



Building true Machine Learning MVPs

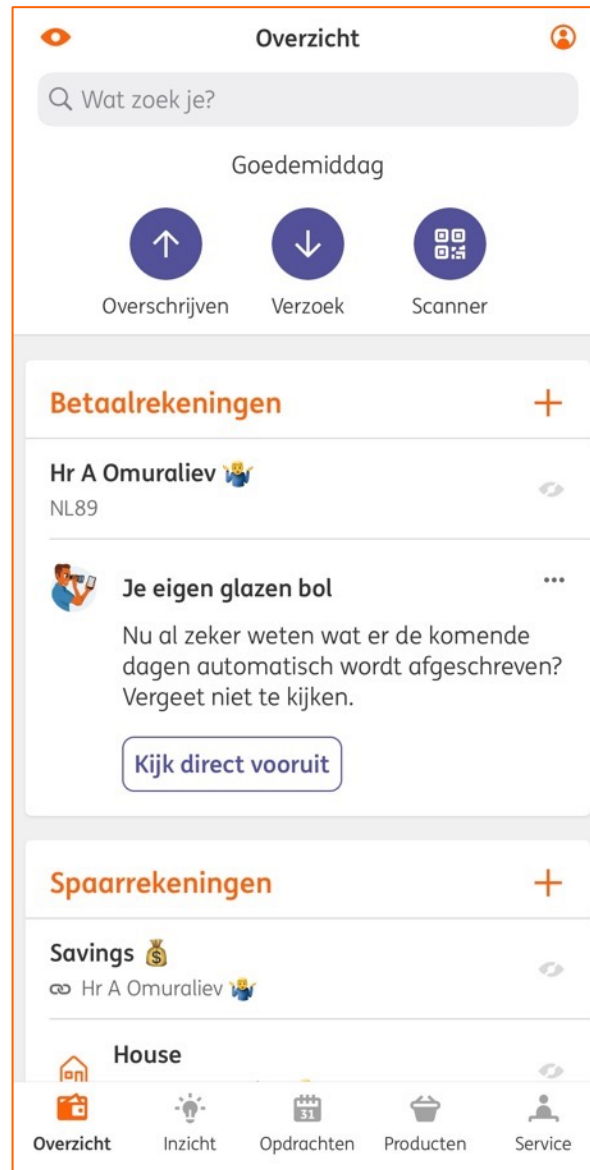
Notes of a product data scientist

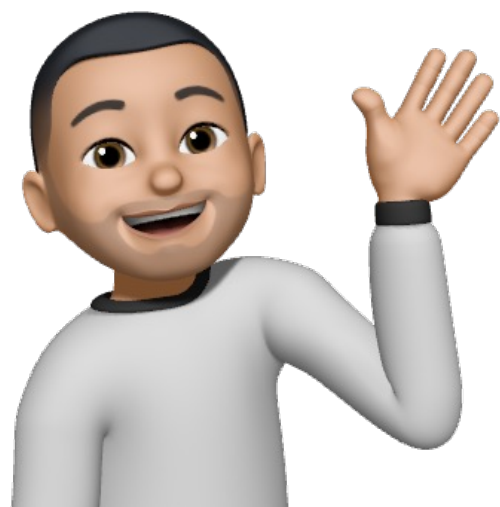
Azamat Omuraliev | Senior Data Scientist @ ING
PyData Amsterdam, 16 September 2023

