DataHouse Client Success Story

Disaster response to prevention mode:

How a Hawaii nonprofit leveraged partnerships and technology to deliver life-changing information in real time

SUMMARY

When COVID-19 threatened to devastate a medically vulnerable population, the National Kidney Foundation of Hawaii (NKFH) leaped into action, building a strategic coalition of community, government, and technology partners. They partnered with DataHouse to orchestrate a secure, user-friendly data exchange system that delivers life-changing information in real time, ultimately saving lives and protecting the public from preventable health complications.

National Kidney Foundation®
of Hawaii

PROBLEM

How do we integrate disparate data and processes to deliver critical health information rapidly?
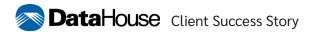
SOLUTION

Create a cloud-based data exchange system that syncs and delivers information in real time.

BUSINESS BENEFITS

- Real-time information sharing
- Public health risk detection and prevention
- Secure, scalable, and extensible solutions
- Intuitive, multi-language user applications
- High user trust and adoption

TECHNOLOGY HIGHLIGHTS

- Fully integrated LumiSight Platform
- Amazon Virtual Private Cloud (VPC)
- Serverless computing
- Identity and access management (IAM)
- Tokenization for data security
- Custom localization modules for multi-lingual interfaces

THE CHALLENGE

Asking the right questions

At the pandemic's onset, the National Kidney Foundation of Hawaii (NKFH) needed to quickly set up an isolated clinic for dialysis patients who tested positive for COVID-19. With the isolated clinic, NKFH could **provide continuity of care while minimizing risks to the greater community**.

However, with one simple question, Glen Hayashida, CEO of NKFH, unveiled another critical problem: "How will patients with COVID-19 get to the clinic?" That same question plagued the entire state since any individual with COVID-19 would need to be transported and isolated to receive care and reduce public health risks.

Glen's subsequent questions launched a cascade of initiatives and revealed a slew of related issues. He reached out to his partner network to mitigate NKFH's immediate concerns but understood that **the evolving community problem required an integrated community solution**.

> " Patients with chronic kidney disease were more at risk for complications, so early COVID-19 detection and prevention was critical to protecting their health. For our team to act quickly and effectively, we needed results in hours, not days.
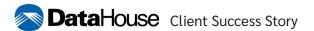>
> - Glen Hayashida, CEO of the National Kidney Foundation of Hawaii

Delays create risks

At the time, local testing sites were too slow. **The primarily manual system took days to process and deliver results, putting the public at risk.**

Once again, Glen reached out to his trusted network. He partnered with a vendor that provided cutting-edge portable testing equipment and rapid test results. The team set up a mobile testing site at Hawaii's international airport so that citizens and visitors could get tested and follow mandatory protocols.

Unfortunately, it seemed like every obstacle they overcame exposed more challenges. Despite the new mobile labs' speed, stakeholders like NKFH, government agencies, lab partners, Hawaii residents, and visitors lacked real-time access to critical health information. To take full advantage of the rapid testing capability, NKFH needed **a secure, user-friendly data exchange system that immediately delivered information to multiple stakeholders**.

THE SOLUTION

Find a trusted information technology partner

Glen Hayashida knew that Hawaii's public health crisis required a devoted coalition, so he quickly assembled a team of trusted public- and private-sector organizations. However, the new NKFH Consortium still needed a reliable, user-friendly technology solution to integrate data and processes. To solve this last piece of the puzzle, Glen sought **a technology partner willing to take a risk and understand the true nature of the community's day-to-day problems**. With future funding and people's lives on the line, he chose DataHouse based on its local reputation, quality track record, human-centered problem-solving approach, and rapid solution delivery.

"The lifeline of a nonprofit comes down to people," said Glen. **"Relationships are the common denominator in everything we do."**

Launch a first-class custom solution in weeks, not months

DataHouse provided NKFH with the **LumiSight Platform, a cloud-based, end-to-end technology solution that increases speed to delivery**. DataHouse customized LumiSight in an Amazon Virtual Private Cloud (VPC) to support the mobile testing labs with a secure data exchange system.

