

# Optimizing Data Analysis for Asset Management with Alteryx and Bloomberg API Integration

An asset management firm significantly enhanced its data analysis capabilities by integrating Bloomberg API with Alteryx, streamlining complex analyses such as universe screening and regression testing, and reducing time-to-answer from hours to minutes.

# AT A GLANCE

### **ABOUT THE CLIENT**

Investment team at publicly traded active asset management firm with \$100B+ in AUM

#### **PROBLEM**

- Need to conduct large-scale data analyses using both Bloomberg and proprietary internal data
- Facing challenges in performing complex tasks like universe screening, regression, and correlation testing efficiently

### SOLUTION

 Created tool that facilitated seamless integration of disparate data sources, allowing the team to build workflows that combined Bloomberg data with internal SQL database information without requiring custom code

## OUTCOME

- Reduced time required for complex data analyses, enabling decision-makers to quickly obtain and act on insights
- Repeatable and easily updated Alteryx workflows eliminated the need for errorprone manual processes, delivering accurate results in minutes

#### **FRAMEWORK**

- Data Integration, Data Visualization, APIs
- Bloomberg, Alteryx Designer, Python/R, SQL

## **PROBLEM**

An investment team at a buy side asset management firm needed to perform large scale data analyses using a combination of Bloomberg and proprietary internal data. Key uses of this tool included universe screening, regression and correlation testing, and security return analyses.

## SOLUTION

**Step 1: API Set Up.** We used Alteryx to access the Bloomberg API via R. The API packages are available to Bloomberg Terminal users, and with a small set of wrapper R code, an Alteryx interface was set up. This interface created a tool that accepted a list of security identifiers, Bloomberg commands, and parameters, and could be used in any Alteryx workflow. Once the Alteryx tool was set up, no coding was necessary to access the Bloomberg API.

**Step 2: Integration and Analysis.** Using the Alteryx tool, workflows could then be built to marry disparate data sources with the results of Bloomberg API function calls. Data was accessed from the client's internal SQL databases to pull portfolio holdings, analyst recommendations, and other proprietary data. Using Alteryx, we were able to prepare the necessary data and query the Bloomberg API. This was utilized to run a large-scale regression test of 2,500+ international equities to determine price and return sensitivity across multiple factors such as oil prices, global market events, and other market conditions.

**Step 3: Drive Action.** The results of the Alteryx workflow enabled decision makers to easily consume the final product of a complex analysis. The Alteryx workflow was designed to be repeatable and easily updated for different portfolios and factors, which drastically reduced the analysis time by providing answers to questions in minutes, without the need for custom programs or error-prone manual Excel spreadsheets.

# OUTCOME

We dramatically reduced the time-to-answer for complex data analyses without requiring custom code development, and while operating within the client's analytic stack.