# The LIV Improves Test-Taking Accessibility by Going Digital with AI-Based Assess App from AWS Partner Elumina



## **Executive Summary**

The Law Institute of Victoria (LIV) achieved remote accessibility for its high-stakes lawyer assessments using the Elumina Assess App, a solution built on AWS. The LIV is a membership association providing education and advocacy for more than 28,000 lawyers in Victoria, Australia. The LIV was using printed, in-person assessments that were taken in local venues and wanted to improve accessibility for its members by going digital. The LIV engaged AWS Partner Elumina eLearning (Elumina) for a solution that uses Amazon Rekognition for the remote proctoring of exams. By using Elumina's AWS-powered solution, the LIV has improved observability and staff productivity and provided a better exam-taking experience to its members.

#### **Engaging AWS Partner Elumina for Digital Test-Taking at the LIV**

The <u>LIV</u>, the peak legal body in Victoria supporting the needs of the law profession, wanted to provide more accessibility for members to take high-stakes assessments. These assessments help members become specialists in their field, a critical step in career development. The LIV previously set exam dates at specific venues, and members would have to travel to these venues to take printed tests. This had a negative impact on service to LIV members and was a stretch of the LIV's limited resources.

To address its needs, the LIV chose to go digital, using a solution built on Amazon Web Services (AWS). The LIV was looking for an Australia-based company to provide a solution that was agile enough to adapt to its needs and determined that Elumina, an AWS Partner, would meet its needs. The LIV selected Elumina because of Elumina's Assess App software, which is an all-in-one digital assessment tool to help educators manage the assessment process in one place. "The biggest driver for choosing Elumina was its use of artificial intelligence (AI) to preserve the security, and thus integrity, of the assessments," says Kellie Hamilton, general manager of member knowledge and learning at LIV. "It was indicative that Elumina knew how to use new technology to provide high-stakes assessments."

#### Using Amazon Rekognition to Build the Elumina Assess App

Elumina is an online digital assessment solution provider specializing in high-stakes exams. Elumina created the Elumina Assess App for its customers to create exams and test items to get their assessments up and running online. The app can deliver, proctor, and audit exams, all on the same solution. Elumina built its Assess App solution using various AWS services.

Al is central to how Elumina uses AWS, and for the proctoring part of its solution, it uses <u>Amazon</u> <u>Rekognition</u>, which offers pretrained and customizable computer vision capabilities to extract information and insights from images and videos, to personalize the experience for test-takers and to monitor for anomalies during an exam. "People who are taking exams can be legitimately monitored and supported from afar," says Hamilton. "If someone's sitting in a room and needs to go to the bathroom, it can disrupt other people, but we can manage such situations with a press of a button."

Elumina stores exam content for its customers using <u>Amazon Elastic Container Service</u> (Amazon ECS), a fully managed container orchestration service that simplifies deployment, management, and scaling of containerized applications. The company also stores files in a scalable way using <u>Amazon Elastic File System</u> (Amazon EFS), which automatically grows and shrinks as files are added and removed with no need for management or provisioning.

Elumina is not region-contained, meaning it can run exams around the world, and uses AWS to meet customer data needs. "The great thing about AWS is that we can use AWS regional servers. Thus, our customers can retain sovereignty of their data, an especially big deal when running high-stakes exams," says Garth Hehir, director of sales at Elumina.

#### Improving Member Satisfaction and Data Availability Using AWS

Over the course of 3 months, Elumina worked with the LIV to create a solution so that the LIV could run exams for its members. This was a quick process that also involved a scoping workshop to determine how Elumina could best adapt its system to meet the LIV's needs. As part of the solution, Elumina releases

# About the Law Institute of Victoria



As a body for the Victorian legal profession, the LIV supports the needs of a changing profession, promotes an active law reform advocacy agenda, responds publicly to issues affecting the community, delivers continuing legal education programs, and provides expert services and



modules and training for the LIV team. The goal is for the LIV team to run the exams and Elumina to manage the AWS infrastructure. Elumina also has a support team that assists LIV members to configure and download the needed technology for taking these remote assessments.

For the LIV, the satisfaction of its members is critical. One major benefit of this new solution is accessibility. Members of the LIV are no longer required to make long commutes to specific venues on testing dates because the Elumina Assess App provides these tests remotely. "Accessibility of the Elumina solution on AWS, the fact that someone can be in Dubai and take our assessment on the same day, is huge," says Hamilton. "It lends itself to the changing nature of workplace practice."

The LIV has improved its observability and insights from assessments using the Elumina solution. Because it now has a data solution, the LIV can analyze testing data to identify gaps in skill development and evaluate the quality and alignment of its questions. In addition, the proctoring of assessments using Amazon Rekognition can dissuade cheating and provide a better test-taking experience. "We can observe test-takers from a dashboard and legitimately make sure people are not cheating when we are not in the room with them," says Hamilton.

Elumina's solution also improves staff productivity for the LIV. As of 2023, the LIV has a full-time staff of three people delivering exams and would not be able to achieve its purpose without a tech solution. "The seamless nature and onday delivery support of Elumina has made all the difference," says Hamilton. A single LIV staff member can personalize the experience for 15–20 people taking an assessment at the push of a button. This can help its members mitigate anxiety and stress because they know they are being monitored and supported remotely.

The LIV is using the Elumina solution to support professional development and to advocate on behalf of the legal profession in Victoria. "If we can increase the skills and capability of legal professionals, that supports the community and access to justice, which is the whole point of the LIV," says Hamilton. "There is an enormous opportunity that we are tapping into."

## Streamlining Digital Delivery of Test-Taking

The LIV offers individual high-stakes assessments annually. The LIV is looking to streamline that with the digital delivery of the Elumina Assess App. The LIV can make these assessments on-demand in the future, which would not have been possible if it were still using printed, in-person assessments. Elumina's AWS-based solution and its innovative, AI-powered ideas are adding new value for customers like the LIV.

"AWS has been first-rate in working with us to build innovations and to connect us with others developing in similar ways," says Hehir. "We work with the AWS team to talk about what we can implement next to provide the innovative features that our customers want to see."

# **About Elumina**

Elumina is an online digital assessment solution provider specializing in high-stakes exams. The Australian educational technology company helps educational institutions, governments, and corporations worldwide streamline processes by reimagining digital assessments through software.

