

7 Lessons to Make Your Cloud Adoption Plan a Success

Introduction: Cloud adoption is now a strategic imperative

The benefits of the cloud are now reasonably well known. Cost savings are compelling for most companies; however, the number one reason enterprises are moving to the cloud so quickly is speed and agility.

Moving to the cloud frees up resources to support your organization's transformation to a more agile, innovative, and efficient business. There are compelling reasons to migrate applications from on premises to the cloud and change the way IT is delivered and consumed across the organization.

If you're thinking along the same lines, you're in good company. Today, global organizations such as Capital One, Johnson & Johnson, News Corp, Siemens, Netflix, and Enel run their businesses on AWS and have made the journey from private data center to AWS and transformed their businesses.

Because the cloud is disrupting the way IT is delivered and consumed, you have a tremendous opportunity to scrutinize and rethink the way IT operates in your organization. Understanding the lessons learned from those who have gone before you can help reduce the time and effort to reach the full benefits of this transformational technology.

We've captured seven lessons that you can use to help make your cloud adoption plan a success. It's a template for CIOs, CTOs, and other transformation leaders who have ambitious visions for what they can achieve with AWS and who want to make sure the whole business is along for the ride.

The good news is that thousands of organizations are already on this journey, and we can all learn from each other. You can find more perspectives from leaders at AWS and other customers at our AWS Executive Insights.

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Executive Buy-In

Successful transformation projects need a senior executive who ensures that the entire leadership team appreciates the profound benefits of moving to the cloud.

Without that buy-in, you might get a few applications in the cloud, but you'll likely get stalled when it comes to migrating the critical applications your business depends on including revenue-generating applications, customer databases, back-office applications, etc.

Without a strong business sponsor, the minute things get difficult, others may become skeptical, and your progress will slow.

So how do you get senior executives on board? And do you have to get support from all of them?

The best way to get other executives to buy in to the plan is by appealing to their own priorities.

For example:

- Your CEO may be concerned about how to compete against disruptive startups and how artificial intelligence can change the company's business model;
- > Your CIO may be feeling pressure to deliver new services faster and more efficiently;
- > Your CFO may be looking for ways to be better prepared for a business downturn;
- > Your CMO may need better and faster insights on customer buying behavior and to dramatically improve time to market; and
- > Your CISO may need more visibility, auditability, and control to reduce the risk of a data breach or information loss.

As you start your cloud journey, you may not have buy-in from all of the executive team. But if you can demonstrate even to one of them that your cloud adoption plan will deliver the benefits they're seeking, then you will have a powerful sponsor for your journey. This executive sponsor will be able to evangelize for you and keep the whole business focused on why you're moving to the cloud and what your organization can achieve when you get there.

Resources to help you get executive buy-in:

aws

IDC Report: Quantifying the Business Value of Amazon Web Services > > PRO TIP: To keep your sponsor on board and cheerleading for you, you'll need to achieve some quick wins that align with their priorities—see Lesson #3.

2 Bring Your Team Along

To accomplish your cloud business plan, you don't just need executive buy-in. You need your whole team on board—committed to achieving the vision, excited to build new skills, and prepared to work in completely new ways.

All evidence suggests that most techies love working in the cloud. And what's not to love—the cloud is a chance to learn new skills, play around with new ideas, test stuff out to see how it works, and make a difference to the organization.

Most people will jump at the opportunity to grow. But you may find that some of your people resist change. And any resistance will at best hinder your progress and at worst derail the whole venture.

So here's what you do:

When you have buy-in for your cloud goals (See Lesson #1), you can clearly and firmly communicate the certainty of the cloud journey: It's non-negotiable, there's senior executive sponsorship, and the results will be transformative for the business. You need everyone on board with you, engaged, and excited for what the future will bring.

Of course, there are bound to be worries—your data center team will soon find themselves operating in a hybrid world, with progressively fewer onpremises resources to manage and an abundance of new and innovative cloud technologies to master. It's essential that you articulate exactly how their roles will change, over what timescale, and what opportunities they will have in the cloud-first world.

Great cloud skills are scarce and in huge demand. So the best approach is to upskill your whole team as fast as you can—and the good news is that technology employees tend to be fast, flexible, eager learners!

