

Modernized the Research Data Platform to enable Sustainable Investing for Institutional Customers for a US based “Big Four” bank

Challenges

- The client was using an MS Excel based utility with limited capability to facilitate research work on Sustainable Investing – ESG (Environmental, Social, Governance).
- The ESG Excel utility lacked reporting, data validation workflows, and history data management capabilities. The accuracy of data was being impacted by the current approach of using MS Excel.
- The legacy Ecosys system had outdated Python scripts and UI screens, and inappropriate classification of AutoSys jobs, making them not user-friendly

Solution

- The Virtusa team executed a proof of concept (PoC) to finalize the job orchestration approach, migrated the core UI, data, and processing components to AWS, and established the foundational components of the Research Data Platform.
- Developed a cloud-based IT platform to aid research analysts in making ESG driven decisions
 - Implemented a reporting feature allowing users to generate reports in PDF or Excel format by companies, sectors, and other criteria
 - Enabled workflow-based data validation for improved data accuracy.
 - Upgraded 1000+ Python jobs and moved to a fully serverless solution using AWS Lambda and Glue.
 - Improved job orchestration process by modernizing job scheduling solution with AWS Cloud services

Value delivered

- The new system, built on a modern tech stack, has 80% serverless infrastructure, reducing maintenance efforts and data complexity. Analysts can use scores to benchmark and compare companies, and qualitative information like "Strong," "Weak," "Average," etc. is available for decision-making. Other key benefits include:
- The single dashboard allowed users to easily compare ESG data between companies and sectors.
 - Ensured high-availability, system performance, and scalability of the UI through the implementation of an application load balancer.
 - Improved the job orchestration system by eliminating the dependency on the Autosys job scheduling tool
 - Achieved high-availability, system performance and scalability need of UI with application load balancer