

Producing a digital twin for drying process

During the production of one of Lundbeck's products, a drying process is included. It is performed without air-conditioning of the outside air, filtered according to standards, but without adding or removal of air. At the end of the process the dried product needs to meet specific standards water content. As the water content of the drying air varies according to the weather conditions, this is a difficult task. Implementing a digital twin for the drying process would make the process a lot easier, as there is already a stream of IoT data and weather data. With the digital twin, accurate predictions of when to stop the drying process would be possible.

Engineering challenges to be solved

Producing a digital twin that matches the already existing technologies and utilizes data from the IoT and about the weather. The current product that Lundbeck produces, of course must meet industry standards, which will be a lot easier and more predictable with the existence of a digital twin.

Engineering backgrounds needed

Data engineers, software engineers, and engineers with knowledge of production and possibly drying processes. Possibly pharmaceutical students as well.

Goal of the project

To obtain a digital twin to monitor the process of producing the product and make it more predictable. To gain insight into which parameters matters most when producing the product and when determining when to stop the drying process.