

Now more than ever before, financial services customers are moving their critical workloads to the public cloud in order to increase efficiencies, automate security, lower cost and improve customer experience.

THE CHALLENGE:

- Migrate to cloud for web harvesting application
- Price sensitive to technology services
- · Need extensive AWS expertise

THE CDI AND AWS SOLUTION:

- · Remove single points of failure
- Reduce cost and create resiliency and availability
- Ability to scale toward global model
- Securely protect application
- Reduced risk of cross environment contamination
- Robust backup and recovery plan
- Separate environment for testing allows control and quality assurance

THE RESULTS:

- Customer saw immense value in leveraging cloud for new application workloads and modern application architectures
- Clear understanding of application workloads and how they can be moved to cloud
- Lower cost compared to on-premises or hosted environment
- Automated disaster recovery plan

THE CHALLENGE

This New York City financial services firm was looking to implement a cloud-based web harvesting application that mines data from various websites of interest and provides its research team with additional insight into trading decisions.

The customer had developed an initial version of this application running traditional on-premises enterprise infrastructure and wanted to build the next version with added resiliency and scale that migrating to the cloud would provide.

The migration would require the development of a highly available architecture with a focus on multi-region deployments and two full stack environments to include a Production and Non-Production (development) deployments. The production environment needed to be multi-region capable and highly available within each region.

Decision makers were also looking for a trusted partner with extensive AWS cloud expertise in well-architected frameworks and best practices on implementation, who could also stay privy to the price sensitivity of technology services.

THE CDI AND AWS SOLUTION

Utilizing the AWS Cloud Adoption Framework, CDI showed the customer how to align their cloud strategies and goals to their business strategies and goals. The customer was now able to identify the gaps in their current organizational capabilities and devise workstreams to close those gaps and meet their cloud adoption goals.

CDI proposed designing and architecting the application in the AWS cloud, which would provide a resilient and scalable architecture leveraging cloud native technologies. The proposal included a design document highlighting the current landscape, requirements for transformation and a "to be" design intended to maximize deployment capabilities while balancing cost.

Additionally, CDI recommended and conducted the cloud migration using the agile project management scrum methodology. This project management tactic provided the customer with an iterative and incremental delivery approach of their migration to the AWS cloud. Once rapid alignment on team vision and goals during agile inception was complete, a bi-weekly Sprint Plan was developed to define the scope of work necessary to meet the sprint commitment for re-hosting and re-platforming into the AWS cloud -- along with incrementally adding automation points and a disaster recovery implementation strategy.

As the customer's environment and business needs shifted, this approach provided flexibility and allowed the software development team to stay aligned. It also enabled CDI to quickly adapt to changing customer requirements and incrementally hone in on the target.

WHY AWS?

The customer evaluated multiple hyperscale cloud providers, but ultimately chose AWS due to the maturity of its database services, the reliability, scalability and performance provided and the continuous delivery tools that will simplify and boost their software development efforts.



ADDITIONAL AWS BENEFITS:

- Supports expanding application environments at a much lower cost than a comparable on-premises or hosted environment.
- Requires less time to manage, administer and update.
- Provides agility, scalability, and improved performance to better address business opportunities and enhance user productivity.
- Reduces risk and minimizes the frequency of application downtime.

APPLICATION DEVELOPMENT BENEFITS:

- Flexibility, ease of deployment, scalable and cost-effective.
- Time savings quicker and consistent provisioning of environments through automation.
- Faster, more frequent releases with a continuous delivery toolchain.

THE RESULTS

The ultimate goal of the workload implementation was to automate the application instantiation and workload process and automate disaster recovery – none of which the customer had in the current onpremise form.

The public cloud strategy designed, deployed and ran by CDI allowed the customer to:

- Remove single points of failure and leverage cloud native technologies to reduce cost and create resiliency and availability of applications.
- Separate development and production environments to greatly reduce the risk of cross environment contamination and increase footprint availability moving towards the future.
- Ability to scale towards a global distribution model by leveraging multiple regions within the AWS infrastructure if so desired.
- Backup and recovery strategy employed within the AWS cloud infrastructure allowed a more robust recovery plan and quicker recoveries from local and regional failures of the infrastructure.
- Separate environment for testing that can be provisioned quickly and easily allow controlled testing and quality assurance of applications updates and new features during the development lifecycle.
- Utilize AWS data centers and network architectures that meet the requirements of the most securitysensitive organizations. By leveraging the AWS cloud services, security controls and other built-in safeguards, the customer can securely protect their application and data more effectively and to higher standard.

"Our hope is that the customer sees immense value in leveraging cloud for new application workloads and modern application architectures. CDI's expertise as an AWS Advanced Tier Consulting Partner provided us the forum to guide this customer along their cloud journey and bridge the gap between legacy/traditional infrastructure and cloud. We're confident that AWS was the most robust and highly-available solution that met all the customer's requirements and satisfied the strict security and compliance needs of the financial industry."

William Chin

Director of Cloud Services, CDI Managed Services