



Transform the Way You Do Business

MIGRATE TO AMAZON WEB SERVICES



Table of Contents

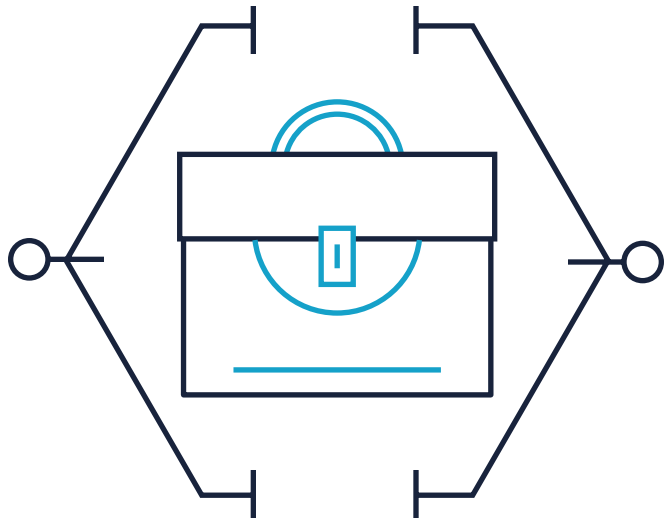
Introduction	3
Business Case	5
Five-Phase Migration Process	8
Phase 1 Migration Preparation and Business Planning	9
Phase 2 Portfolio Discovery and Planning	11
Phase 3 & 4 Application Design & Migration and Validation	12
Phase 5 Modern Operating Model	13
“The 6 Rs”	15
Conclusion and Next Steps	20
Featured APN Partners	22
About Us Carbon60	23
Case Study Fundraising Leader	24

Introduction

Migrating to Amazon Web Services (AWS) enables organizations to transform the way they do business by empowering them to accelerate their speed of doing business, freeing them from the constraints of on-premises data centers, and providing the flexibility to pay only for what they use. This eBook will detail how cloud adoption can deliver significant business benefits.

A key imperative is the development of a thorough and compelling business case, that clearly identifies the specific business benefits your organization will achieve by moving to the cloud. A robust methodology is also key and we will give an overview of the 5-phase migration process, which serves as a guide to migration, and also learn about six common migration strategies that are used to move applications and workloads to AWS. You will also be introduced to the support options that are available from Amazon Web Services Partner Network (APN) Partners, AWS Professional Services, and vendor solutions on AWS Marketplace that can help you migrate.

Developing a robust business case will also help you begin to see the positive effect that migration will have on your people and organization, and help you gain an understanding of how specific roles and responsibilities for the cloud adoption effort will be assigned.



Business Case

Business Case

A robust and thorough business case is critical

A core tenet of migrating to AWS is developing a business plan that is based on your organization's fundamental reasons for cloud adoption. For example, moving to AWS means your organization's IT team will spend significantly less time managing on-premises infrastructure and upgrades. It also means you will no longer have to make large upfront investments in hardware and software, or manage ongoing maintenance.

Faster time to market, improved workforce productivity, and more transparency into operational costs are some of the most common reasons our customers migrate to AWS. Other frequent business drivers for AWS migration are increased operational agility that enables you to react to market conditions more quickly, and using the global footprint of AWS to reduce your risk profile. These factors help build a robust and compelling business case for moving to the cloud.

Working with AWS or an APN Partner, you can create a business case for migration based on sound planning and preparation. This will help accurately determine the cost of the current on-premises data center, what the migration cost will be, and what the new



AWS cost will be. Based on this you can set expectations for cloud adoption and provide your organization an opportunity to begin the process of instilling a change management mindset throughout your workforce.

Creating the business case will also help you begin to answer a few key questions, such as:

- What is the expected Return on Investment (ROI), and when will the projected cash flow be positive?
- What are some of the other business value benefits of cloud adoption, beyond cost savings?
- What is the potential business impact of migrating a select group of applications first?
- What are factors that help customers determine if a hybrid cloud environment would be the best solution?
- What indicators are used to estimate how long the migration process will take?

