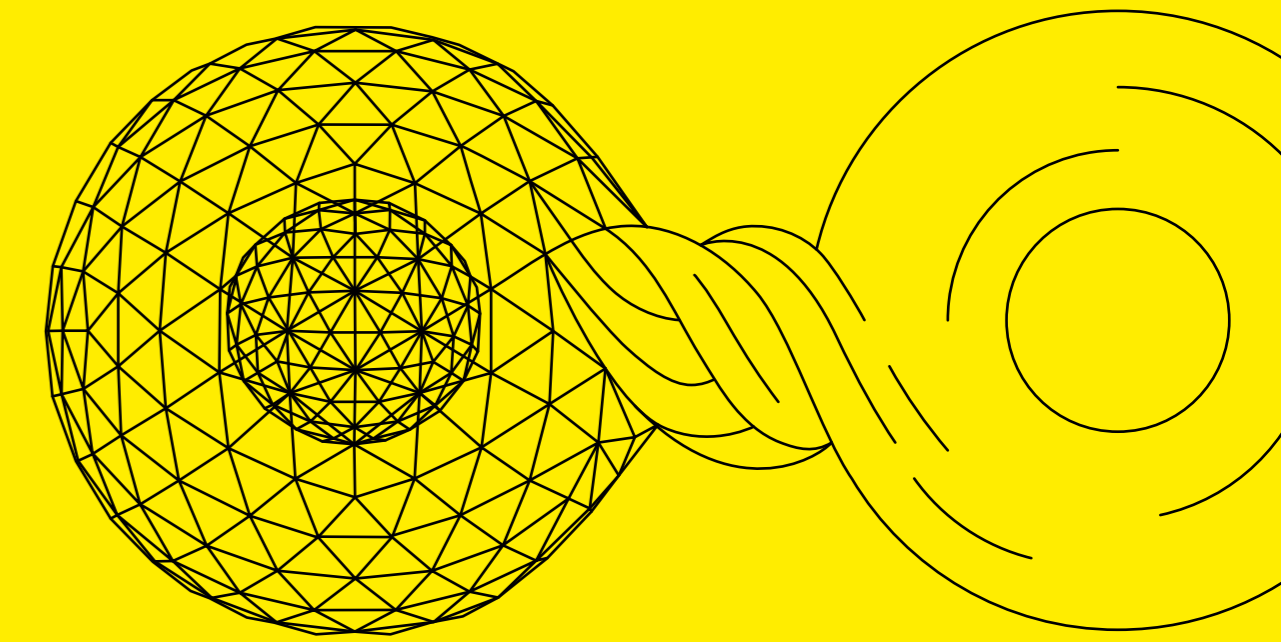


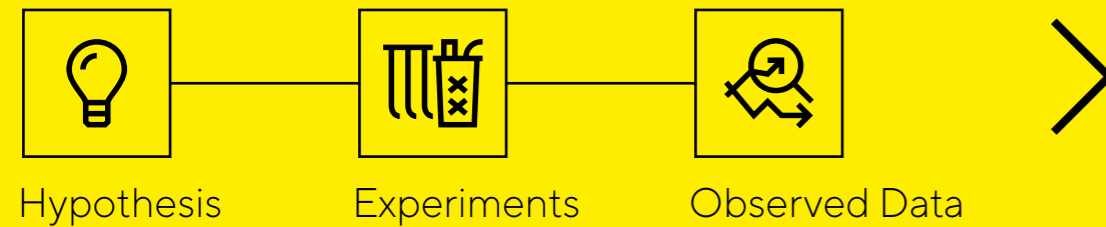
# Condition Optimization for Fed-Batch Processes

Speed Up Your Development Process by up to 40%  
With the Help of a Virtual Bioreactor

