ENQUIZIT

The Migration Mindset

A Proactive Guide to AWS Cloud Migration

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In our rapid-fire world, we often put long-term planning on the backburner to focus on immediate concerns: tight deadlines, last-minute meetings, urgent concerns. But when you take a reactive approach to large-scale, systemic changes within your organization, like cloud migration, you risk wasting precious time and money on a project that may not meet your organization's needs long-term.

Having the right mindset is a vital and often overlooked part of the migration process. Taking a holistic and proactive approach to cost analysis, planning, compliance, and security can fundamentally change your AWS Cloud migration experience – and save you money in the process.

In this guidebook, we'll investigate the common pitfalls that organizations run into at every stage in the AWS Cloud migration process. We'll highlight best practices, from cost conversations to compliance concerns, so you can navigate AWS Cloud migration with confidence. Ready to dive in?

Chapter 1
From Reactive to Proactive

Often, a transition to the AWS Cloud is triggered by an external event – a data center closure, an impending hardware upgrade, a demand for a new app. But making the migration in "react mode" is a missed opportunity that can lead to heartache and expense down the road. Read on to discover how to get out from behind a reactive mindset and fully maximize your AWS Cloud migration with a proactive mind shift.

What Is "React Mode?"

When an organization acts in response to an external event, constraint, or threat, it has already lost. It's lost initiative, the ability to control the narrative, the chance to build a project on its own terms. An opportunity has been missed to directly progress toward greater organizational goals, both near- and long-term. Though some may enjoy the rush that comes from crisis management, constantly putting out fires is not a path to success. So how does a culture move from a reactive mindset to one squarely centered on its goals – especially when emergencies really do pop up from time to time? It starts with shifting organizational thinking to the end-user or the end goal, instead of focusing only on the immediate problem.

Focusing on the End User

While compelling events can and do often kickstart change, starting with the end-user in mind helps individual people and departments work holistically across operations. It avoids the siloing that pushes organizations into defensive problem solving, bogs down operations, and stifles creative and proactive innovation.

Putting out a fire may be a small success, but moving towards greater success means preparing ahead for everyone's future fires and creating a system that mitigates all of them. A culture like this doesn't discriminate between who does what – it is driven by the resultant capabilities provided. When all the silos are connected in a positive network with defined goals, everyone's individual and group strengths are leveraged.

The AWS Cloud and Freedom to Innovate Go Hand-in-Hand

This is the mindset with which to approach your transition to the AWS Cloud. What could your technical staff accomplish, if their responsibilities were focused on providing value aligned with the organizational mission, freed from the burden of managing data center infrastructure? It is truly transformative when the efforts of your professionals drive toward building better and thinking bigger, instead of getting bogged down in troubleshooting a single problem, or updating, patching, and testing with software and hardware that will always leave them steps behind. Shifting organizational mindset to an end-user perspective drives proactive innovations in both the product/solution and the process of migration, providing better capabilities with the added benefit of far fewer fires along the way.

Shifting out of a reactive mindset can help your team more fully seize the opportunities of the AWS Cloud. But it's also important to include shareholders outside of your team. There are many pitfalls when you try to go it alone – but building holistically can help you avoid this common problem.

Chapter 2

Building Holistically in the AWS Cloud

There are many cloud-migration scenarios where individual business units and departments are tempted to migrate to the AWS Cloud on their own or build their own solution. Perhaps it's a university department that has received a large grant, or a business unit within a corporation that suddenly landed a large client. When faced with the sudden need for greater resources, departments and units frequently feel the urge to forge ahead and stand up their own ad hoc systems. Such windfalls, however, become squandered opportunities if the new solution is unable to work with existing systems or further the larger goals of the organization. Let's explore the pitfalls of this kind of planning – and how to avoid it.

The Danger of One-Off Solutions

The "go it alone" mentality described above can be costly in many ways: whatever is built serves only that unit; the department itself suddenly becomes responsible for compliance, DR, and backups; and the system likely doesn't talk to the rest of the organization, never mind lacking integration with established systems and the organization's overall goals. From a staffing perspective, communication and lessons learned about migration are siloed, stymieing organizational improvement. The good intentions of spearhead problem-solving efforts can end up producing a patchwork quilt of various one-offs – not tied together, not aligned with planned organizational mission and, on top of that, now demanding their own maintenance and upkeep requirements.

No one sets out to create an inadequate or even duplicative ad hoc system within an organization. Though well-intentioned, this is all-too-often the result of trying to solve a single problem. How can you instead build holistic solutions that are agile and responsive to scale and shifting requirements? The answer lies in communication and getting stakeholder buy-in, across the organization.

Building Holistically

First, identify a champion within the leadership team – someone who is willing to take up the cause of AWS migration. Make sure that person clearly understands the problem your business unit is trying to solve and how AWS can solve it. Be sure they are willing to support you, and that they can communicate with anyone else who needs to be involved across the organization. This person should also make sure that your solution aligns with overarching business goals.