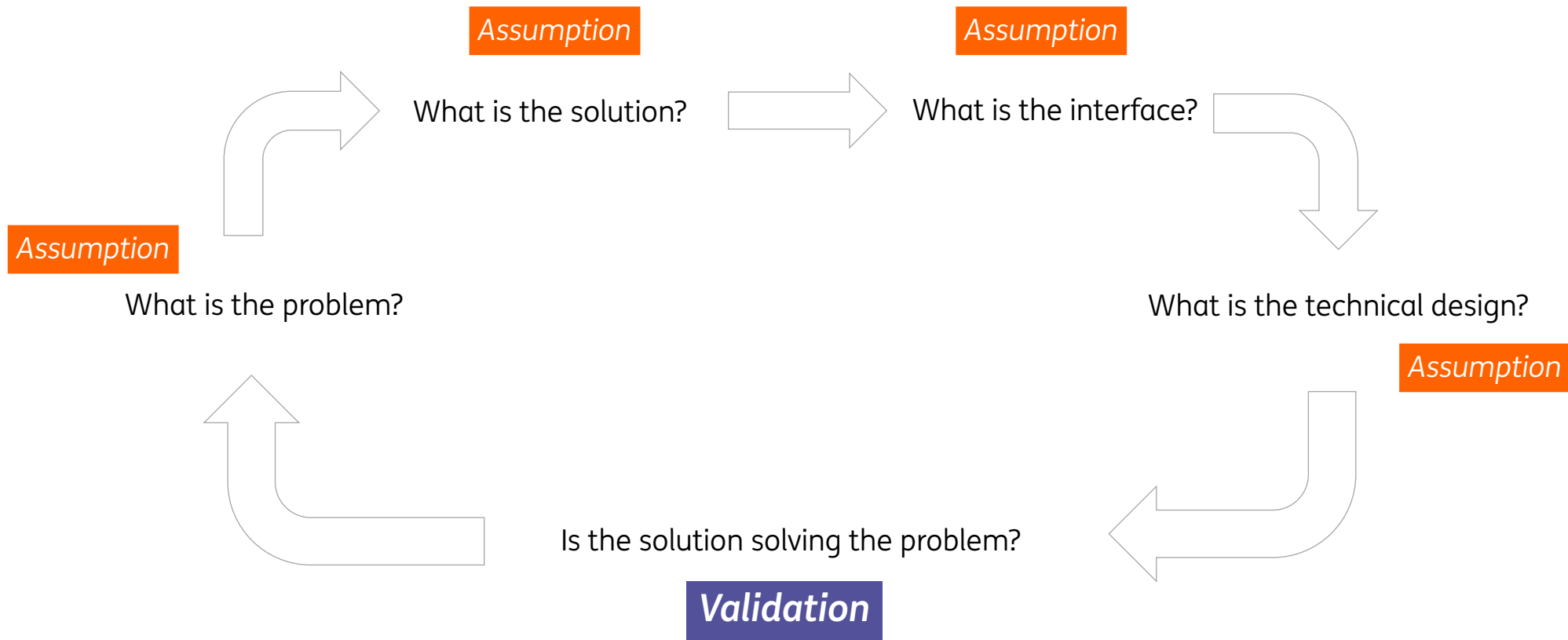


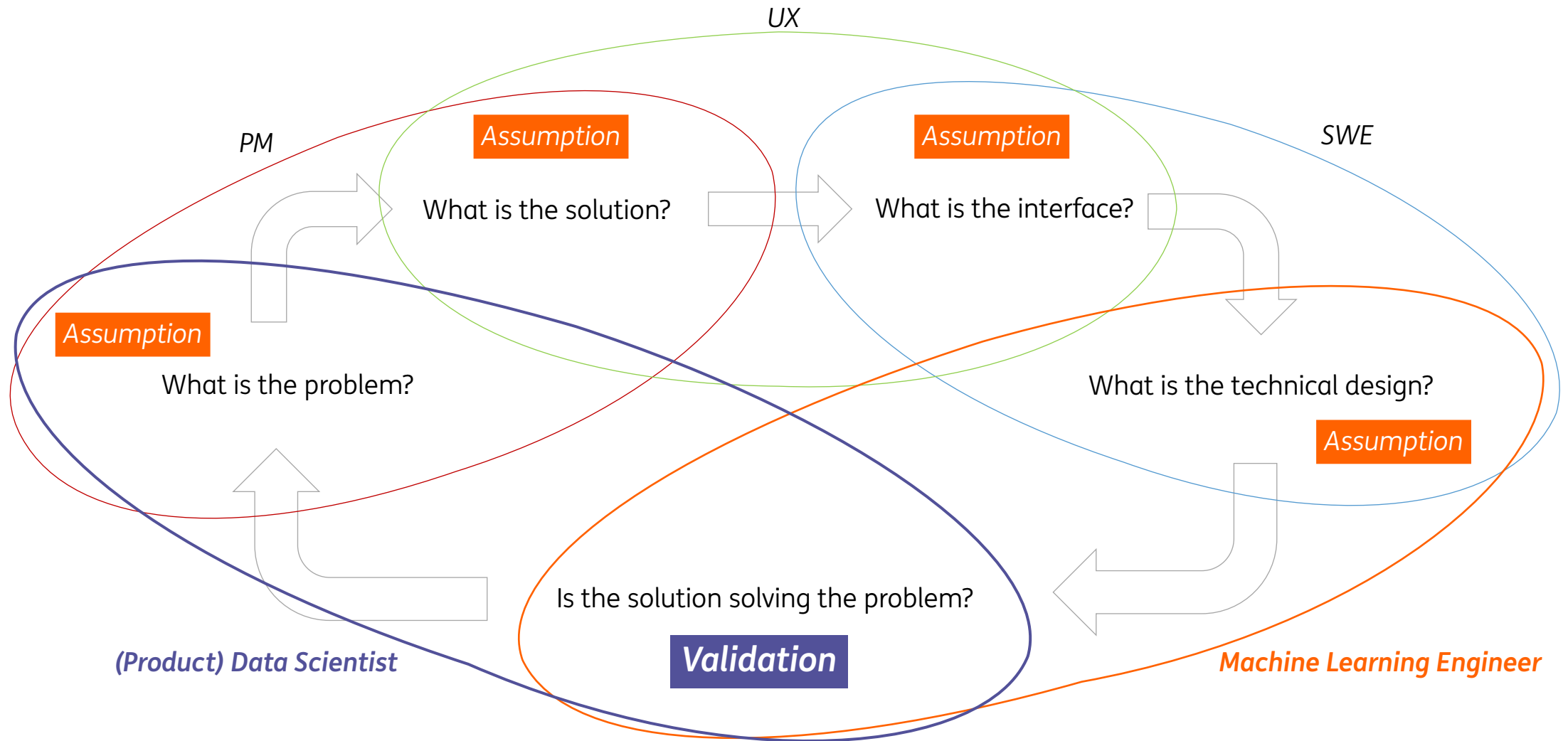
do your thing











How to improve your chances of building something that **users want** or **solves the business need**?