AWS Training and Certification offers the resources you need to develop your team, innovate in the cloud, and transform your organization. They can help your staff leverage the fundamental IT skills and institutional knowledge they already have to transition to cloud roles and deepen their cloud expertise.

Bear in mind that it's not just technical skills such as learning the best strategies for moving applications to the cloud or how to use cloud-native services. An optimized cloud environment is one of continuous delivery, integration, and testing—which means your developers will need to work in concert with your operations people in a DevOps culture. So, for best results, build both technology skills and skills for operating in a new way into your training plan.

Advance your IT staff:

Learning Paths for Training > How Can Government Grow and Recruit Digital Talent? > Getting Started with Training for the Cloud > Training the Entire Enterprise to Harness the Cloud's Full Value >



Don't get stuck in analysis paralysis—just get started! Ship something to production that has immediate, tangible benefits.

Moving to the cloud should be an iterative process. There's no better way to get started on your cloud adoption plan than *getting started*. Build and/or migrate your first applications. You need to prove that the journey is worth it; that there are fantastic, tangible benefits from going to the cloud. And to keep everyone engaged, it's best to do this as quickly as possible.

Identify one or more applications that can move quickly and easily to the cloud, which will deliver very visible benefits to the organization.

But which ones? Look for applications that the business needs to meet its goals but cannot easily be implemented on premises. For example, AWS pre-trained AI Services easily integrate with your applications to add intelligence to address common use cases such as personalized recommendations, modernizing your contact center, and increasing customer engagement.

Or, migrate a business-critical application that could benefit from an upgraded high-end hardware configuration—an upgrade that would have been cost-prohibitive if you were doing it on premises. Then bask in the joy of happy users enjoying outstanding performance.

You could also choose to improve customer interactions by creating a data lake on AWS. By combining customer data from a Customer Relationship Management (CRM) platform with social media analytics, and with customer buying history and incident tickets, your business can gain new understanding of potential customer churn or identify rewards that will increase loyalty.

By identifying something really valuable to the business, setting it up really quickly in the cloud, and starting to deliver immediate benefits, you'll show the organization the real, tangible value from your cloud adoption. Plus, your team will have gained valuable experience and skills in setting up and managing high-profile business applications in a cloud environment.

AWS Resources to Help You Get Quick Wins:

How to Go Fast > We All Start Somewhere > Partnering for AI innovation > Intuit case study > Bayer IOT Case >



4 Engage Partners

Even as you're learning and building experience, you can get some quick and valuable wins under your belt: See Lesson #3. But as you start to turn your attention to larger-scale migrations and modernization, you may want expert help.

This is where you should consider enlisting the help of people who plan, build, transition, and operate critical IT systems in the cloud every day and can help transform your people and operating model to take advantage of the cloud.

AWS and our AWS Partner Network: deep expertise where, when, and how you need it.

AWS Professional Services works side by side with your team at each stage of your transformation journey. With AWS ProServe, you get access to a team that has the most experience with enterprise cloud computing and AWS services.

The **AWS Partner Network (APN)**, with its broad ecosystem of partners, offers an expanded set of professional services capabilities. In combination with AWS ProServe, this gives you a virtually unlimited set of resources to get you the help you need.

To help you realize the value of the cloud faster, we can operate your AWS infrastructure on your behalf with **AWS Managed Services (AMS)**. AMS closes skill gaps and eliminates post-migration operations pain by providing a production-ready environment in days. This includes a secure, compliant landing zone, a curated selection of AWS services, and an "out-of-the-box" cloud operating model.

With AMS, we take full operational responsibility for your environment during migration until your teams are ready to take over. This flexibility enables you to move to AWS quickly while your in-house teams learn new skills, create new processes, and implement new tools. Because AMS contracts are month to month, you have the flexibility to take back operations once you build the necessary skills.



The AWS Partner Network also features dozens of Managed Services Providers (MSPs) that can offer you options for managing your AWS environment.