To fully understand the problem, DataHouse analysts visited the airport testing site and observed the resident and visitors' experiences. The analysts then mapped the current state to desired future-state user journeys and customized the LumiSight Platform accordingly. They also worked closely with other NKFH Consortium partners to ensure the platform aligned with in-person processes.

"DataHouse led with empathy and was meticulous in their development process," Glen stated. "They came to the airport, put themselves in the passengers' shoes, and tested and implemented a solution based on first-hand knowledge of the user journey."

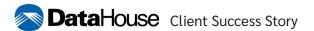The solution included **multi-lingual web and mobile applications** for citizens and visitors to quickly create accounts, register for services, complete forms, and receive results and communications. The administration dashboard provided **real-time data visualization and analytics** to manage testing and track population data. The **data exchange layer** integrated all applications, the laboratory information management system (LIMS), and a secure payment gateway. The solution could also **scale and integrate any other disparate data source or system** necessary.

By leveraging DataHouse's pre-engineered platform and cloud-first technology, NKFH launched a first-class solution in just a few weeks, allowing the airport testing program to take flight in record time.

LUMISIGHT

LumiSight is DataHouse's pre-engineered, cloud-based technology platform that quickly transforms organizations into digital service providers.

- Consolidates disparate data
- Automates business processes
- 24/7 self-service portals
- Seamless system integration
- Built-in security and privacy
- Web and mobile applications
- Rapid application development
- Analytics and reporting services

THE OUTCOME

Uninterrupted service at scale

The community caught wind of the online registration apps and put the system's availability and reliability to the test. User adoption exploded within a week and ramped up to over one thousand users daily. As volume increased, **the system scaled automatically without delays or service interruptions**. The solution seamlessly met the needs of visitors under strict travel requirements and served Hawaii's immediate community safety needs.

Word spread of an extensible solution

The program was so successful that DataHouse and the NKFH Consortium replicated and expanded the solution to solve similar challenges in the broader community. **It became a blueprint for rapidly implementing public-sector projects**. After the initial airport program, which provided free and paid testing options through OahuCityPass and LumiSight Workplace, respectfully, the team implemented AlohaClear to serve the needs of the City and County of Honolulu, the Hawaii Department of Education, and the Hawaii Department of Health. They set up mobile testing labs across seven islands and created seamless user experiences for every use case.

More importantly, these extensible solutions helped move Hawaii beyond disaster response into proactive disaster prevention. "Knowing we could easily turn around 10,000 tests a day with all stakeholders seeing test results in just hours, not days, was game-changing for the health of Hawaii," said Glen. **"We went from disaster response mode to prevention mode, and people began to notice."**

Inspiring others to do good

Not only did this successful project enable NKFH to extend its reach and serve a wider community, but the selfless endeavors of Glen Hayashida and his coalition inspired others to participate in serving the community.

> **"**
> Our coalition put a trusted system in place to serve a critically vulnerable community. These replicable solutions inspired an incredible volunteer response. Physicians and professionals in the community donated their time. Pharmacies provided medication. Public servants reached out to use this solution for new endeavors. Thanks to this successful implementation putting NKFH on the map, we could empower others to do good.
>
> - Glen Hayashida, CEO of the National Kidney Foundation of Hawaii

About the National Kidney Foundation of Hawaii

The National Kidney Foundation of Hawaii is the leading 501©(3) nonprofit organization striving to eradicate chronic kidney disease (CKD) in Hawaii. They provide health education programs, clinical patient services, innovative research, and other efforts to prevent, treat, and manage chronic illnesses. Learn more about the NKFH testing program at: https://kidneyhi.org

About DataHouse

DataHouse is a global leader in systems integration and Hawaii's go-to company for solving complex problems. Since 1975, the team has provided world-class business and technology solutions for the public and private sectors. DataHouse's mission is to advance our communities through smart innovation and collaboration for a better tomorrow.

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