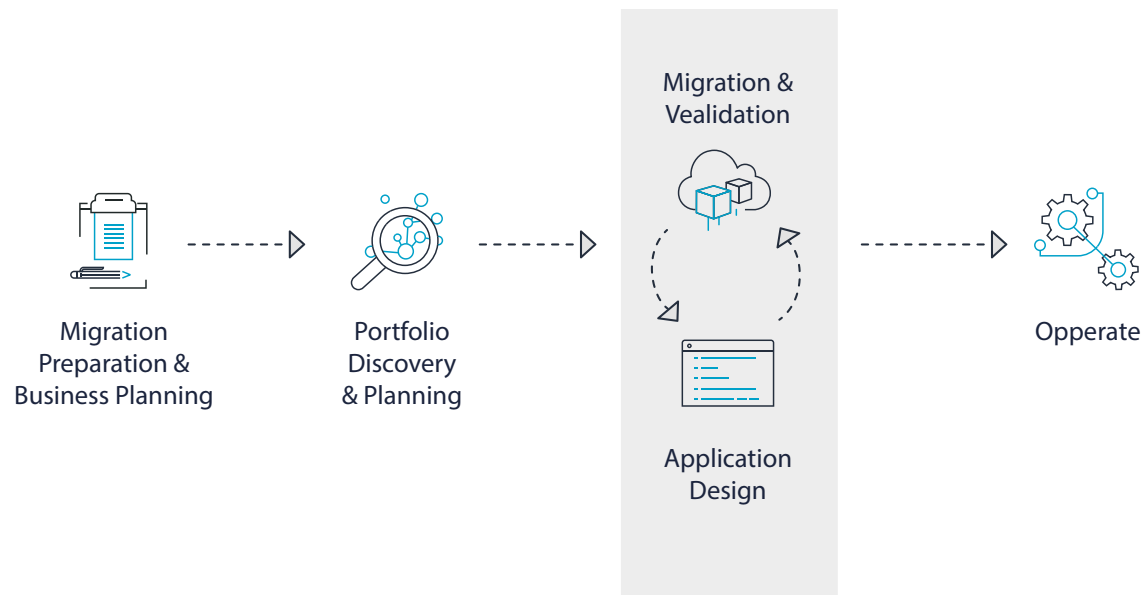
Once the business case has been developed and this important first step toward cloud adoption is complete, you will have an idea of what the financial impact and benefits will be. As the cloud adoption process evolves, you will be able to more specifically consider the many ways this transformation will impact your organization as a whole.



The Five-Phase Migration Process

Five-Phase Migration Process

Visualizing the five-phase migration process



The five-phase migration process can help guide your organizational approach to migrating tens, hundreds, or thousands of applications. This serves as a way to envision the major milestones of cloud adoption during your journey to AWS.



Migration Preparation and Business Planning

Developing a sound business case requires taking your objectives into account, along with the age and architecture of your existing applications, and their constraints.

Engaged leadership, frequent communication, and clarity of purpose, along with aggressive but realistic goals and timelines, make it easier for an entire company to rally behind the decision to migrate.

You will want to establish operational processes and form a team dedicated to mobilizing the appropriate resources. This team is your Cloud Center of Excellence (CCoE), and they will be charged with leading your company through the organizational and business transformations over the course of the migration effort. The CCoE identifies and implements best practices, governance standards, automation, and drives change management.

An effective CCoE evolves over time, starting small and then growing as the migration effort ramps up. This evolution helps to establish migration teams within your company, and decide which ones will be responsible for migrating specific portions of your IT portfolio to AWS. The CCoE will also communicate with the migration teams to



determine areas where you may need to work with AWS Professional Services, an APN Partner, or a vendor offering a solution on AWS Marketplace to help you offset costs and migrate successfully.

