



# Fast Adoption, Fast Development

## AI for Multi-Layer Coatings



### The Customer

Our customer is a global giant in construction materials and chemicals, supporting an expansive range of applications.

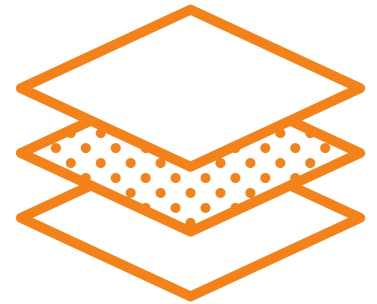
### The Problem

When getting started with Citrine's AI, the customer had 2 overall goals. The first was to optimize a multi-layer coating by improving stability while maintaining mechanical and other properties.

The second goal was to support the digital transformation of R&D by improving data collection and generating success via AI so that the team is motivated to use the Citrine Platform.

### The Process




After agreeing on a new objective measure of a performance criteria, the customer team was able to model each layer of the coating and its overall properties. The team's subject matter expertise was used to train the AI with important context and property relationships, guiding it to successful results. For example, the importance of similar mechanical properties in adjacent layers of the coating was represented.



The customer team embraced Sequential Learning, running experiments, uploading new data, and retraining the AI daily so that it could suggest the following day's experiments.

### The Outcome

After experiencing quick success with their implementation of the Citrine Platform, continued momentum is being generated to ensure that the Platform will be widely used across the customer's R&D in the future.

-  The customer estimates a **> 50% reduction in development time.**
-  Early success has sparked the generation of further projects focused on PFAS removal.
-  The customer hit team **adoption targets in less than 50%** of expected timeline, with further goals set for continued growth in projects and users.