Kokomo24/7 Launches Health Solutions and Supports 200,000 Daily Users Over 60 Organizations on AWS

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In early 2020, safety management software provider Kokomo24/7 quickly repurposed its software-as-a-service (SaaS) solutions built on Amazon Web Services (AWS) to help organizations better manage health and safety during the COVID-19 pandemic. Though its tools were originally built for K–12 school systems, Kokomo24/7 took advantage of the serverless architecture and the simplicity of developing on AWS to adapt its solutions and bring two new SaaS products to market quickly: CovidTracker, an application for self-screening, contact tracing, and case management; and VaxTrax, for vaccination and testing compliance management. These products not only met new health management needs but also rapidly grew the company's customer base without requiring any additional employees.

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Founder and CEO, Kokomo24/7

Taking Advantage of Serverless Architecture to Pivot Quickly

Since it was founded in 2016, Kokomo24/7 has built its SaaS solutions on AWS for anonymous reporting, emergency management, and incident case management. "Our mission is to build easy-to-use modern safety solutions that keep our kids and employees safer," says Daniel Lee, founder and CEO of Kokomo24/7. The core functionality of its school safety solution—which lets people use mobile, text, and web to anonymously send tips on cases of suicide, drugs, and violence in

schools—relies on predictive analytics, which score the legitimacy of anonymous reports to help educators prevent incidents and improve safety. The predictive analytics were developed on Amazon SageMaker, which helps data scientists and developers prepare, build, train, and deploy high-quality machine learning models quickly.

Kokomo24/7 chose AWS as its cloud provider because it is well established and offers a wide variety of services. The company saw great potential for growth through the AWS Partner Network and became an AWS Partner. On AWS, Kokomo24/7 built a serverless architecture using AWS Lambda, a serverless compute service that lets users run code for virtually any type of application or backend service without provisioning or managing servers. The company also relies on Amazon Relational Database Service (Amazon RDS) for MySQL, which manages time-consuming database administration tasks including backups, monitoring, and scaling.

In March 2020, Kokomo24/7 foresaw that schools and organizations would need to track and manage COVID-19 cases and used its AWS serverless architecture to rapidly build CovidTracker. The solution provides health-screening certification, facilitates contact tracing to mitigate outbreaks, and helps employers with case management. "We launched CovidTracker in 2 weeks because of our serverless architecture on AWS, which is so easy to repurpose and scale," says Lee.

Scaling on AWS to Support Dynamic Growth and Industry Expansion

Before launching CovidTracker, Kokomo24/7 had one customer: the Los Angeles Unified School District, amounting to 5,000 users. In the 18 months after CovidTracker launched, it gained an additional 80 customers—including Amtrak, the Cheesecake Factory, Andersen Tax, and the Illinois State Police—supporting 200,000 users daily. To accommodate that influx, Kokomo24/7 created a single sign-on using Amazon Cognito, which lets companies add user sign-up, sign-in, and access control to their web and mobile applications quickly and easily. Using Amazon Cognito, the company can accommodate its customers' many different information technology settings.

Kokomo 24/7 was able to support its rapid growth because of the scalability of its infrastructure on AWS. When the company onboarded 10 clients, resulting in 30,000 new users, in 1 week after the CovidTracker solution launched, its medium-size Amazon RDS for MySQL database initially struggled under the load. However, through a support call to AWS, the company was able to adjust to the new volume immediately. "The AWS team helped us quickly choose a larger database that scaled and continued to provide a quality experience for our new customers," says Lee. Further discussion about how else the AWS account team could support the company's work led it to conduct a review using the AWS Well-Architected Framework, which helps cloud architects build secure, high-performing, resilient, and efficient infrastructure for their applications and workloads. "Because we had started serving various major corporations, we wanted our system to be covered," says Lee. "Now when prospects ask us if our system is reliable, we always mention that we went through an AWS Well-Architected review."

On AWS, Kokomo24/7 was able to scale CovidTracker and help its customers meet compliance standards. "For a small software company to win 100,000 user licenses from a major university and serve an organization of that size would be impossible without being on AWS," says Lee. Many of its customers require HIPAA compliance as well as ISO/IEC 27001 and SOC 2 certifications. Using AWS data security measures and best practices through the shared responsibility model, the company can confidently provide solutions for these organizations and close new business. "The AWS shared responsibility model for security helps us make sure that nothing falls through the cracks," says Lee.

When Pfizer's COVID-19 vaccine received Emergency Use Authorization from the US Food and Drug Administration, Kokomo24/7 reacted by launching VaxTrax, a vaccine and test record compliance management solution, in February 2021. "We are one of the few companies that offer a mature SaaS cloud-based offering for that specific need," says Lee. With VaxTrax, an employee takes a photo or screenshot of a vaccine card or polymerase chain reaction test report and submits it. The organization's human resources team is notified and manually verifies the documentation. Kokomo24/7 later automated documentation approval using Amazon Rekognition—which uses machine learning to automatically identify objects, people, text, scenes, and activities in images and videos—so organizations with thousands of members could quickly comply with vaccine mandates. "Without Amazon Rekognition, we would have needed another three employees and 3 months to do this," says Lee.

Expanding to Other Regions on AWS

Since New York State mandated the COVID-19 vaccine for healthcare workers in August 2021, Kokomo24/7 has seen increased demand for VaxTrax in the state, quickly adding 10 new customers in August alone. The company also plans to offer its SaaS solutions in other countries. "We plan to replicate the processes we have in the United States and expand to Mexico, Japan, the United Arab Emirates, and Europe," explains Lee. "AWS has globally distributed data centers, which provides us the ability to continue to grow the business to any of the regions that AWS is in without worrying about infrastructure."

The small Kokomo24/7 team quickly adapted the company's AWS serverless architecture to launch two SaaS solutions critical to public health. "Big organizations have to go through a long process before making changes," says Lee. "For us, the distance between noticing trends and bringing a new product to market is short. AWS was instrumental in making that happen."

About Kokomo24/7

Founded in 2016, Kokomo24/7 provides a public occupational health and safety software as a service that delivers incident and emergency management solutions to over 89 global, national, and regional enterprises and educational institutions.

Benefits of AWS

- Launched CovidTracker in 2 weeks
- Gained 80 new clients in 18 months as a result of CovidTracker
- Acquired 10 clients amounting to 30,000 new users in 1 week
- Grew customer base from 5,000 to 200,000 daily users
- Automated vaccine and testing approval in VaxTrax
- Supported growth without requiring additional employees
- Met regulatory and compliance security protocols
- Accelerated speed to market