

CLOUD PLANNING

LESSONS LEARNED

cloudEQ

Cloud Planning Lessons Learned

The cloud journey is an important one. Whether you are already in the cloud and need optimization, automation, transformation, or if moving to the cloud is on your to do list, evaluating the benefits the cloud has to offer your particular situation is the first step down the path. Our three- part series highlights some of the lessons our team has learned the easy way, and unfortunately the hard way through our experience with hundreds of cloud migrations large and small.

LESSON 1: Measure 3 Times, Cut Once

MEASURE #1

Understand, Select, and Collaborate

Understand Outcomes and Key Motivations

Before you move to the cloud, understand your outcomes and key motivations for wanting or needing to migrate. Some motivations may include budget, timeline, technology, innovation, and growth. Understanding the outcomes and key motivations before your move will help align the rollout plan and the approach!

Select the Right Integrator or Professional Services Firm

Moving to the cloud is expensive and complicated, two project characteristics that are a company's least favorite things. Therefore, choosing the right systems integrator or professional services firm is one the most important decisions you will make. There are 3 types of firms; those that operate as factories and will try to move your systems in large numbers without consideration for the impact to your company, those that have only one cloud solution and as a result can place you into the wrong cloud for your needs, and those that operate as a partner. It is critical to find a firm that is willing to partner to understand your core business, desired outcomes, and motivation with a history of success and collaboration. Choosing a partner who invests the time and energy you deserve, will pay off in the long run.

Collaborate

When you begin building plans Build them so that they foster collaboration between system integrators, application teams, infrastructure teams, management, and executive leadership. Having buy in from all areas of the company is critical and not having it can derail a migration. Holding frequent review and planning meetings with all teams to gain/share understanding, and achieve alignment is critical.

An integration partner with experience working with a company of your size, industry expertise or technology environment will be able to help you navigate these items with consideration for both the technology and political landscape.

MEASURE #2

Choose the Right Cloud Platform(s) and Weigh Institutional Knowledge

Choosing the right cloud platform(s) for your company is crucial before you migrate to the cloud. Each platform has advantages, and you should use the one that brings you the greatest advantage both now and in the future. Do not just choose the first platform you see, do research to determine which cloud platform(s) fits your business needs, will be the easiest for you to use, and makes sense for long-term growth.

Balance Institutional Knowledge

Institutional knowledge is essential, but it can be an impediment as well. Often, individuals don't know what they like as much as they like what they know. Because this is generally how people think, this could lead people without an understanding of cloud to make decisions that limit your ability to leverage the cloud to its full potential and savings. Working together, cloud knowledge, a partner, and institutional knowledge will help your company go the distance when it comes to cloud migration.





MEASURE #3

Know the Application Requirements and Restrictions

Some applications are unique and require definitive specifications or have restrictions. For example, some database applications require faster IOPS to perform. Others have custom load balancer configurations, and some have seasonality of CPU and Memory spikes. If you don't understand the requirements or restrictions of the applications on the cloud platform before you start, you might get stuck being unable to complete something the way you originally thought. Research or ask if there are certain requirements or restrictions before utilizing the application.

Know exactly what your systems are and are not capable of doing.

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Lay a Foundation Before Moving

One of the greatest lessons you can take away about cloud migration is to build the architecture and the foundation before you start moving your applications. If the foundation where you place your applications is not strong, it will cause inconsistent results, performance, and reliability.

If you move before the build is complete, you can see significant errors and the structure could cause you to start again from scratch. Laying out Architecture, growth, connectivity, security, and governance early will play a key role in for near- and long-term success.

Migrating to the cloud is an exciting and rewarding process, but it takes time, understanding and collaboration. Review partners and cloud platforms understand the cloud and why migrating can benefit your company and overall choose the best solution for your team!



