### Don't Go It Alone Optimizing AWS





# Your AWS Partner

At GenUl, we love innovators who want to go out and build things—but taking a DIY approach to the Amazon Web Services (AWS) Cloud can come back to bite you. That's because cloud services are deceptively simple to spin up - all you need is a computer and a credit card. And given the right tools and approaches, they can be easier to manage than on-premises infrastructure.

This low barrier to entry is a major advantage, but it can also be a major pitfall one you can avoid by choosing the right partner. Having someone by your side who's done this before is an investment in your success. In this article, we'll look at some of the reasons we - as designers and builders of custom software solutions - appreciate AWS as a platform, and how that experience is gold when it comes to accelerating and achieving your strategic goals.

# The Power of AWS

The AWS Cloud has major advantages over traditional on-premises infrastructure. These factors can benefit your business whether or not you have customer-facing apps, regardless of industry. With the increasing pace of global competition, growing customer and employee expectations for fluid digital experiences, and increasing demand for always-on, high-performance services, successful cloud adoption has become an existential issue. Organizations struggling with technical debt will increasingly find themselves falling behind in the race to capture and keep customers. AWS can help you win that race in four important ways.

#### Focus on what matters

Unless you are a cloud services provider, managing infrastructure is probably not your key business differentiator. AWS allows you to shift away from running servers so you can focus on what truly differentiates your business. Managing compute, storage, and networking has been commodified, and hyperscale cloud providers can do it better and cheaper than anyone on the planet. AWS has been at it longer than anyone else—and has even reduced prices over the years

#### Buy, don't build

With more than 150 services available, AWS provides easy access to a vast range of capabilities you can innovate on top of without building them yourself.

Whether you want to explore machine learning, containerize your applications, create a data warehouse, or automate photo recognition, you can spin up a pre-built AWS service that will give you a head start.

You can also consume a huge range of third-party services on AWS in a software-as-a-service subscription model.

#### Strengthen your foundation

Using AWS allows you to establish levels of security, scale, and reliability that are exceedingly difficult to achieve and maintain in an on-premises model. If companies such as Netflix can run their business on AWS, so can you. What's more, you can match the scale to your needs, helping to eliminate the cost of over-provisioning to handle usage spikes.

### Innovate and experiment

Finally, the fact that cloud services can be provisioned and de-provisioned almost instantly means you can experiment quickly and cheaply. Innovation is no longer limited by spare capacity or your ability to procure new hardware. You can "move fast and break things" without actually breaking anything, then deploy to production when you're ready.

# The Power of Partnership

Sounds pretty great, right? The fact is, most organizations already understand the benefits a cloud approach can deliver. At the same time, many companies who have adopted a cloud approach often find themselves getting stuck along the way. By working with a trusted partner, you'll get the most out of AWS - without investing time, money and energy into learning deep cloud processes yourself.

### Operationalizing the cloud

The first benefit we discussed was moving away from commodity management tasks. The challenge here is that many organizations move applications to the cloud without fundamentally changing how they operate them. In some cases, this makes management even more of a burden than it was before. Reducing operational overhead requires maximizing visibility, automation, and repeatability of cloud management tasks.

GenUI has deep cloud experience to help you make the appropriate changes in your workloads and processes - truly liberating your team's time and energy, not to mention budget.

Pay-as-you-go can be an expensive proposition unless it's fully optimized. We understand the cost levers of AWS for a wide variety of use cases and can help you spend no more than what is needed.

### Navigating technology choices

AWS has a vast range of services available. For many organizations, this is a case of being "spoiled for choice." For example, there are more than 30 different types of instances available in Amazon Elastic Compute Cloud (Amazon EC2), the foundational computing service of AWS. That's just one part of the

equation, which also includes operating systems, messaging, databases, virtual networking, serverless computing, and so on.

This range of options enables you to tailor your subscriptions to your needs—but figuring that out can be a challenge. If you have a partner who understands both, you're much more likely to build on a strong foundation that you won't have to retool later.

The choices you make today can have significant effect on performance and cost down the road, so it's critical to make choices based on long-term business strategy and technical needs.

#### Getting the basics right

Now take the case of security, compliance, and reliability. AWS has many certifications used by the world's largest companies, and can help you create site-level disaster recovery capabilities that far exceed those of most companies working on their own. However, this can lead to a false sense of security.

For example, just using AWS is no guarantee that your solution will be HIPAA-compliant. Your cloud service framework matters - how you configure it, what happens to the data at rest and in transit, and how it traverses other systems all have an impact on your compliance status.

Misconfiguring cloud infrastructure can put your data at risk of exposure on the public internet. This is not said in the spirit of scaremongering - AWS does a fantastic job of ensuring default configurations are as compliant and secure as possible. But making the best use of the platform requires specialized expertise.

#### Adopting modern engineering

Cloud innovation requires a shift in mindset and approach as much as technology. Modern approaches such as infrastructure-as-code and continuous integration/continuous deployment are as or more important than the cloud technology you choose—and are more challenging to get right.

At GenUI, our developers and technologists work closely with IT teams to help them quickly modernize and painlessly adopt cloud infrastructure in ways that make their jobs more fun and satisfying.

# The Power of Potential

Whether you don't know where to start, are stuck in the middle, or want to take initial success even further, we can help. We approach your journey to AWS as a partnership, starting from wherever you are, understanding the potential of where you want to go, and helping you every step of the way.

Although we are technology experts, we take a value-first approach to AWS projects. Making the right IT decisions requires a clear understanding of your goals and KPIs.

### We can help develop the business case for cloud and ensure you get the measurable benefits you envision.

During migration or adoption, we help avoid having to "build the plane while it's in the air." Let us help you get it right from the start, so you can achieve the full promise of cloud technology - without wasted time or money. You can create a more pleasant environment for your skilled IT staff, helping to retain them and make the most of their passion and skills.

We know what AWS can do - and truly enjoy helping organizations of all types and sizes get the most from this revolutionary platform. To see our expertise in action, check out our <u>Resolution Bioscience</u> and <u>Sage Bionetworks</u> case studies.

<u>Contact us</u> or send an email to hello@genui.com to learn how we can do the same for you.