High-quality, fast issue resolution is a critical element of cloud success. With the pace of the innovation, issues or questions about services are inevitable. **AWS Support's** unique, customer-obsessed approach brings a single-tier resolution model to issue resolution, having support engineers stay with cases from start to finish and avoiding handoffs that slow resolution times. AWS, hand in hand with the AWS Partner Network, is how you can move faster and achieve success with your cloud adoption plan. For example, with AWS customer enablement services, National Australia Bank was able to train over 4,000 IT staff members, achieve regulatory compliance approval, implement its first cloud-based data lake, and complete a large-scale migration project of over 30 applications in less than two months.

Find the right enablement partner:

AWS Partner Network> Migration Partner Solutions> AWS Managed Services> AWS Professional Services>

Learn more about how AWS and our partners have helped our customers move to AWS:

SGN Case Study> Orion Health case study> Sony DADC NMS Case Study>



5 Build Your Cloud Enablement Engine

If you're operating in a cloud-first world, a DevOps operating model becomes the norm.

With this comes a frequent assumption that implementing DevOps "correctly" means giving developers the ability to manage the full lifecycle of their applications and the platform services that support them.

While there will certainly be specific use cases where this "full-stack, fulllifecycle" approach to DevOps makes sense, most enterprises will benefit from having a central team that handles the undifferentiated heavy lifting of configuring and integrating AWS platform services on the developers' behalf.

This ensures that the platform services supporting your applications adhere to corporate standards for architecture, operational excellence, security and compliance, as well as financial controls, without burdening developers with these platform governance concerns.

Implementing a core team for these platform services frees development teams to focus on maximizing the business impact—and value—of their applications. Developers can then migrate and optimize their applications faster, using standardized, self-service enterprise capabilities.

This core team within your company becomes your "Cloud Enablement Engine."

Your Cloud Enablement Engine (CEE) provides products and shared services to your internal customers. These products and services accelerate cloud adoption while keeping adoption sustainable and secure.

There are two key components to your Cloud Enablement Engine:

- Cloud Business Office (CBO): The CBO provides products or services for business and financial management and governance, ongoing training, as well as change management to ensure the organization successfully embraces adapting to life in the cloud.
- Cloud Platform Engineering (CPE): The CPE team configures and codifies the AWS platform to align with enterprise standards for architecture, operations, security, and finance. The CPE then packages and continuously improves these standards as self-service deployable products and consumable services.

These products and shared services add up to a large responsibility for the Cloud Enablement Engine. That said, you don't (and shouldn't) build it all at once.

At AWS, we frequently say, "think big, but start small." Start with a single, small **"Cloud Foundation Team"** made up of a product owner, financial analyst, organization change management specialist, and engineering manager, including architects and engineers who have the domain expertise to design and build products related to Platform, Operations, and Security.

Resources to help you establish a Cloud Enablement Engine:

Get current insights from our Enterprise Strategy blog >

6 Hybrid IT Architecture

While most applications can be easily migrated to the cloud, some applications remain on premises necessitating a hybrid IT architecture.

Inevitably, there will be a period—which could last for some years—where you're operating a hybrid architecture with some applications and workloads in the cloud and others staying on premises. You'll need to continuously prioritize and re-evaluate what to move and what to keep, especially as the pace of innovation in the cloud opens up new opportunities virtually every day.

During this time, you'll need to continue to communicate your cloud-first plan: For every application—from the newest web service to the oldest legacy system—the question isn't "Why the cloud?" but "Why NOT the cloud?"

You'll need a well-thought-out strategy that sees you increasingly moving legacy applications into the cloud—including the big, monolithic, complex legacy applications that are critical to your business.

A small proportion of these legacy applications are going to live on premises for a long time. These are the ones for which there's a good answer to the basic cloud-first question: "Why NOT the cloud"? It may be that the data is too sensitive, it can't be re-architected, the application has low latency or local data processing requirements, or the data can't be moved for data sovereignty regulations.

For applications that remain on premises, **AWS Outposts** bring the same hardware and software in the AWS cloud, the same services and APIs, the same management tools, and the same support and operating model to virtually any data center, co-location space, or on-premises facility. With Outposts, you have a truly consistent hybrid cloud so that you can develop once and deploy across Outposts on premises or in the AWS cloud without having to recertify your applications.

If you're using VMware Cloud Foundation technologies on premises today, you can also simplify your hybrid IT operations by using those same technologies including vSphere, vSAN, NSX, and vCenter Server across your on-premises



data centers and on the AWS cloud. VMware Cloud on AWS lets you maintain consistent operations across your hybrid cloud architecture, without having to purchase any new or custom hardware or rewrite applications.

