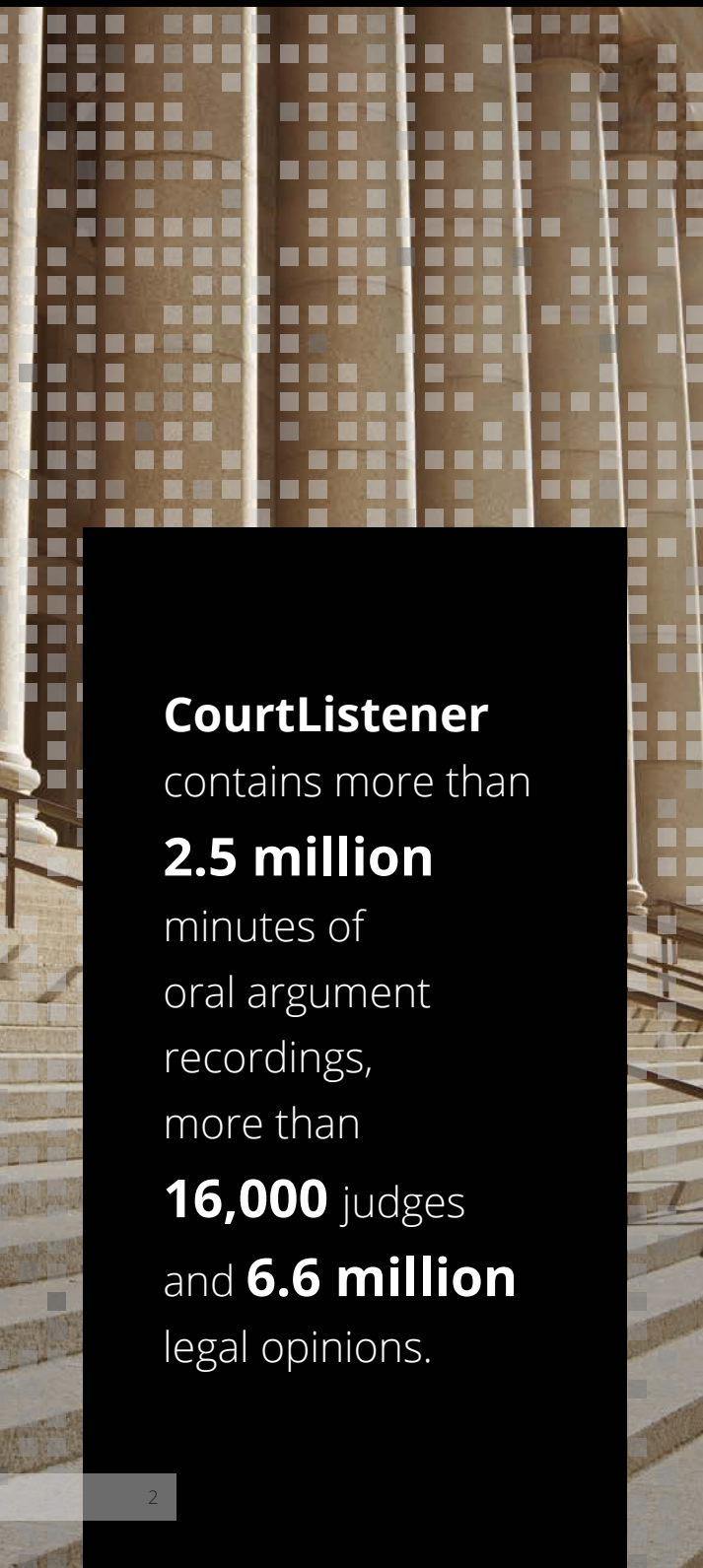# Free Law Project Meets Data Demand

Founded in 2010, Free Law Project leverages software, data, and advocacy to make the legal ecosystem more equitable and accessible to everyone. Since its founding, Free Law Project has connected thousands of people with information they need regarding court and other primary legal documents, with access to many services for free.

But much has changed since then, including the amount of traffic to the site. On a recent politically charged news day, Free Law Project saw 3.7 million page views, up from hundreds per day at its start. Additionally, Free Law Project has seen a rise in the volume of data housed on its sites and an increase in security concerns online.

CourtListener contains more than **2.5 million** minutes of oral argument recordings, more than **16,000** judges and **6.6 million** legal opinions.

To respond, the nonprofit reached out to Amazon Web Services (AWS) for support with growing data, volume, and security needs, as well as to ensure reliability, accessibility, and safety in the process. Individuals from all backgrounds use Free Law Project to uncover information. They include journalists, academic researchers, and individuals seeking more information on a person they know.

"It is pro se litigants or a person involved in a lawsuit proceeding without legal counsel, who must use our information for research," says Michael Lissner, Free Law Project's co-founder and executive director. "All these people are somehow interacting with the legal system. We even have courts that use our system to upload content and disseminate the latest opinion. We serve a lot of different purposes."