Talk to customers

Market research & expert advice

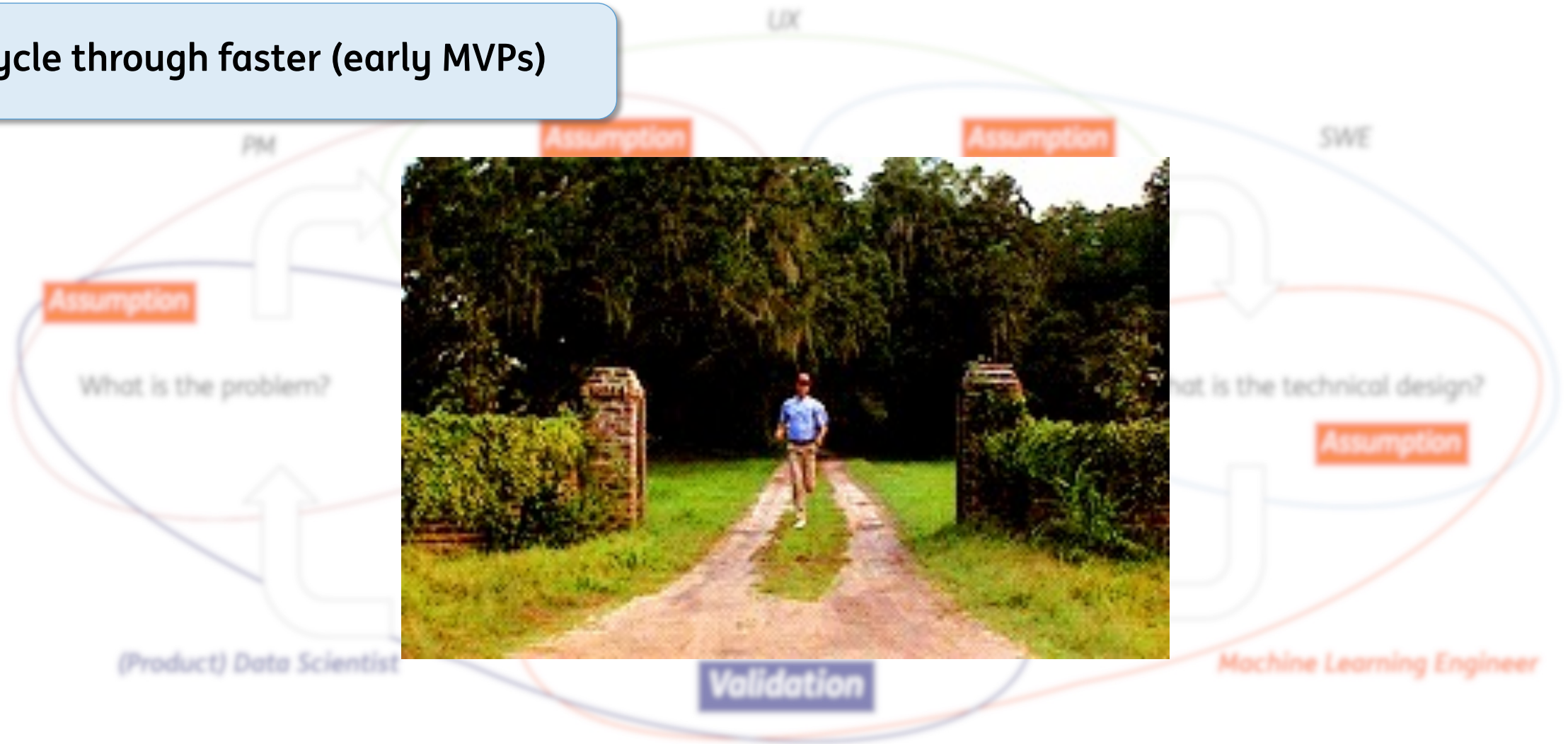
Cycle through faster (early MVPs)

Make a hypothesis, then experiment

Find validation evidence in data

You should do this as a data scientist!

Cycle through faster (early MVPs)



