Model where AWS secures the underlying infrastructure while your organization is responsible for securing applications and data.

# **Key Security Practices**

### IAM Roles

Use IAM roles & least privilege access to limit permissions.

### Encryption

Implement encryption for sensitive data using AWS KMS.

### Monitoring

Set up CloudWatch & GuardDuty for security monitoring.

#### Compliance

Ensure compliance with HIPAA, SOC2, ISO27001 if needed.



# Agile & DevOps for AWS

### CI/CD Pipelines

Automate deployments using AWS CodePipeline & CodeBuild.

#### Infrastructure as Code

Use Terraform or CloudFormation to manage cloud resources. Monitoring & Logging Implement AWS

CloudWatch for performance tracking.

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Integrate AWS Lambda & API Gateway for scalable testing.

#### Automated Testing



## Managing Cloud Teams

#### Shorter Sprints

Continuous Integration

Implement shorter development cycles to adapt quickly to cloud changes.





## PM's Role in AWS Projects



### Bridge the Gap

Connect business and technology teams with clear communication.



### Manage Risks

Oversee cloud project scope, risks, and costs effectively.



**Ensure Best Practices** 

Drive security, compliance, and performance standards.

## Key Takeaways

1	Strategic Leadership PMs are strategic leaders, not cloud engineers				
2		Business Alignment Ensure AWS implementation serves business goals			
3			<b>Cost Management</b> Actively monitor and optimize cloud spending		
	Ĺ	ł		Security Focus Integrate security throughout the projec	

You don't need to deploy an EC2 instance or write an IAM policy, but understanding these concepts will make you a better AWS Project Manager.

#### ct lifecycle

# **Final Thoughts**

Project Managers play a crucial role in AWS implementations-not as cloud engineers, but as strategic leaders.



### Bridge the Gap

Connect business and technology teams with clear communication and mutual understanding.



Manage Cloud Resources

Oversee project scope, risks, and costs effectively to ensure AWS implementations deliver value.





Ensure	Best	Practices	

Drive security, compliance, and performance standards throughout your AWS projects.

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#### re Collaboration

### r Agile teamwork for essful cloud adoption and continuous improvement.