Guiding principles for the creation of a CCoE:

- Get executive buy-in (this will lead to organization-wide commitment for cloud adoption).
- The CCoE structure will evolve and change as the organization transforms.
- Treat the cloud as your product and the application team leaders as your customers.
- Organizational change management is central to business transformation and cloud adoption. Use intentional and targeted organizational change management to change company culture and norms.
- Embrace a change-as-normal mindset: Change of applications, IT systems, and business direction is expected.
- Operating Model decisions will determine how people fill roles that achieve desired business outcomes.




Portfolio Discovery and Planning

Full portfolio analysis of your environment, complete with a mapping of interdependencies, and migration strategies and priorities, are all key elements to building a plan for a successful migration.

The complexity and level of business impact of your applications will influence how you migrate. Beginning the migration process with less critical and complex applications in your portfolio creates a sound learning opportunity for your team to exit their initial round of migration with:

- Confidence they are not practicing with mission critical applications in the early learning stages.
- Foundational learnings they can apply to future migration iterations.
- Ability to fill skills and process gaps, as well as positively reinforce best practices based on experience.

The CCoE plays an integral role in beginning to identify the roles and responsibilities of the smaller migration teams in this phase of the migration process. It is important to gain familiarity with the operational processes that your organization will use on AWS. This will help your workforce build experience and start to identify patterns that can help accelerate the migration process, simplifying the method of determining which groups of applications can be migrated together.



Begin the process with less critical and complex applications

PHASE
3 Application Design

&

PHASE
4 Migration and Validation

These two phases are combined because they are often executed at the same time.

They occur as the migration effort ramps up and you begin to land more applications and workloads on AWS. During these phases the focus shifts from the portfolio level to the individual application level. Each application is designed, migrated, and validated according to one of the six common application strategies. (“The 6 R’s” will be discussed in greater detail below.)

A continuous improvement approach is often recommended. The level of project fluidity and success frequently comes down to how well you apply the iterative methodology in these phases.

Each application is designed, migrated, and validated



Modern Operating Model

As applications are migrated, you optimize your new foundation, turn off old systems, and constantly iterate toward a modern operating model. Think about your operating model as an evergreen set of people, processes, and technologies that constantly improves as you migrate more applications.

Ideally, you will be building off the foundational expertise you already developed. If not, use your first few application migrations to develop that foundation, and your operating model will continually improve and become more sophisticated as your migration accelerates.





Six Common Migration Strategies: “The 6 Rs”

"The 6 Rs"

Six common migration strategies

Organizations considering a migration often debate the best [approach to get there](#). While there is no one-size-fits all approach, the focus should be on grouping each of the IT portfolio's applications into buckets defined by one of the [migration strategies](#).

At this point in the migration process, you will want to have a solid understanding of which migration strategy will be best suited for the different parts of your IT portfolio. Being able to identify which migration strategies will work best for moving specific portions of your on-premises environment will simplify the process. This is done by determining similar applications in your portfolio that can be grouped together and moved to AWS at the same time.

Six Common Migration Strategies: "The 6 Rs"