Second, be sure to include other IT departments in the planning session. Perhaps other units are facing similar problems and have similar needs? Your solution might work for all of them. Or maybe they can identify a problem that will save you time and headaches later on in the process, such as ensuring that your new solution integrates with the online payment system in their own department.

Pulling all of the stakeholders into the planning process will help pave the road for collaboration and satisfaction, moving your organization toward a proactive mind shift. Once everyone is on board, you can move forward with confidence that your solution will add value to the entire organization.

The natural next step is thinking about cost – another area where there are some common pitfalls.

Chapter 3
Thinking Beyond the Price Tag

When you make decisions like moving to the cloud, with a far-reaching impact across your organization, cost is obviously top-of-mind. But focusing only on the price tag associated with migration is a trap that can lead to escalating frustrations and missed opportunities down the road. We'll look at two reasons why selecting cloud solutions on cost alone is a bad idea – and how to avoid this trap.

1 Limited ability to scale and adapt in future

Choosing a cloud solution based on cost alone can limit your abilities to scale and adapt in the future. Your organization is dynamic: you likely have needs and demands facing you today that you could not have anticipated five years ago. Similarly, the cloud solution you implement today should be able to flex and scale to the unknown demands your organization will face five years from now.

That's why selecting a cloud solution on cost alone can be deeply limiting. You might think of it like picking an office space. You can choose the smallest, cheapest commercial property, but if your business grows, you will either need to move to a new location or make do with subpar working conditions for yourself and your employees.

Just like with real estate, you can't choose the cloud solution with the lowest sticker price and then expect to have the same performance, adaptability capabilities, and life expectancy as a more premium option. In these scenarios, it's all about balancing current needs with anticipated growth.

2 An inability to innovate

Moving from a traditional data center to the AWS Cloud is a paradigm shift. Possibilities await beyond the narrow problem that might have triggered your decision to migrate. Considering cloud operations means focusing on a broader picture with an innovative outlook. It demands shifting outside of the silos of individual departments, and even re-thinking above the divisions between operating costs and capital expenditure to a more comprehensive assessment of total cost of ownership and return on investment -- we'll discuss this more in the next chapter.

When measured as an all-encompassing system, a properly leveraged AWS Cloud Solution has the ability to deliver compelling cost savings. But even so, making decisions based on price alone means missing the real opportunity – the opportunity to break out of the confines imposed by the data center, revisit traditional operational practices and organizational structures, and free the pent-up demands from business that could not previously be fulfilled. Cloud is about providing capabilities; the savings realized across the organizational model are simply the result of going about business in a better way.

Thinking Big Picture

Choosing a cloud solution – and a provider – is more than solving a one-off business problem. It's the chance to optimize your organization to meet future demands and provide your end-users with a seamless, optimal experience. Thinking "big picture" rather than "price tag" as you make your initial decisions will set you up for future success and cost savings down the road. But what factors should be included in your total cost analysis? The answer might not be as straightforward as you think.

Chapter 4
Including Hidden Costs in Your Cloud Cost Analysis Comparison

You already know not to compare "apples to oranges" when looking at the costs of cloud computing versus traditional on-premises architecture. What you might not recognize, however, are all the hidden costs your data center has been incurring all along. To consider a complete total cost of ownership (TCO) for either approach requires stepping back to gain a broader view.

A more accurate analogy for this kind of comparison is "orchards to orchards." Why? Because you are looking at the entirety of the enterprise, not just at a product (the "fruit") or even an operating unit (the "tree"). This level of analysis exposes the hidden costs of on-premises systems which, once accounted for, reveal a much more accurate cost comparison between data centers and cloud computing.

Tangible Hidden Costs

Organizations often tend to focus on the tangible equipment costs and end up ignoring other expenses related to their on-premises environments. Hidden costs of the on-premises model include functions traditionally presumed to be unavoidable, such as:


Real estate costs


Facilities management (utility costs for power, cooling, physical security)


Hardware and software costs, networking, licensing, and warranties


Administration, support, technical staff and maintenance


Security, Compliance and Disaster Recovery/Business Continuity

Intangible Costs

Intangible costs, such as barriers to innovation and development, are even harder to account for. Freeing your technical professionals from the endless cycle of updates and troubleshooting to focus, instead, on building more effectively around organizational goals is one example of intangible cost-savings. Recognizing that your current structure might be limiting opportunity, especially when you are accustomed to the way you've been operating, can require some real soul-searching.

The bottom line is that cloud allows you to run code that provides direct value – without having to worry about everything required to make that code run. And as you alleviate the burden of traditional IT functions and structure, you gain massive capabilities in scalability, flexibility and security. Migrating to the cloud is not simply a "move," then, but a fundamental change to the way you do business. Once you recognize how different the framework of utilizing the cloud can look, you are much better suited to make an all-encompassing calculation that factors in your operations, your infrastructure and your workforce.

Once you've done your cost analysis, all that's left is planning your migration. But saving time – and money – means including all your stakeholders in that conversation.