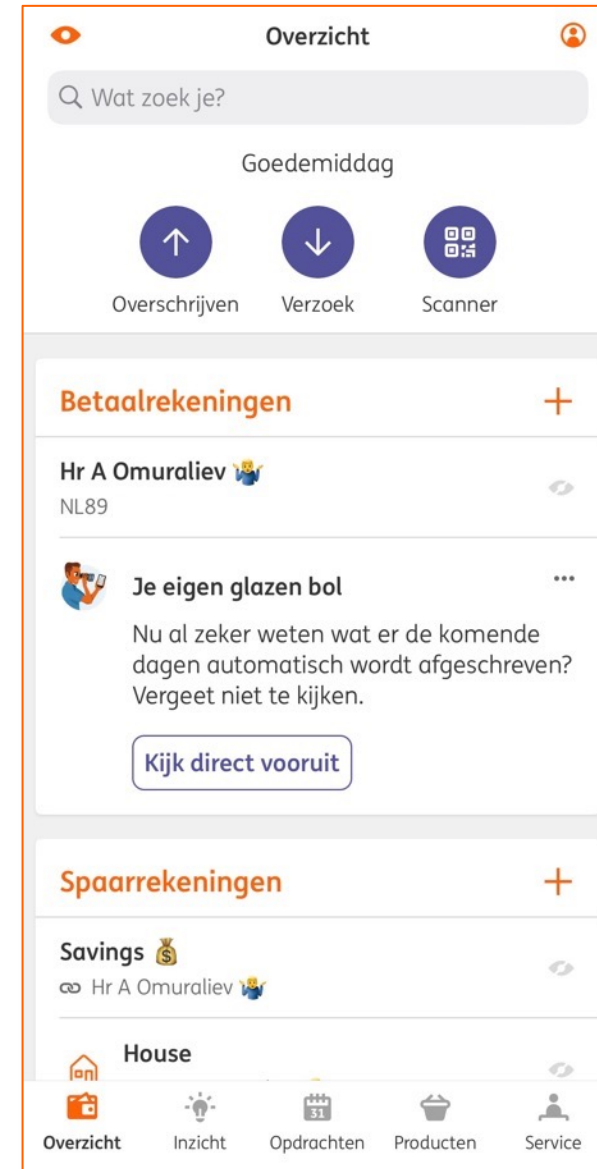
Case 1: Social ads optimization

MVP cycle: 2 months

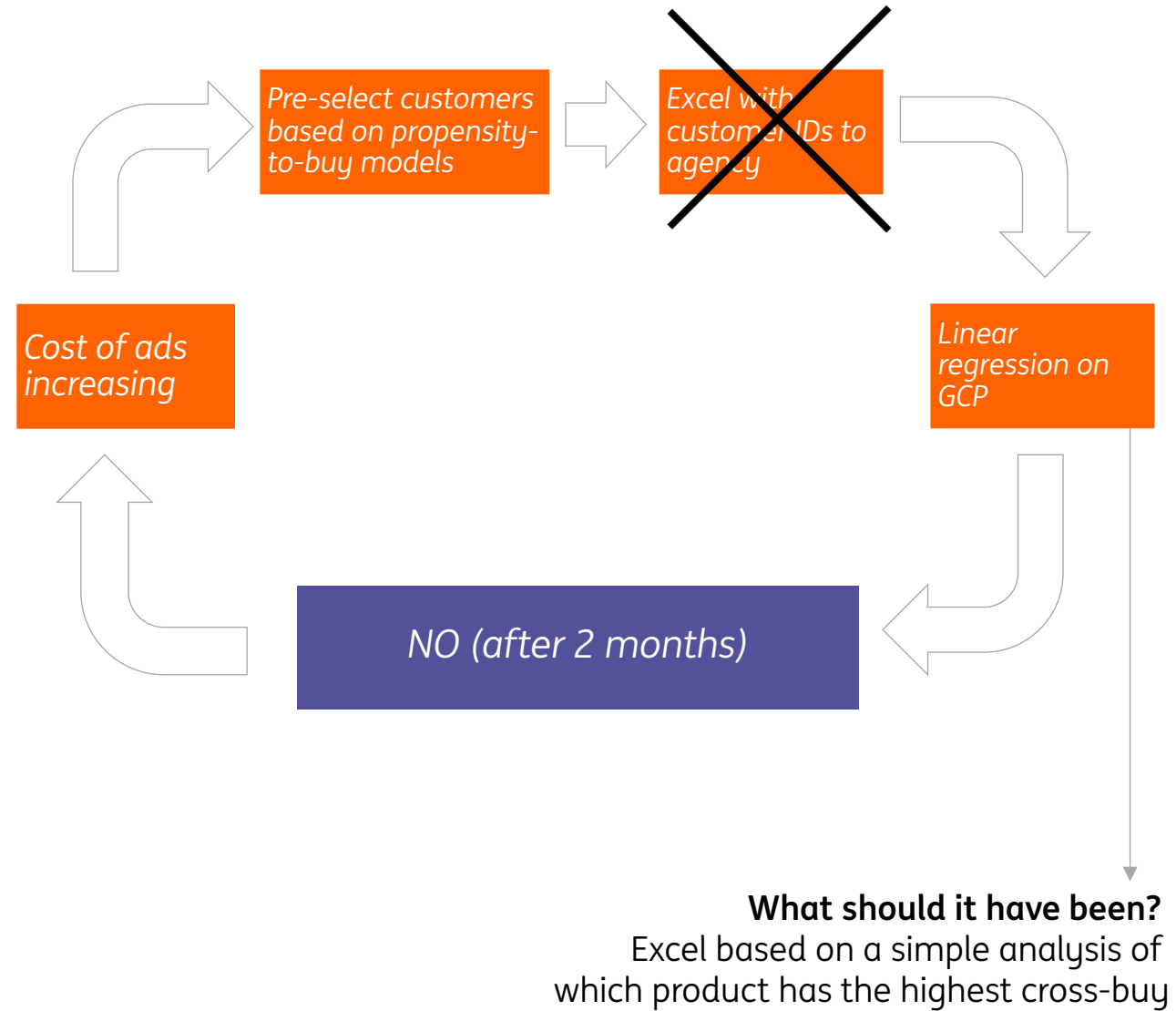