LESSON 2:

Just Move, Then Transform

Your Questions Answered

Our last blog highlighted how important it is to do your homework before making the right decisions to ensure success in the cloud. Here we will highlight what questions you are or should be asking before migrating

Understand Outcomes and Key Motivations

Yes, there is a great chance that your applications work in the cloud. In fact, your applications are most likely already virtualized (VMWare or Hyper-V) and therefore largely cloud ready. You will need to look at licensing, as it can be more expensive or less, depending on the product(s). Some of your applications may simply not run in the cloud e.g. Sun, AIX, AS400, Mainframe or applications that require specialized and dedicated hardware. Obviously, each situation will require its own strategy.

Do I need to replace my staff?

No, not necessarily. However, you will likely need to skill up and possibly augment for a period if your current team is not well versed

on the chosen cloud platform(s). After you decide on the cloud platform(s) you are going to utilize, we recommend getting your staff certified to increase their knowledge. Additionally, it makes sense to hire a systems integrator/professional services firm to guide you through the migration process.

Should we transform applications during the migration?

Not recommended. Most of time, we do not recommend transforming applications during the migration. Instead, we recommend lifting and shifting the current applications because this is the fastest and safest way to get into the cloud. Trying to transform your applications to cloud native during a migration will cost more, take longer, and leave room for error. Additionally, the sooner you get to the cloud and increasing the amount of time spent in the cloud, key learnings will be achieved which will lead to more informed approaches to transformation in the future.

Should I expect everything to work perfectly?

Nothing works perfectly, especially right away. The cloud is different than on prem and therefore there will be differences that need to be overcome during the migration. In addition, IT items often break when they are moved, however, the changes or fixes are usually minor and can be overcome quickly.

The slower you migrate the confident you can be; however, the slower you migrate the more it costs. Once you have made the migration, then take the time to transform.

LESSON 2: Cloud Alone Does Not Equal Cost Savings

Our last lesson in the Cloud Journey is an important one! Moving to the cloud alone does not equal cost savings. Here are some financial considerations for you to ensure your migration success.

Know how you will measure financial success

Yes, you should move to the cloud, but financial measurements are complicated and there are numerous depending factors. In the long run, you can and should save money by moving to the cloud when comparing capital depreciation to the OPEX spend over time

- If you have just made a large capital investment in on prem infrastructure, the pay back will be much longer.
- If the company is focused on EBITDA and therefore favors capital investments rather than OPEX, it will require a ROI and TCO to convince the CFO.
- If you are willing to schedule systems, optimize usage, and invest in building automation then the savings can be substantial.



Remember, the savings start after migration

Moving to the cloud can save a significant amount of money. However, you will need to get to the cloud before you can take advantage of cloud only offerings.

- Because in some cases you will be running the same application in both places for a time, you will have a temporary increased cost.
- Focusing your application teams on cloud readiness will take them away from key critical business projects for a period but remember things will get back to normal when the migration is complete.
- Governing the spend will be a focused effort.

Cloud providers offer a lower cost environment

Cloud providers have scale on their side. If the environment you have purchased includes servers and virtualization software, chances are you are not fully utilizing it to its potential. The large cloud providers aggregate huge farms of compute and storage and therefore buy it cheaper and use it to capacity. AWS, Azure, and GCP are not building cloud platforms to be altruistic. In fact, these companies are building clouds to make money, but are just more efficient because of their scale.

Planning and adaptation provide optimum savings

Build a roadmap to leverage cloud native offerings, automation, optimization, and hibernation. Once you have moved to the cloud or are setting up a new system, look to leverage transformational offerings where applicable.

For example, platform as a service (PaaS), containerization, immutable infrastructure, and services. Lastly, take advantage of programs that are available from the cloud providers like enterprise discount plans, reserved instances, pay as you go, spot instances and storage tiers.



While there are many lessons to be learned from migrating to the cloud and continuing to manage in the cloud, three lessons that stood out to us are: measure three times and cut once, just move and then transform, being in the cloud alone does not equal cost savings.

The cloud is very powerful, but it depends how you utilize it. Take the time to educate yourself and your team before, during and after the migration. If you have questions about cloud migration or want to learn more, our team at cloudEQ is more than happy to help.