Chapter 5

Planning With All Your Stakeholders

Designating a particular department or team to take the lead on cloud migration can be beneficial to drive your project forward. Problems can occur, however, if that team forgets to think beyond the particular needs and capabilities of their own department. This can occur when one group is the driving force initiating the change, or when others are simply less familiar or have less motivation to be involved. Let's take a look at when the business-unit led approach can be problematic, and how to remedy this.

The Trap of Too Few

The unit driving the migration often feels empowered and motivated – and those are positive characteristics for change. But moving too fast or failing to solicit input from other stakeholders across your organization can lead to missed opportunities, divided efforts, and the necessity for future design changes that should have been caught ahead of time. Plus, nothing destroys

cohesion and forward motion as quickly as making others feel as if their concerns don't matter.

For example, it might be natural for an operations department to approach migration from the perspective of their own problem set – what they view as their current impediments and the capabilities they see the cloud bringing to the organization. But if they develop too far internally, they will suddenly find themselves in the position of telling the security department: "We're moving to the cloud, so get ready!" In this scenario, lack of early coordination across departments means valuable technical insight that would have helped shape planning was not brought in early enough, and now what should have been a cooperative effort can very easily create a rift that turns the whole project into an adversarial process.

Seeking Buy-In

The solution is to make a deliberate and concerted effort to get buy-in from all of the organization's key stakeholders. Each will see slightly different benefits to cloud migration, through the prism of their particular specialties. Even more importantly, they will see potential problem areas and issues that other teams might not recognize.

Including all of your technical teams and functional units helps ensure that your migration plan arrives at a solution that best addresses everyone's needs, as well as an agreed-upon understanding of how the project should proceed.

Which Teams to Include?

How do you know that you haven't missed an important perspective? At a minimum your planning period should pull in members from leadership and all your technical teams.

Additionally, representatives from the following departments might surprise you with relevant insight derived from their areas of expertise. Consider including:


Accounting


Product Design


Marketing


Sales and Customer Relations

Beware the trap of how good it can feel to quickly deliver functionality to meet your own team's needs. Make an effort to get buy-in from all stakeholders. Doing so will not only help build a great team, but it will also save you from costly reengineering during implementation to solve a problem that would have been obvious to someone who wasn't included.

Now that you have a plan, how do you know if your system is ready? You'll need to determine your readiness requirements and take a hard look at the role compliance and security will play in your planning and migration process.

Chapter 6
Getting Cloud Ready

Each of us live with requirements that dictate how we move through the world. Laws and regulations keep us in check, simplify our daily lives, and ensure we don't harm ourselves or others. Without traffic laws, for example, imagine how much time we'd spend figuring out which side of the road we should drive on.

Just like laws that dictate traffic, apps and systems need to "play by the rules" in order to work for your organization. Readiness requirements are the compliance rules that your applications need to meet in order to work within your current systems.

Read on to find out how to make readiness requirements a priority in your cloud migration plan – and avoid future compliance emergencies.

Understanding App "Readiness"

In order to make readiness requirements a priority, you need to understand what they are – and what your company needs from each application for it to comply with policies around data security.

Readiness requirements include regulations around data back-ups, emergency preparedness, security, and more. Some examples include:

HIPAA or FERPA compliance

Recovery objectives

Data protection and access control regulations

Maximum offline time during an emergency or disaster

In most cases, your company already has a set of policies in place around compliance and readiness. Working with your compliance, security, and disaster recovery teams during planning will ensure you have a solid understanding of the minimum requirements your company needs to move forward with implementation.

When it Comes to Compliance, Plan Ahead

Many people assume that cloud solutions come with built in security and compliance requirements. But most cloud solutions do not automatically include these configurations by default. If you make assumptions about your cloud systems compliance standards, you are almost certainly in for an unpleasant surprise in the future.

In order to ensure compliance during migration, you need to work with your compliance and security departments ahead of time. Security, Compliance, and Disaster Recovery will need to take a close look at application requirements before implementation – if you include them late in the process, it might lead to tedious reworking and duplicate effort.

Be Proactive – and Compliant

Compliance shouldn't be an afterthought. Having expert insight at each stage is essential for an efficient migration process.

Talk to your security experts early on, and make sure you have a clear understanding of what you need from an application before you begin your planning.

The Value of a Proactive Approach

At every point in your migration process, there are opportunities to take a proactive approach. Spending time making thoughtful, holistic choices that allow you to work across your organization isn't just about inclusion or transparency. It also saves time and money and will help you achieve the results you want from your AWS Cloud migration.

Designing the perfect cloud system for your organization isn't easy. It requires a methodical, holistic approach, with an eye on cost-optimization and the future needs of your company. But when you consider the many factors at play and take the time to work laterally across your departments, you can implement a system that will not just save time and money, but fundamentally change how your organization operates day-to-day.

As you've seen, planning and implementing cloud migration can be time-consuming and complex. To optimize your process, it can be helpful to bring in an expert partner like Enquizit to guide your migration and ensure you are checking all the right boxes. To learn more about how Enquizit can support your migration process, go to enquizit.com.