Case 2: Login intent prediction model

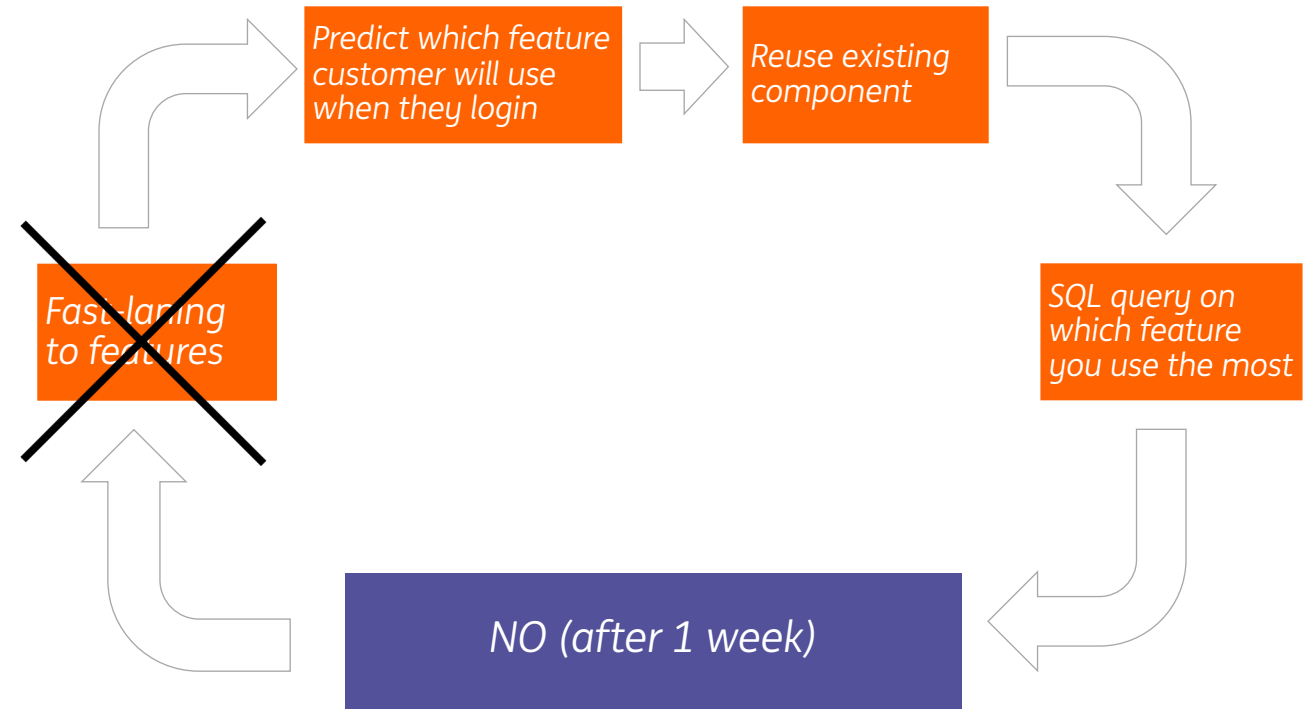
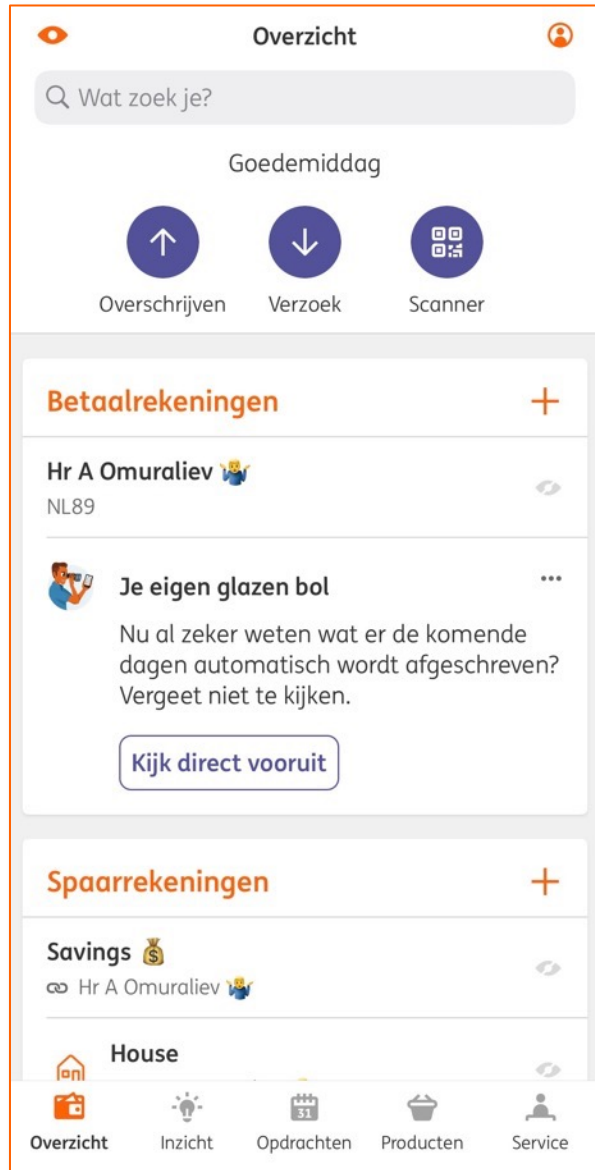
MVP cycle: 1 week