Free Law Project has open-source and open-data initiatives the AWS Cloud supports. CourtListener, the nonprofit's primary program, has moved initiatives entirely into AWS. CourtListener is Free Law Project's fully searchable and accessible archive of court data, including growing repositories of opinions, oral arguments, judicial financial records, and federal filings. CourtListener contains more than 2.5 million minutes of oral argument recordings, more than 16,000 judges and 6.6 million legal opinions, according to Free Law Project's cloud partner, Datamatics.

Many legal startups, technology groups, and academics use application programming interfaces (APIs) developed by Free Law Project as part of their own offerings.

"Our APIs are used extensively and account for the majority of our traffic. A bank, vendor-management platform, individual or judge really runs the gamut of all the different ways our legal data is useful and can have an impact," Lissner says. "It can be used for de-risking a purchase analysis before you work with a vendor to check what lawsuits they have out there, as another example."

THE NEED TO SCALE

Free Law Project started with data collected on a server under the desk of a University of California at Berkeley professor. That arrangement eventually morphed to a co-location setup, but it was still not enough storage or computer capacity.

"When you are operating at our scale and running your own servers in a co-location facility and your central processing unit (CPU) crashes, you're offline for days until you can get a new CPU, and that's just unacceptable," Lissner says. "Moving into AWS Cloud eliminates this problem for us."

Additionally, Free Law Project was collecting data faster than what it could back up on its own, causing insecurity in bulk data systems via its APIs. In a tangible sense, Free Law Project was running out of hard drive space, facilitating a need for a partner that could not only back up data but also store new data.

Since the transition to AWS, reliability has improved, streamlining workflows, Lissner says.

"There's a million little things that are so much better. For instance, we were running our own email server, so deliverability wasn't so great. Now, we're paying AWS to do that, and deliverability is really good," Lissner says.

MEETING DATA DEMAND

As the popularity of Free Law Project grew, keeping up with demand became overwhelming, especially during peak search times for specific cases or people.

"There are times when legal documents go viral; for instance, when there are California legal findings related to English royalty and child abuse. We couldn't sustain that," Lissner says.

Before collaborating with AWS, Lissner had to manually intervene in these situations, such as when Jeffrey Epstein-related documents went viral. Another time was when controversial political documents were released. "This demand took our website offline," Lissner says.

Moving to AWS has balanced high-traffic times, keeping servers running smoothly and without hiccups.

"I don't think about that anymore. I don't even know when information goes viral, which you can say is an anti-feature but a pretty cool one," Lissner says.

Other AWS features that impress Lissner are the ability to deliver emails and keep resending until they go through, Amazon Simple Storage Service (Amazon S3), and backup capabilities. These features elevate Free Law Project's ability to streamline offerings with no disruptions.

> " Security is increasingly a problem. Keeping track of the latest vulnerabilities is a full-time need. "
>
> — Michael Lissner
> **FREE LAW PROJECT CO-FOUNDER & EXECUTIVE DIRECTOR**

Security standards and compliance certifications AWS supports also are attractive to Free Law Project.

"Security is increasingly a problem. Keeping track of the latest vulnerabilities is a full-time need," Lissner says. "I would dedicate a lot of my time to intrusion-detection systems. But with AWS, I don't need to do that anymore."

IT TAKES THE RIGHT PARTNER

For lean nonprofits, finding the right collaborator is important. Partners can assist organizations in refining goals, narrowing down the right technology, and building a system in a cost-sensitive way that is easy to maintain and scale.

Datamatics is an information technology company specializing in digital transformation, hyperautomation, and process automation, as well as a global Advanced Partner with AWS. The partner-management team at AWS introduced Datamatics to Free Law Project. Datamatics was able to help Free Law Project scale by identifying gaps in technical architecture, by prioritizing deliverability goals and taking a cloud-first design approach and by migrating Free Law Project to the AWS Cloud.

"Being a very small team, Free Law Project faced constraints with ever-changing technology offerings on the cloud," says Viraj Birmole, sales manager at Datamatics.

Specifically, Datamatics recommended that Free Law Project design its system in a cloud-native fashion, using Amazon Elastic Kubernetes Service (Amazon EKS) to seamlessly manage applications.

"Our technology-agnostic consulting helped many nonprofits progress in their cloud adoption, which is a significant part of digital transformation," says Hitendra Shinde, senior vice president of sales at Datamatics.

Lissner says, "Datamatics, an AWS Partner, made the transition as painless as possible for us via a combined strategy of upgrading some services and lifting and shifting others."

Lissner can now devote time entirely to what matters most to his organization: gathering and making accessible millions of legal documents. Through use of AWS, Lissner ensures that Free Law Project's reputation, reliability and performance remain high.

"Moving to AWS enabled us to solve a multitude of technology challenges: Amazon EKS and Amazon Relational Database Service (Amazon RDS) let us scale our services; Amazon S3 easily handles even our most viral content; Amazon Simple Email Service (Amazon SES) gives us email deliverability insights we couldn't dream of previously; and of course, security and hardware failures no longer haunt us," Lissner says.

"We needed to up our game, and you can't go wrong with AWS. Our users barely noticed the change, which is the goal."

If your nonprofit is considering moving to the cloud, ask us about the AWS Migration Acceleration Program (MAP). Contact us, and let's explore together. ■