A Data Management System That Increases Transparency and Efficiency

High cost, manual process, and little data transparency

In 2015, the Rhode Island (RI) Department of Labor and Training launched the Real Jobs Rhode Island (Real Jobs RI) initiative. Real Jobs RI is a state and federally funded, competitive workforce and economic development grant program. It is designed to ensure that Rhode Island employers have the talent they need to compete and grow while providing targeted education and skills training to Rhode Island workers and jobseekers.

Real Jobs RI recognizes that the best way to identify the workforce challenges employers face is to work directly with employers to identify their needs and craft solutions. Workforce solutions are developed by the industries themselves, in concert with strategic partners, and can include training for jobseekers to fill vacant positions and career advancement strategies for incumbent workers.

From 2015-2016, the state pieced together a solution to achieve the above program with a lot of manual intervention and legacy processes to get the job done. After spending \$1,000,000 in costs per year to operate this program the state knew they had a need to optimize and re-architect this program to a more efficient, scalable and self-service solution.

Community based partnership

In 2018, the DLT partnered with Amdocs to embark on a journey to re-design and re-architect the system utilizing technology and processes that would enable self service capabilities for the various parties involved. Amdocs, through its acquisition of Kenzan, has been in cloud consulting business for many years and had a large RI community presence. Together this was a great opportunity to help a very important government funded program which would benefit all Rhode Islanders.

Why Amazon Web Services?

There were a few key areas Amdocs decided to focus on:

- Providing more effective and robust self-service capabilities, so that the DLT staff could manage more partnerships and participant tasks. Managed services would allow the DLT staff to focus on improving its service and business value, instead of on administrative operations.
- 2. While the government was spending \$1,000,000 yearly to operate this program, we wanted to be very cost effective and only use compute and storage when we need it to avoid high operations costs.
- 3. The participant enrollment program is subject to random bursts of traffic as people would be instructed to sign up during large events, classes and/or workshops. We must be able to handle the load and scale up and down for the participant enrollment capability.
- 4. Security is fundamental and must be woven within the entire solution.

About the Rhode Island Department of Labor and Training

aws

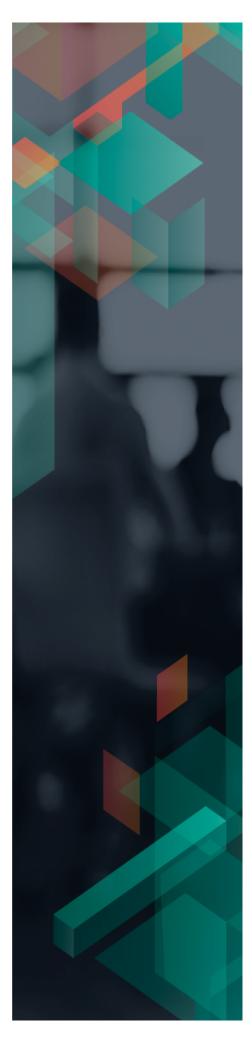
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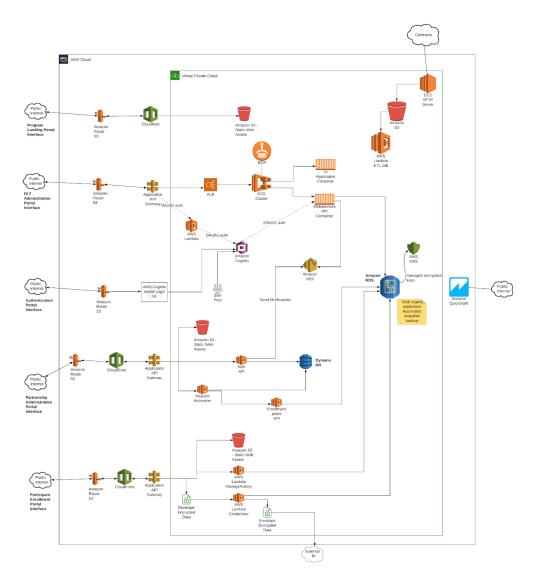
Department of Labor and Training RHODE ISLAND

The Department of Labor and Training (DLT) is Rhode Island's primary workforce development agency. We anticipate demand by actively asking business and industry to tell us their needs then accelerate supply by doing whatever it takes – be it building programs or clearing barriers – to teach those skills to potential employees.

DLT also ensures the security and protection of Rhode Island's workers and businesses by enforcing labor laws, maintaining workplace health and safety standards, and providing income support to those temporarily out of the workforce.



Solution Architecture



AWS Services

API Gateway, Lambda, Elastic Load Balancing, Cognito, RDS, S3, Route53, IAM, ECS, CloudFront, CloudWatch, EC2, DynamoDB, SES, ECR, QuickSight, KMS, Secrets Manager, CodeCommit, CodePipeline, CodeDeploy



Results and Benefits

Implementing the Data Management System (DMS) on AWS brought a number of benefits to the DLT, including data transparency, integrity, and security as well as efficiencies in time, effort, and cost.

The manual process of completing an application on paper, which used to take two weeks to complete, now takes 5 to 10 minutes. The application process is also now much more secure, as the information is fully encrypted during the entire process, eliminating interactions with multiple administrators. It makes the data instantly accessible, opening opportunities to leverage additional funding.

Grant advisors have also increased productivity dramatically. The previous ratio measuring their productivity was 80% administrative overhead to 20% time spent building partnerships on strategic workforce initiatives. Now that number has reversed almost completely, to 30% administrative overhead and 70% pursuing strategic partnerships.

This allowed the Grant Advisors to manage more partnerships per person. In only nine months, some have doubled the number of partnerships each: from 3-5 to 6 partnerships, and that number continues to grow.

They have also completely eliminated an extensive backlog of paper forms.

Grant Advisors can now create customized reports so they can monitor activity enrollment and performance in real time. The improved visibility into the success of programs gives them analytics-driven insights into what is working, and ways to improve.

The DLT was previously capturing data in seven different data sources, including paper forms, excel spreadsheets and manual data entry into different DLT systems all with very limited access to the actual data. The newly built DMS now integrates with two external systems via API access which eliminates dependencies on external sources for data insights and is fully automated with real time access to data. This now created one source of truth for multiple data streams. Reports that previously took a week to prepare are now automatically updated as people enroll, thanks to AWS QuickSight.

The success of the implementation of the DMS has allowed others in the DLT to have confidence in the security and functionality of AWS as a solution. The DLT leveraged its familiarity partnership with AWS in the response to a Covid19 unemployment solution. They were able to deploy the Pandemic Unemployment Assistance (PUA) solution in 10 days, rather than needing to provision bare metal which could have taken weeks or longer.

Amdocs

Amdocs' purpose is to enrich lives and progress society, using creativity and technology to build a better connected world. Amdocs and its 25,000 employees partner with the leading players in the communications and media industry, enabling next-generation experiences in 85 countries. Our cloud-native, open and dynamic portfolio of digital solutions, platforms and services brings greater choice, faster time to market and flexibility, to better meet the evolving needs of our customers as they drive growth, transform and take their business to the cloud. Listed on the NASDAQ Global Select Market, Amdocs had revenue of \$4.1 billion in fiscal 2019. For more information, visit Amdocs at www.amdocs.com.

