## **SUCCESS STORY**





# ESG DATA MANAGEMENT PLATFORM WITH AUTOMATED WORKFLOWS USING AWS SERVICES

#### **OVERVIEW**

The client wanted a cloud-based data management platform to enable data collection, validation, and integration with their ESG assessment platform. The data platform had to be designed to collect ESG performance metrics of the companies as per standards like GRI, SFDR/PAI, IRIS+, SDGs.

#### **KEY HIGHLIGHTS**

- End-to-end implementation of the data management platform on AWS Cloud infrastructure with highly reliable data to enable thematic decisions based on the latest regulations
- Facilitated data collection for numerous issuers.

## CLIENT

The client helps investors integrate Environmental, Social & Governance (ESG) solutions in their investment decisions by providing ESG data/signals on listed companies and analytical tools needed to interpret and integrate ESG in risk assessments, scrip selection, performance monitoring and issuer engagement.

### **BUSINESS REQUIREMENTS**

- Build a robust cloud-based data management platform to that could cater to Thousands of companies for multiple clients involving multiple taxonomies which aids in the comprehensive assessment of their performance
- Allow concurrency of hundreds of users
- Provide a unified view of the curated data to the customer with user-based access
- Enable bulk data processing using Excel and JSON based data exchange
- Build a modernized infrastructure to achieve high availability, scalability, centralization, and business continuity / disaster recovery for all the governed data and reduce the latency of data delivery with traditional data architecture.

#### **OUR SOLUTION**

- Indium proposed a modern architecture suited for Cloud-based web applications considering the Business requirements. The solution recommendation involved Application stack, AWS Infra deployment architecture with Devops components.
- The data collection / curation portal was developed with AWS Cloud Infrastructure services Cloud Front, Route 53, EC2, S3 and the database in Mongo DB.
- The data architecture was solutioned to provide low latency. This ensures that application performance is top-notch at all points in time so that the Platform can scale seamlessly and cater to the growth of Data Analysts as more Companies are on-boarded.

- Indium provided a highly available data infrastructure for DNS management and traffic management and to effectively monitor the health of the systems and route the traffic accordingly from multiple organizations simultaneously. This enabled accelerated data availability for the analysts through the numerous data points which the client uses.
- For ensuring high availability, reliability & data security, AWS EC2 was used to host the data curation portal with the data stored in AWS S3 to provide 99.999% durability of objects. Data is stored at multiple Availability Zones within a region, ensuring document backup and disaster recovery.
- The platform primarily uses Amazon CloudWatch for monitoring. A new utility was created in CloudWatch to restart the server for instances where a particular service is not running.

#### **BUSINESS IMPACT**

- Delivered the solution at over 60% faster time-to-market
- Built a comprehensive and highly scalable data curation portal with interactive dashboards for various personas including professionals responsible for data entry and ESG analysts
- The data collection platform enables the analyst to perform the data collection quickly without manual errors.
- The workflow implemented helps the approvals and verification process very smooth.
- The validations and calculations are in built in the system.
- The output JSONs are generated quickly which has all the details needed for assessing the companies

#### TOOLS

AWS Secrets Manager, AWS Service Catalog, AWS Key Management Service, AWS Elastic Load =Balancing



#### **ABOUT INDIUM**

Indium is a Digital Engineering Services leader and Full Spectrum Integrator that helps customers embrace and navigate the Cloud-native world with Certainty. With deep expertise across Applications, Data & Analytics, AI, DevOps, Security and Digital Assurance we "Make technology work" and accelerate business value, while adding scale and velocity to customer's digital journey on AWS.



#### USA

Cupertino | Princeton Toll-free: +1-888-207-5969 Chennai | Bengaluru | Mumbai | Hyderabad Toll-free: 1800-123-1191

INDIA

UK

London Ph: +44 1420 300014 SINGAPORE

Singapore Ph: +65 6812 7888

www.indiumsoftware.com



For Sales Inquiries sales@indiumsoftware.com



For General Inquiries info@indiumsoftware.com

