

Helping Businesses Maximize Benefits, Reduce Costs as They Move to the Cloud

More than ever, companies are turning to the cloud to save money, increase efficiency, support increasingly distributed workforces, and improve operational performance and resiliency. This trend has only accelerated with the Covid-19 pandemic.

But simply spending more on cloud doesn't guarantee good results. Organizations on average waste at least 30 percent of their cloud spend. As a result, optimizing existing use of cloud is a top priority for some 61 percent of organizations, followed by migrating more workloads to the cloud (59 percent).

There are five key areas organizations can fine-tune to get more from their cloud investments: Cost optimization, operational excellence, reliability, security and performance efficiency. An experienced, trusted and versatile partner can make sure you get the greatest possible benefits in all five areas of your cloud journey.



Sketch Development's robust cloud capabilities

Sketch Development is a software development consultant that specializes in AWS cloud implementation. As an AWS select tier partner, Sketch has extensive experience in AWS implementations and a staff with multiple accredited and certified AWS specialists. We use our expertise and sophisticated tools to evaluate your cloud implementation, then help optimize your existing cloud use or help plan your migration to the cloud. No matter where you are in your cloud journey, Sketch ensures that you will get the most for your investment. Our breadth of services, including software development, training, and coaching — in addition to our extensive cloud expertise — is what sets us apart from others because we can help clients in many ways as they move to the cloud.



Assess, evaluate, and improve

Sketch uses our tools and expertise to review and assess your existing cloud implementation in the following five key areas. We evaluate each area for over 500 best practices in cloud design and management. Weakness in any of these areas can lead to lower efficiency and higher costs. If you are just starting in the cloud, Sketch can help you implement your solution from scratch: evaluating your on-premises environment and recommending an optimal strategy for your migration, whether it's a full-scale shift or moving just a subset of your applications.



COST OPTIMIZATION

Using the right services, resources, and configurations for your workloads is key to getting the most from your cloud investment. We'll help you identify and prioritize your goals for the cloud, whether they be high efficiency, fast processing, or low costs, and then architect your cloud environment to meet those goals. This includes analyzing your current cloud spend to find ways to get more value, including right-sizing it to get maximum advantage for the lowest cost. We also help you choose the right consumption model for your needs — using reserved-instance pricing rather than on-demand pricing, for example.



RELIABILITY

We ensure consistent and reliable performance by building your solution to be capable of scaling as workloads increase (using load balancers, for example), making sure you have sufficient bandwidth to handle transmission needs, configuring automatic fail-over to multiple availability zones for business continuity, and programming automatic backups.



PERFORMANCE EFFICIENCY

Sketch ensure you are using cloud computing resources in the most efficient way to meet your business goals. This includes right-sizing server instances by looking at your historical utilization trends and evaluating their efficiency. We will help you size resources appropriately for today, while also designing an architecture that auto-scales – drawing on more cloud processing when needed but only when needed. Relying on our software development skills, we review your software applications and re-factor them as needed to run at peak efficiency in the cloud. We also review your architecture regularly to take advantage of the latest features of AWS cloud.



SECURITY

Sketch knows how to take advantage of cloud technology to protect your data, applications, and systems. We start by building a secure foundation and applying security best practices at all layers. Our experts build in compliance with the appropriate security standards for your industry, including ISO 27002-2013, the Payment Card Industry Data Security Standard (PCI) and the Health Insurance Portability and Accountability Act (HIPAA). Our architecture not only improves compliance but also makes audits quick, easy, and thorough. We ensure security down to the smallest (sometimes overlooked) details, such as making sure that ports are closed when not in use and programming the system to reset passwords automatically, yet securely.



OPERATIONAL EXCELLENCE

Sketch not only ensures that your cloud runs workloads effectively and efficiently, we architect it to deliver valuable insights into your operation so you can continuously optimize the business value you are getting from the cloud. For example, we can suggest ways to automate processes and leverage a technique known as “infrastructure as code (IaC).” We continue to measure progress toward your business goals and tweak the architecture as business needs and priorities evolve.