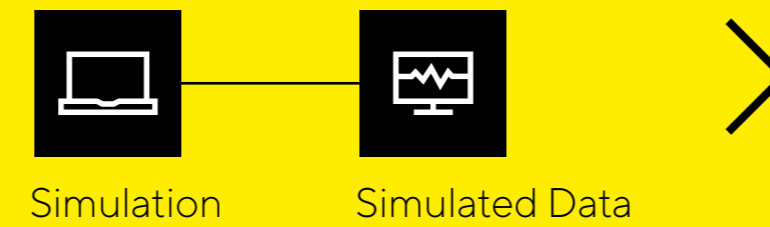


## Virtual Bioreactor Fed Batch: 90 – 180 Days

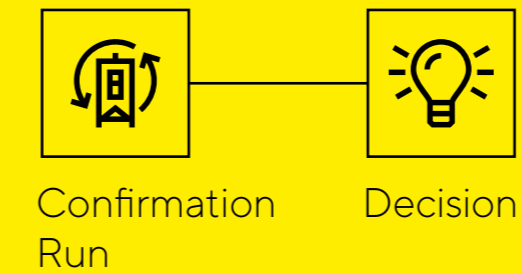
Initial Setup: 1 – 2 Months



Prediction and Analysis: 1 – 2 Months

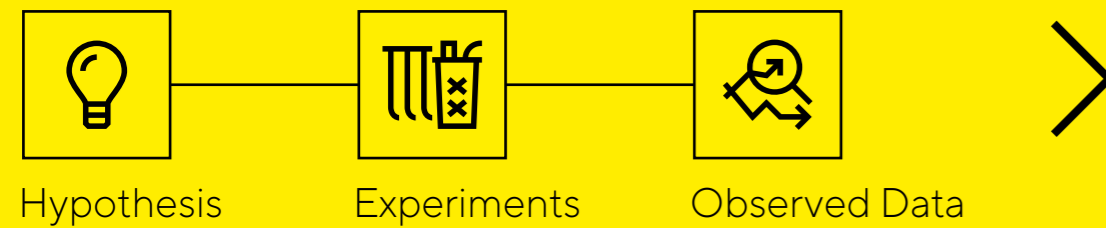


Final: 1 – 2 Months

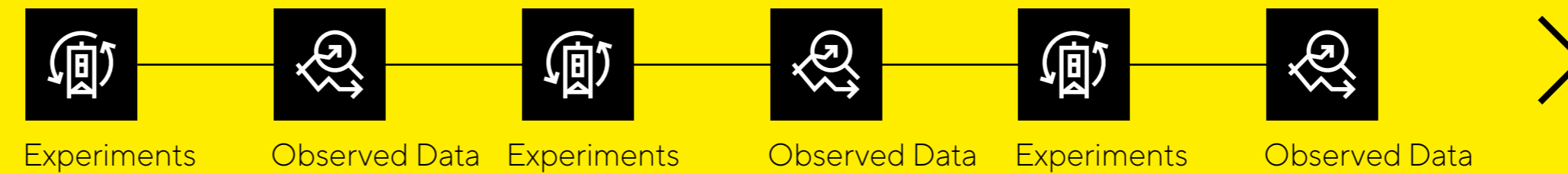


## Traditional Fed Batch: 150 – 300 Days

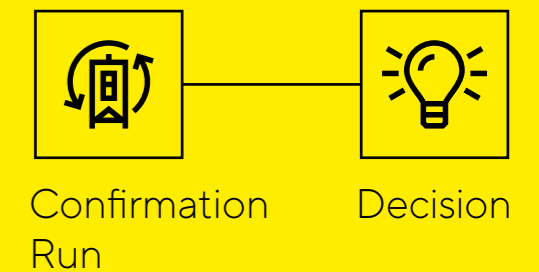
Initial Setup: 1 – 2 Months



Development Runs: 3 – 6 Months



Final: 1 – 2 Months



**Illustrative Project Timeline:** Theoretical project set up with the following assumptions. Initial fed-batch is 24 days from thawing first vial to harvest of first campaign. All following campaigns are 3 weeks assuming a rolling inoculum train. One week allocated for data analysis between each campaign.