



AARP is a nonprofit, nonpartisan social welfare organization with a membership of nearly 38 million that helps people turn their goals and dreams into real possibilities. It does so by strengthening communities and fighting for the issues that matter most to families, including healthcare, unemployment, income security and protection from financial abuse. AARP offers discounts and benefits in various healthcare and other lifestyle categories to its subscription members.

AARP Services Inc. (ASI) manages the relationships with companies that provide AARP member benefits. Influent50 is an AARP agency and an expert in the 50+ age market. The firm studies trends in that segment, including attitudinal patterns, behavioral tendencies, purchasing trends and more. It has strategic partnerships with other businesses, offering valuable and relevant insights that include research on the 50+ age segment with positive communication channels for a fee.

CHALLENGE:

Migrating the existing Clickstream data to the AWS Cloud from the servers currently residing at on-premise and automate the processes necessary to update and maintain the data, ensuring it is current and accessible to ASI analysts and data scientists.

After migrating the server to the AWS Cloud, Idexcel provided managed services to support the AWS Infrastructure, which includes Monitoring, Performance Advisory, Configuration Management, Incident Response, Problem Resolution, Change Management Security Service and Production Support.

Management & Maintenance Challenges	Technical Challenges
Hardware reaching the end of its rope	The current solution doesn't offer high availability/ fault tolerance accessory services that are hardware dependent
Increasing hardware & software licensing costs	Performance issues with larger data size and data frequency
Unable to offer new features	The servers are unable to support its new demands and workloads
	Backing up and restoring data in a timely fashion
	Attaining operational excellence
	Defining high-level architecture best practices that are secure, scalable, resilient, and operational

SOLUTION:

The Idexcel implementation team reviewed the current workload and infrastructure to identify common bottlenecks and key parameters. To ensure the new solution offers the necessary benefits surrounding performance, new workload demands, the need for resilience, high availability, and fault tolerance, Idexcel migrated the application using Amazon Web Services (AWS). The Idexcel team had detailed and fruitful discussions with several stakeholders from the business and technical teams to determine how to deploy the solution, **which is determined via the following phases:**

1. Cloud Readiness Assessment
2. Migration Readiness Assessment
3. Portfolio Assessment

Based on the meeting and discussions, the Idexcel team arrived at the most appropriate migration strategy and designed the following migration steps.

Idexcel's solution included:

1. Migrated the MS SQL database workloads to Redshift for the following performance benefits:
 - a. Fully managed and hosted solution
 - b. Better DR strategy
2. Amazon Elastic Compute Cloud (Amazon EC2) for ETL when processing computing instances.
3. Amazon Virtual Private Cloud (VPC) and its associated services for securely isolating cloud resources.
4. Enabled infrastructural health monitoring with efficient notification system using CloudWatch, SNS solution.
5. Implemented AWS CloudFormation to deploy infrastructure as code.
6. One-time data migration using S3 Copy and Redshift loads.
7. Data extraction using Redshift native commands.
8. Implemented an event-driven approach with Lambda to initiate the ETL processes.

After the migration was completed and tested for application performance, stability, and reliability, the Idexcel team focused on cost optimization for EC2 instances, as well as Redshift clusters.

BENEFITS:

With proper assessment, planning and design, the Idexcel team was able to complete the migration process within the original timeframe.

Following are the key benefits attained from the new solution:

1. Performance - some workload efficiencies improved by up to 1500%.
2. Support of new workloads and growing data size.
3. Cost savings on licenses.
4. Cost savings on infrastructure usage.
5. Solution is highly available and resilient.

OUR AWS COMPETENCIES



- Public Sector
- Solution Provider
- DevOps Services Competency

- Financial Services Competency
- Migration Services Competency

Contact us

Idexcel, Inc.
459 Herndon Parkway Suite 10, Herndon, VA 20170
Tel: 703-230-2600
Email: inquiry@idexcel.com