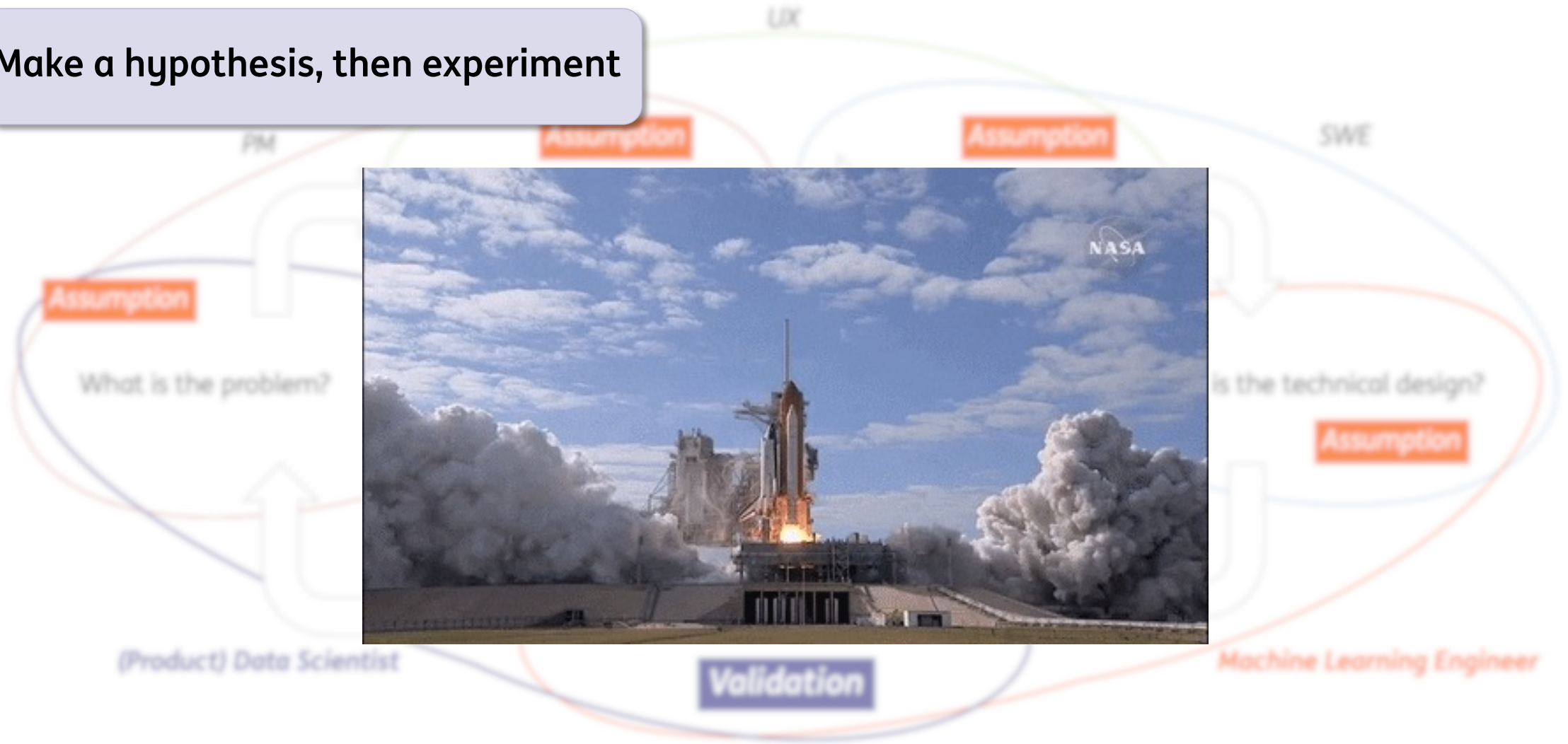
Case 1: Social ads optimization

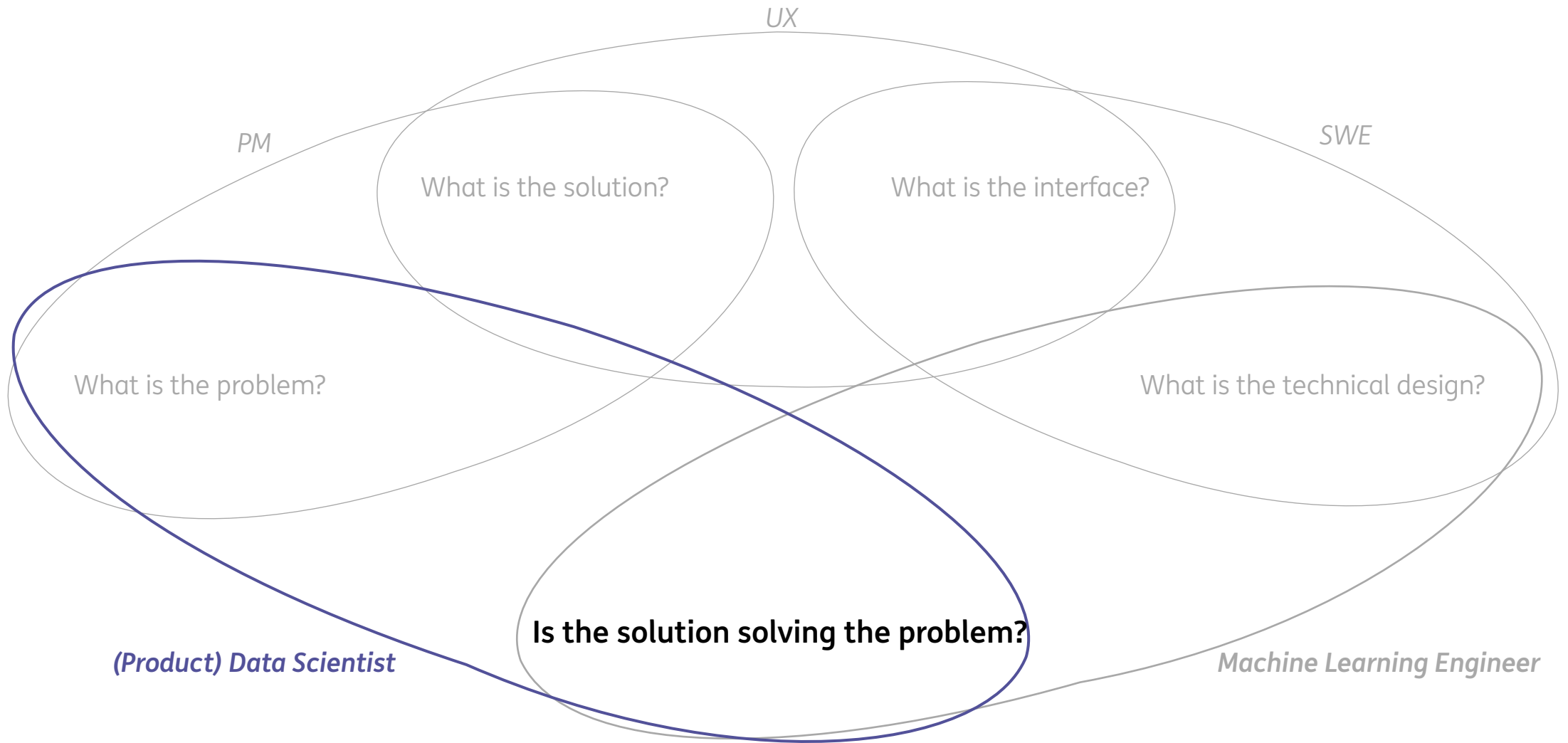


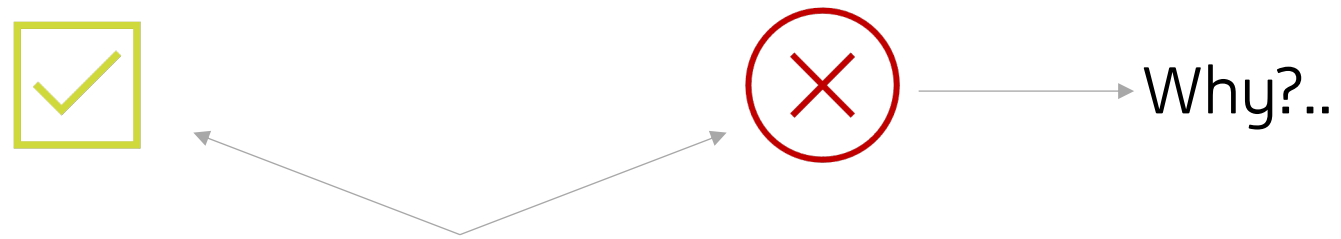
