

How a Pharma R&D Department Reduced Time to Decision by 86%

Objective

Two key objectives of the company's digital transformation initiative are to digitize the laboratory environment and deploy technology that enables information sharing. The company evaluated Scitara DLX to deliver on instrument connectivity requirements and the following goals:

- ❑ **Removal of non-value-added tasks enabling self-service analytics**
- ❑ **Immediate access to instrument datasets to remove ten-day time lag from instrument run to decision-making**

The company evaluated Scitara DLX for use with eight instrument types.

- Particle Size Analysis
- Morphology
- Rheometry
- Surface Area/Pore Size
- Microcalorimetry
- Differential Scanning Calorimetry
- Thermogravimetric Analysis
- Dynamic Vapor Sorption

Current State

The current process, which is highly manual, involves performing the instrument run, transcribing the data to Microsoft Excel, checking the data, reworking the data, aggregating the data, checking the aggregated data, and finally performing analytics and visualization on the data. The company determined that across the eight instruments the total time from beginning the instrument run to performing data analytics and visualization was 2,795 hours. Included in the total time is 560 hours of rework.

The Solution - Scitara DLX

Scitara DLX, the iPaaS for science, facilitates data mobility in a laboratory environment. Scitara DLX was deployed to automate the exchange of data from the eight instruments to the data lake. The eight instruments were connected to Scitara DLX using the Windows File Connector. The internal data lake was connected to Scitara DLX using the Web Services Connector. These connections and the orchestration capability of DLX allowed for the automated flow of data between the instruments and the data lake. As soon as the instrument result files are placed in a designated file share, a Scitara Orchestration automatically captures and parses the data files and subsequently uploads the desired results to the data lake. The instrument files are then automatically moved to an archive location for each specific instrument.

Impact

Deploying Scitara DLX led to a reduction in time to results from 2,795 hours across the eight instruments to 392 hours, a reduction of 86%. All manual steps as well as the associated errors and rework were eliminated. The goals of self-service analytics and immediate access to data sets were both met. Additionally, scientists in the lab, who no longer had to do manual transcriptions, were freed up to work on higher value-added work, improving morale.