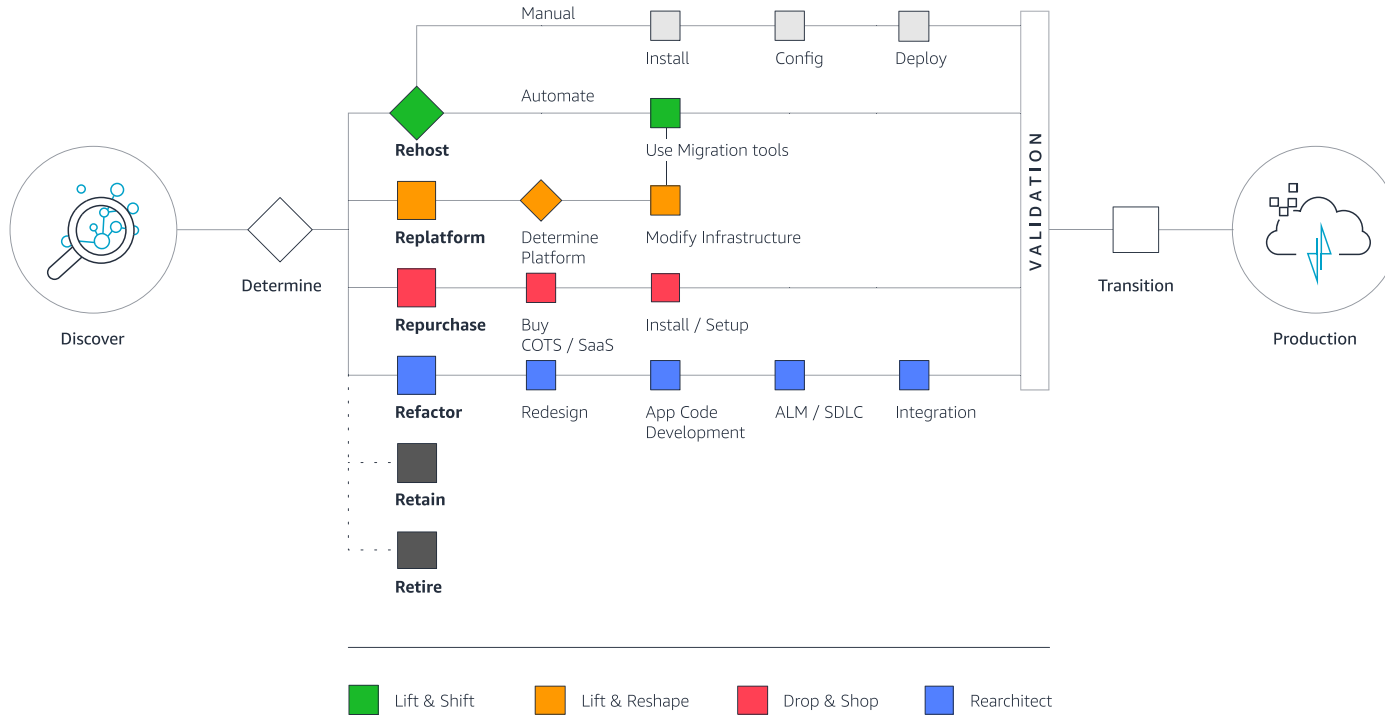


Diagram: Six Common Migration Strategies

"The 6 Rs"

Six common migration strategies:



Rehost

Also known as
"lift-and-shift"

In a large legacy migration scenario where your organization is looking to accelerate cloud adoption and scale quickly to meet a business case, we find that the majority of applications are rehosted. Most rehosting can be automated with tools available from AWS, or by working with an APN Partner or a vendor offering from AWS Marketplace.



Replatform

Sometimes referred to as
"lift-tinker-and-shift"

This entails making a few cloud optimizations in order to achieve some tangible benefit, without changing the core architecture of the application.

"The 6 Rs"

Six common migration strategies:



Repurchase

Replacing your current environment, casually referred to as "drop and shop"

This is a decision to move to a newer version or different solution, and likely means your organization is willing to change the existing licensing model it has been using.



Refactor (Re-architect)

Changing the way the application is architected and developed, usually done by employing cloud-native features

Typically, this is driven by a strong business need to add features, scale, or performance that would otherwise be difficult to achieve in the application's existing environment.

