DADF Case Study

Executive Summary

The Department of Animal Husbandry, Dairying & Fisheries (DADF) is a unit of the Indian government's Ministry of Fisheries, Animal Husbandry, and Dairying. The department handles matters related to sustainable fisheries development, infrastructure for livestock, healthcare for prevention of diseases, germplasm development for preservation, dairy development, and more across states and UTs. It also manages the affairs of National Dairy Development Board (NDDB) and Delhi Milk Scheme (DMS).

DADF had an on-premises IT infrastructure, which was challenging to maintain and scale as per requirement. The administrative tasks were time-consuming and resulted in high maintenance costs. The department trusted SISL Infotech, a system integrator and IT services provider, for migrating its workloads to the AWS cloud platform. This migration reduced the burden of in-house IT staff and brought down the overall costs substantially.

About DADF

The Department of Animal Husbandry, Dairying & Fisheries (DADF) is responsible for managing livestock preservation and welfare, dairy production, fisheries development, among others.

It plays an advisory role in creating programs and policies for the development of livestock, fisheries, and dairies by states and UTs. It also handles functions related to Delhi Milk Scheme (DMS) and National Dairy Development Board (NDDB). It has offices at Krishi Bhawan and Janpath in New Delhi.

The Challenge

On-Prem Management Challenges

The IT team had to do peak capacity planning, ensure infrastructure compliance, and manually backup data. Since the requirements for different project phases were difficult to estimate beforehand, it increased the risk of delaying projects. Additionally, if the manual backup of data got delayed due to unforeseen circumstances, it increased the risk of data loss.

Lack of Extra IT Support

With on-premise deployment, the limited number of in-house staff had to manage and maintain servers. As the IT team had to devote extra time in executing repetitive tasks, it reduced the efficiency of the IT team in completing projects on time.

Limited Scalability

Whenever there was a requirement for extra storage or other capabilities, the IT team had to install additional hardware and software manually. It was also challenging to manage end-of-life (EOL) products.

High Maintenance Expenses

Besides the initial upfront investment, equipment upgrades and replacements resulted in high annual costs and complexity. Solutions to fix software vulnerabilities, hardware repairs, license upgrades and additional services to provide remote software access to employees increased operational costs.

Why SISL Infotech as AWS Migration Partner

SISL Infotech has over a decade of expertise and has earned global recognition by deploying more than 4,500 projects successfully. DADF chose a technical consultant from EY as the POC for the project. Several consecutive meetings were held between the SISL team, EY's technical consultant, and DADF's IT team. Based on the evaluation of various solutions, AWS was selected as the best choice for migration. Being an AWS public sector partner, SISL proved to be a great support in hassle-free migration to AWS cloud.
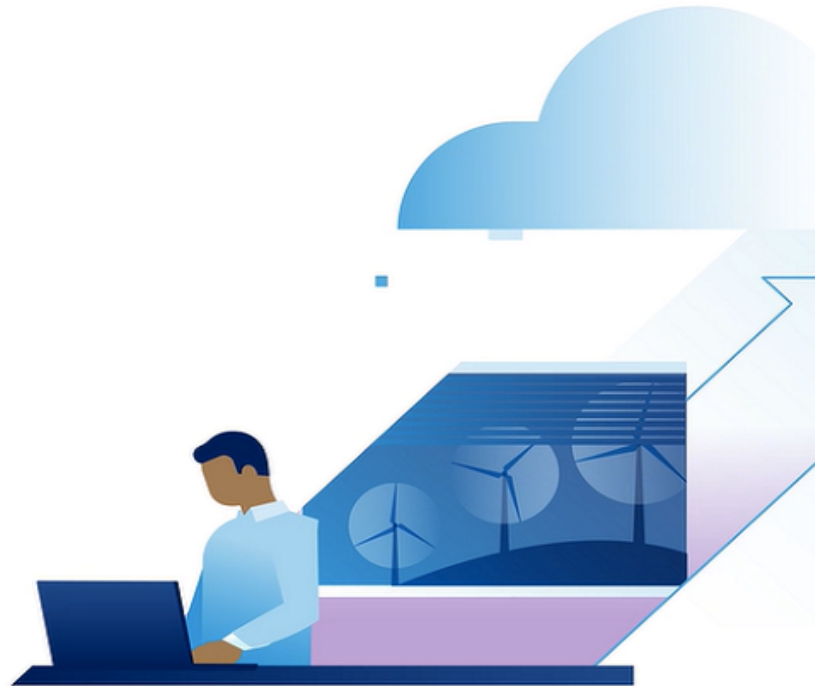
The Solution

Migration Services

SISL performed the technical capability and business capability assessment for cloud migration readiness. Based on their assessment, the team selected the most suitable migration tools and storage options to solve all existing challenges.

Datacenter Services

By employing AWS datacenter services, SISL ensured mitigation of environmental disruptions and the continuity of business operations. DADF has complete control over data center access given to employees to prevent security breaches. AWS performs vulnerability and threat reviews, equipment maintenance, and surveillance to ensure data security.

Disaster Recovery Services

SISL implemented AWS backup and disaster recovery services to optimize backup costs and enhance data availability. The in-house IT team can quickly launch recovery instances on AWS to recover apps in case of unforeseen events.

Results and Benefits

Flexibility

With AWS cloud migration, DADF can now design application components and load them according to their requirements. AWS continuously monitors the capacity and ensures optimal resources.

Cost-Effectiveness

SISL's team chose the most cost-effective and high-performance strategy for migration. With AWS, there are minimal infrastructure expenses and DADF doesn't have to spend money on idle resources.

Productivity

AWS offers a high degree of dependability and reliability. The entire responsibility of infrastructure maintenance is on cloud service provider, thereby freeing the in-house IT staff to work on other important tasks.

Scalability

With services like auto scaling and elastic load balancing, applications can easily respond to the changing traffic. There is no need to manually handle the installation of additional infrastructure.

Security

SISL's cloud experts successfully deployed all AWS services and modernized DADF's legacy infrastructure. AWS provides end-to-end security and complete data recovery in case of hardware failure.

Next Steps

Migration of on-prem IT setup to AWS cloud platform has been completed successfully. DADF plans to work with SISL Infotech to host new applications in 2022.

Benefits

Better Managed Services

AWS offers end-to-end services, including networking, storage, compute, identity and access management, and more. DADF can opt for various AWS offerings to manage its operations anytime with the Operations on Demand feature.

Cost Optimization

Flexible pricing options with the AWS pay-as-you-go model contribute to large IT operational savings. This model, paired with SISL's competitive pricing, enabled DADF to record lower TCO than the previous on-prem IT setup.

Less Burden on IT Staff

AWS takes complete control of the management and maintenance of the IT setup. As a result, the IT team at DADF can focus on projects instead of maintenance tasks.

Smooth Integration of Industry 4.0 Technologies

DADF can easily integrate technologies like machine learning and artificial intelligence into their applications. AWS ensures no hassle in terms of flexibility, scalability, data access, or security.

About SISL

SISL Infotech is a system integrator and provider of end-to-end IT solutions and services to startups, government institutions, SMEs, enterprises, and individuals. The organization is an AWS public sector partner and authorized commercial reseller. It has 'AWS Solutions Architect-Associate' certification to design and implement distributed systems on the AWS platform.