Enhancing Business Efficiency through Strategic S3 Data Management

Business Objective

- The client manages operations across multiple AWS Accounts, using S3 Buckets with version control for historical and daily
- Current processes involve backend modifications and creating new versions, leading to increased storage costs and multiple copies.
- The client seeks an automated solution to eliminate extra versions without manual intervention, including an expiry date.
- Objectives include reducing storage costs, archiving less-used data, and enabling on-demand data retrieval.
- Certain S3 data becomes obsolete after 30 days, requiring an automated method for cleaning and cost reduction.
- Some S3 data with unpredictable usage needs immediate access; an automated approach is sought for cost-effective storage.

Client

- The client is the global provider of manufacturing services and solutions operating from over 100 locations in 30 countries. They combine an unmatched breadth and depth of end-market experience, technical and design capabilities, manufacturing know-how, supply chain insights, and global product management expertise.

Industry

- Manufacturing

Function

- Sales and Purchase Analytics

Technology

- SAP, Cloud Services, AWS

TekLink's Engagement

- **S3 Lifecycle Rules:**
  - Implemented rules to automatically delete older data versions after 30 days, aligning with policy for reduced storage costs.
  - Utilities with boto3 SDK (AWS SDK for Python):
- **Developed tools to:**
  - Archive S3 data at a specified prefix to S3 Glacier
  - Retrieve archived data and return it to the frequent access layer for a specified duration, automatically re-archiving afterward, simplifying data retrieval.
  - Run periodic processes to delete unnecessary data post the specified expiry period, contributing to storage cost reduction.
- **S3 Intelligent Tiering Rules:**
  - Utilized S3 Intelligent Tiering rules to transition data to the infrequent/Archive layer automatically.

Outcomes and Benefits

- Implemented measures leading to a 95% reduction in data storage expenses.
- Used smart rules to cut costs further while ensuring data is ready when needed (40% to 68%).
- Set up rules and tools for S3 datalake, saving $150 - $200 per AWS account monthly with little impact on the business.
- Made it easy to get back archived data, improving overall business efficiency.
- Streamlined data management, cutting S3 storage costs without complications.