"The 6 Rs"

Six common migration strategies:



Retire

Decommission or archive unneeded portions of your IT portfolio

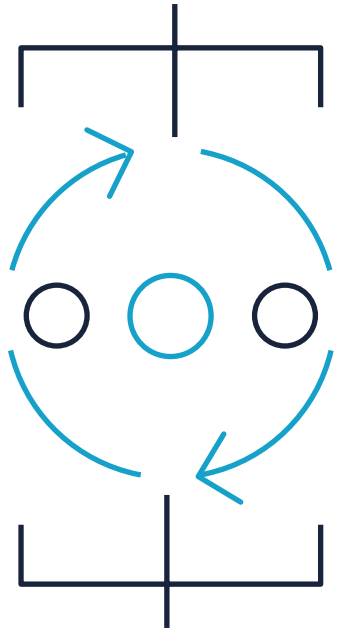
Identifying IT assets that are no longer useful and can be turned off will help boost your business case and help focus your team's attention on maintaining the resources that are widely used.



Retain

Do nothing, for now
—revisit later

Organizations retain portions of their IT portfolio because there are some that they are not ready (or are too complex or challenging) to migrate, and feel more comfortable keeping them on-premises.



Conclusion and Next Steps

Conclusion and Next Steps

Migration is the beginning of what is possible with AWS adoption and cloud capabilities. Looking at a migration as an organizational change project helps you generate buy-in across your organization and maintain communications through each stage of the process. Build a business case and refine the ROI as the project progresses. Identify specific roles and responsibilities for your migration team members, and familiarize them with the 5-phase Migration Process and Six Common Migration Strategies to set your organization up for success. You will then be prepared to transform the way your company does business, and realize the benefits of cloud adoption on AWS.

[Contact Carbon60](#) to learn more about how migrating can transform your business.



Featured APN Partner



Carbon60 specializes in delivering secure managed cloud solutions for public and private sector organizations with business-critical workloads. The company provides secure and scalable hosting services using the leading hyper scale clouds and its own cloud platform in Toronto, Vancouver, Saint John, New York, and London. Carbon60 guides customers on their cloud journey and can engage with clients at any stage of their transition. Carbon60 provides a white-glove customer experience with a deep level of technical support services combined with a nimble approach making them the trusted choice for companies that need a partner to deliver solutions with exceptional reliability, performance and security. Visit us at www.carbon60.com

Case Study: Fundraising Leader

Solves Website Reliability & Compliance Challenges with AWS & DevOps

- ➔ *Reliable Web App infrastructure*
- ➔ *High-Touch Deployment Support*
- ➔ *Compliant and Disciplined process*



Challenge

The healthcare fundraising sector has evolved from traditional phone sales and mailing physical tickets to a fully automated e-commerce experience. The client adopted the digital experience ahead of the curve to capitalize on multiple channels of demand, fueling higher volumes and better results for its customers. The buyer journey inevitably leads to e-commerce websites through various demand generation tactics.

The website application is custom-built with multiple enhancements over several years. A third-party partner of the fundraiser developed and maintains the application for website creation and integration with a separate ticketing application.

Over the years, the website application faced challenges with availability of the primary data center location and network reliability. In addition, since many clients are subject to compliance audits with increased scrutiny it became difficult to keep pace. The fundraiser outgrew the current solution and sought a more national managed cloud provider to manage and secure the underlying infrastructure - this would free them up to satisfy their clients by increasing program effectiveness, revenues and expanding to new markets.

Solution

After Carbon60 was selected, the application migration time frame was only a few weeks. The cyclical nature of the business led Carbon60 to leverage AWS as the ideal target to build the secure, reliable and scalable infrastructure platform to deploy the application quickly. They met the pending deadline, but also set the stage for the long-term stability of the system with building blocks for future enhancements.

Results

Carbon60 successfully built a new environment for the lift-and-shift of the existing website generation application to set the foundation for the future. Over the next few cycles, we shared and deployed our best practices in terms of DevOps processes to improve consistency during the iterative change periods at the beginning of each cycle. Carbon60 committed to our standard operating procedures to ensure effective and documented service request and incident management, in order to exceed the client's business objective of improving the compliance and audit posture.

“Carbon60’s expertise is fundamental to our success and we rest easier knowing they have our best interest in mind in terms of planning, IT infrastructure guidance and a high-quality service experience.”



Copyright © 2020, Amazon Web Services