To ensure you have a hybrid IT architecture that meets your needs today and tomorrow, you'll want to choose a cloud provider that has the breadth and depth of services and features to address the broad spectrum of hybrid use cases, from integrating on-premises IT resources with cloud resources to delivering cloud services, APIs, and operating models to your on-premises and disconnected edge locations. And, since a hybrid architecture functions as an extension of your IT environment, you need a cloud provider with a reliable and global infrastructure to support your business operations and a provider that helps you meet stringent security and compliance requirements.

Getting everyone on board and having a well-thought-out, well-documented, and well-communicated hybrid strategy will make this transition period much easier to manage and much faster to complete.

Resources to help you implement a hybrid IT architecture:

Hybrid Cloud on AWS > AWS Outposts > VMware Cloud on AWS >

Learn more about how AWS customers implemented hybrid architectures:

Comcast case study> Intuit case study> Yelp case study>



7 Build Momentum

Congratulations! You've got your champion and team on board (Lessons #1 and #2) and demonstrated the value of the cloud to your organization (Lesson #3). You're building your foundation with your people and processes (Lessons #4 and #5) and architecture (Lesson #6). How do you build off of that momentum and even accelerate it?

By now, you have a core team that is passionately building their cloud skills and adopting DevOps practices. You've proven the cloud value to your business through the first applications the team built and/or migrated. But the rest of the organization's resources are still tied down under the weight of your technical debt and maintaining your legacy infrastructure. So how do you keep your adoption plan moving forward and see greater benefits from your cloud transformation?

Many leading businesses such as Capital One, Guardian Life, Enel, and Intuit have found that the answer is to free up their IT resources with a large-scale, rapid migration of their applications to AWS.

When your team sees that you're committed to rapidly migrating to the cloud, they tend to get on board faster. More people develop cloud skills and momentum accelerates.

The benefits of breaking free from your legacy IT environment and practices are just too compelling to move slowly:

- > Much, much lower IT costs
- > Elevated security and operational resiliency
- > The agility to move faster than competitors
- > An on-demand environment for experimentation and innovation
- > Near-infinite resources to support game-changing initiatives

This is where every organization wants to be—and when cloud-first becomes your standard, you're there. You can move fast, deploy new services globally, improve your time to market, free up real estate, innovate on the fly, and respond to changes in an instant.

And in a market where so many organizations are held back by the many constraints of aging on-premises systems, that's a huge advantage.

AWS Resources to Help You Get the Most Value from Cloud Faster:

Accelerate Large-Scale Migrations >

Derisking Enterprise Migration with AWS Managed Services > "How to Cloud" with Capital One >

Conclusion & Next Steps

Helping your organization transform in the cloud to a more agile, innovative, and efficient business will likely be the most important career decision you make this year.

You don't do change like that in an ad hoc way. Rather, you learn from those who have been there, done it, and transformed their organization for the better.

The Seven Lessons outlined here are drawn from the experience of some of the world's most successful cloud practitioners and some of the biggest enterprises on the planet. We hope it inspires you to follow in their footsteps.

And if you need some guidance along the way, AWS can either help directly or point you in the right direction.

Are you ready for the next step?

Then it's time to give us a bit of detail on who you are and what you're doing, and we'll get back to you to get the ball rolling.

Contact us today \rightarrow

Ready to learn more?

We have resources to help you plan, manage, and execute your cloud adoption. Here are just a few to help you on your way.

Prepare for the cloud:

Cut through the mythology surrounding cloud security, compliance, culture, expertise, and performance.

What are your Cloud Transformation Principles? >
Reducing Risk in the Cloud by Overcoming the Status Quo Bias >
5 Steps to Building a Culture of Security >
AWS Control Tower and AWS Security Hub—Powerful Enterprise Twins >
12 Steps to Get Started With The Cloud >

Follow cloud pioneers:

Migrating to Cloud–Lessons from Netflix, Brought Up to Date > Adrian Cockcroft on Digital Transformation > Staying Inspired: A Conversation with Today's Enterprise Cloud Leaders >