Lambda: The serverless advantage

AWS's serverless cloud technology – called AWS Lambda – often translates to improvements in all five areas. AWS Lambda is an event-driven compute service that allows you to execute your code without provisioning or managing infrastructure. Rather than running on dedicated servers (and paying for them), your applications run on AWS compute instances only when needed. This reduces costs because you pay only for the compute time your applications require. It improves operational efficiency and performance because it scales up and down, automatically, so you do not have to provision infrastructure to be able to support peak demand. Instead, at peak times your code might run simultaneously on hundreds of AWS compute instances and execute thousands of events a second. When demand falls, your code runs on a handful of AWS compute servers executing a dozen events a day. Lambda increases security because there is essentially no server to hack.

Sketch's AWS cloud skills provide insurance company with competitive advantage

An insurance company needed a better way to aggregate and analyze data when assessing risk. Sketch Development designed, architected, and built a data analytics application and platform on AWS. The solution brings data from many sources together, enabling the insurer's risk managers to provide accurate quotes faster than competitors.

“The Sketch team is one of the best, if not the best, dev shop I have worked with in 20-plus years ... the architects are top-notch and come to the table ready to solve challenges and deliver quality output.”

said the insurance company's director of business analytics and data architecture.

Platform: AWS Lambda serverless cloud computing and AWS managed services

AWS skills: Elastic Compute Cloud (EC2), Elastic Container Registry (ECR), Simple Storage Service (S3), Cognito, Beanstalk, Relational Database Services (RDS), Lambda, CodeBuild, CodePipeline

Software: Cloud-native, high-performance, and secure custom application to enable low-cost, event-driven computation

Programming skills: Vue.js, Typescript, Golang, MySQL, Cypress.io

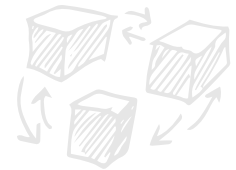
The improvements with Lambda can be significant, if you have the right expertise. Sketch's software development expertise adds significant value in Lambda migrations. We can recommend whether Lambda makes sense for you, suggest which applications it is most appropriate for, and recode those applications to take full advantage of this new technology. Rather than being constrained by server limitations, you can take advantage of the technology to scale across thousands of compute instances to run your code simultaneously, maximizing throughput and dramatically

increasing speed. That leads to big cost savings, since you pay only for the time your code runs. And by getting results so much faster, you are able to make decisions quickly, thus becoming a more agile business operation with advantages over your competitors. In one AWS Lambda implementation, Sketch recoded and migrated a business process that previously took 13 hours to run on the customer's on-premise infrastructure and cost tens of thousands of dollars a month. On AWS Lambda, it now takes 10 minutes and costs less than \$1,000.



Much more than cloud services

Sketch's extensive background and expertise in software development sets us apart from other cloud resellers or managed service providers. Founded as a software development business, we have years of experience using agile, DevOps and lean startup methods to develop product-centric applications. We can serve as your software development team. More often, however, we become co-developers with your staff, growing your technical employees' skills so you can deliver the best products and services to your customers.










In cloud computing, this expertise means we can review software applications that may not have been originally designed for cloud and rewrite code so they run as efficiently in the cloud as possible, while showing your staff how in the process. We can also help you build (and train your staff to develop) new applications that take the best advantage of cloud's capabilities. Add that co-development to our training and coaching services, and you can use Sketch to upskill your entire company. We don't just do cloud migration and optimization projects, we teach you to do your own.

Why Sketch Development

Based in St. Louis, Sketch Development delivers cloud services, custom software and more. We are on a mission to help companies reduce friction and cost by migrating their critical infrastructure and product development processes to the cloud. Sketch is an AWS select tier partner, with broad experience in AWS implementations and AWS accredited and certified specialists on staff. We use our cloud and software development expertise, as well as sophisticated tools, to evaluate and suggest improvements to your existing cloud implementation, or to help you start migrating to the cloud, and continue optimizing your cloud environment. Our complementary training and coaching services help upskill your staff in cloud management. We can teach them how to get the best of the cloud through DevOps practices, guiding and co-developing with them until they are ready to do so independently.

SKETCH DEVELOPMENT MISSION

In all our services, Sketch helps customers achieve:

-  **Faster Time to Market**
-  **More Predictability**
-  **Higher Quality**
-  **Highly Satisfied Customers**
-  **Tighter Alignment**
-  **Happier Teams**
-  **Increased Adaptability**



For more information about Sketch's cloud services and software capabilities, see

<https://www.sketchdev.io/>

or contact Jacob Kalagian at jacob@sketchdev.io.