Case 2: Login intent prediction model



Make a hypothesis, then experiment





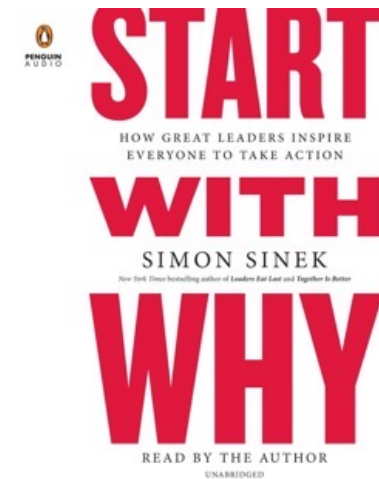


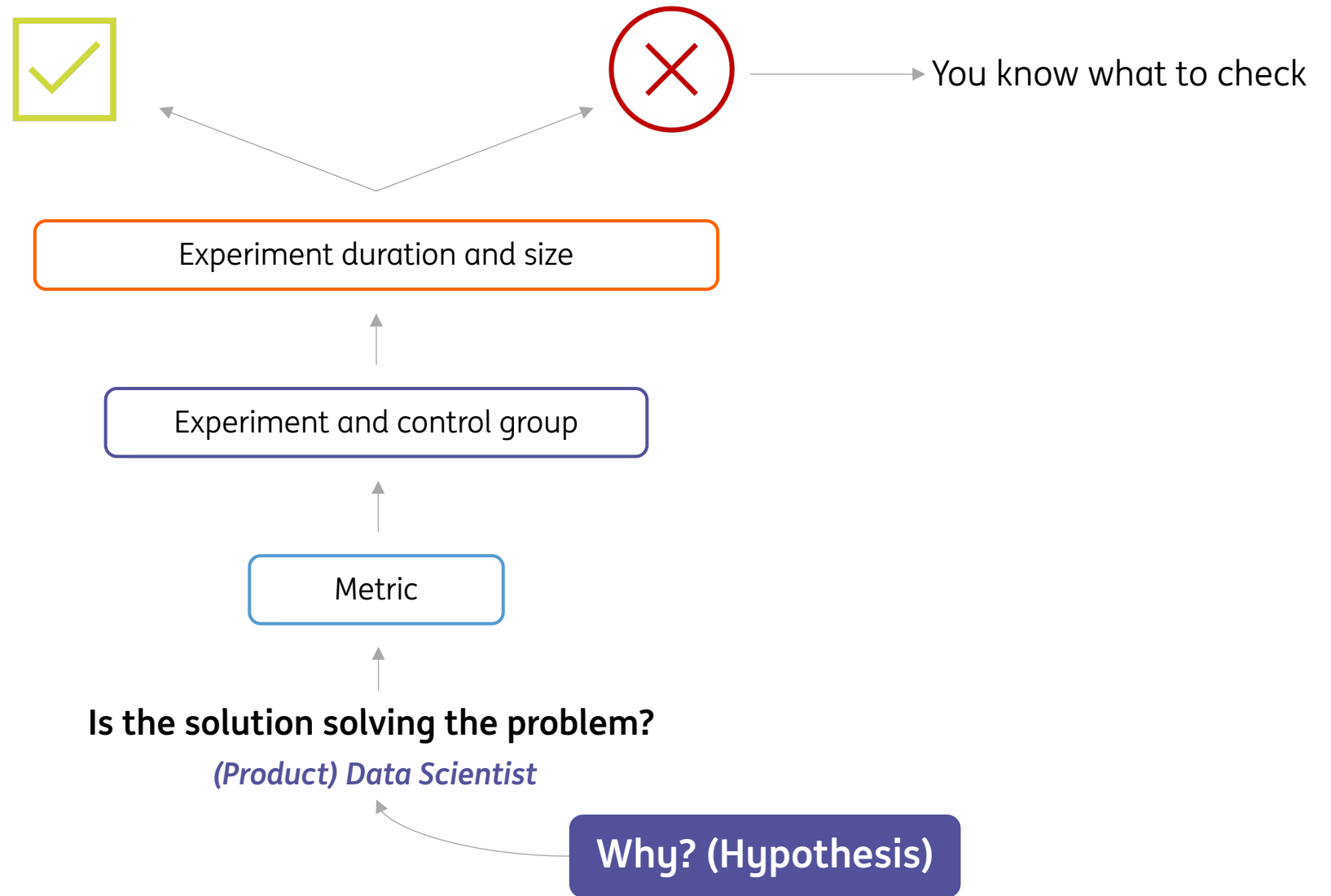
Experiment duration and size

Experiment and control group

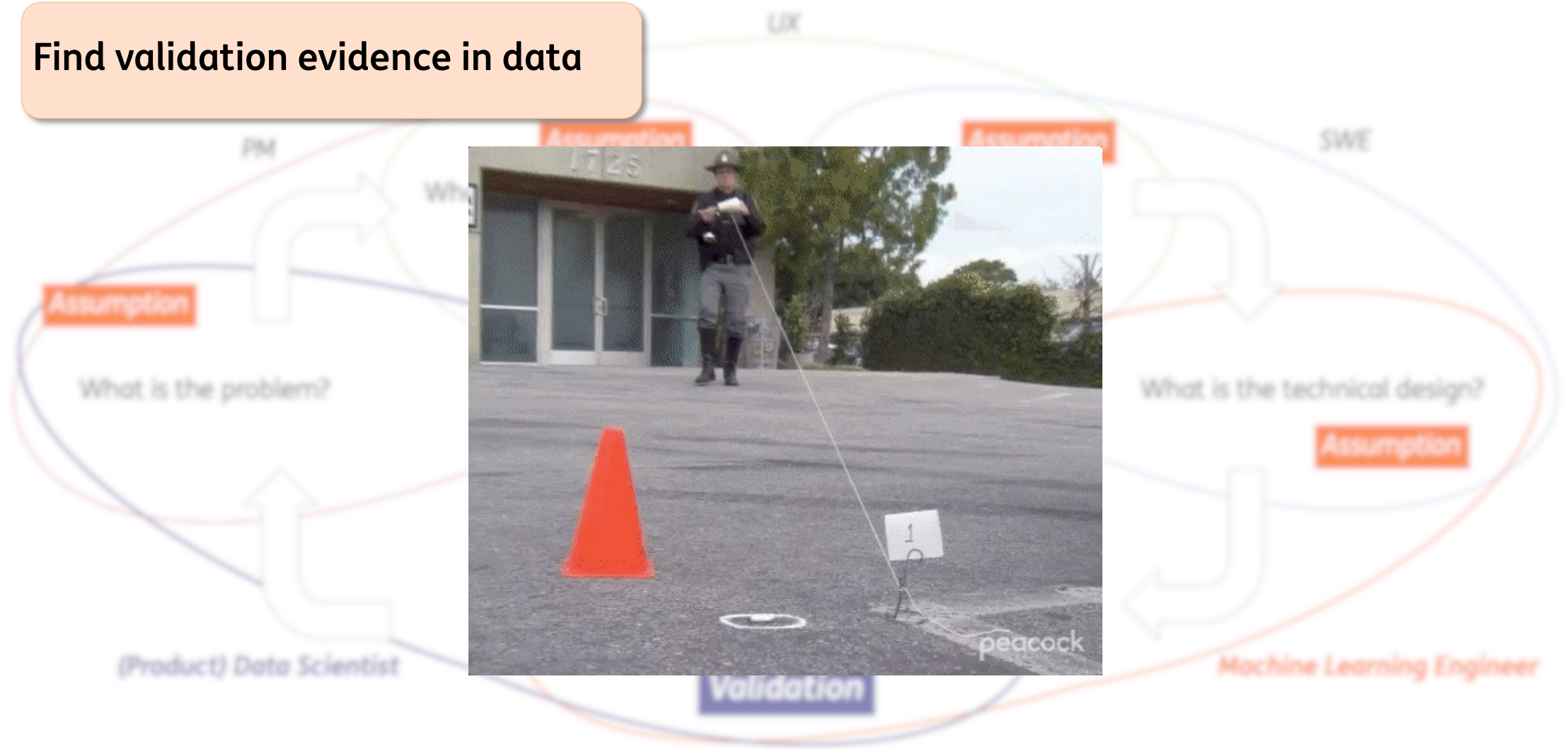
Metric

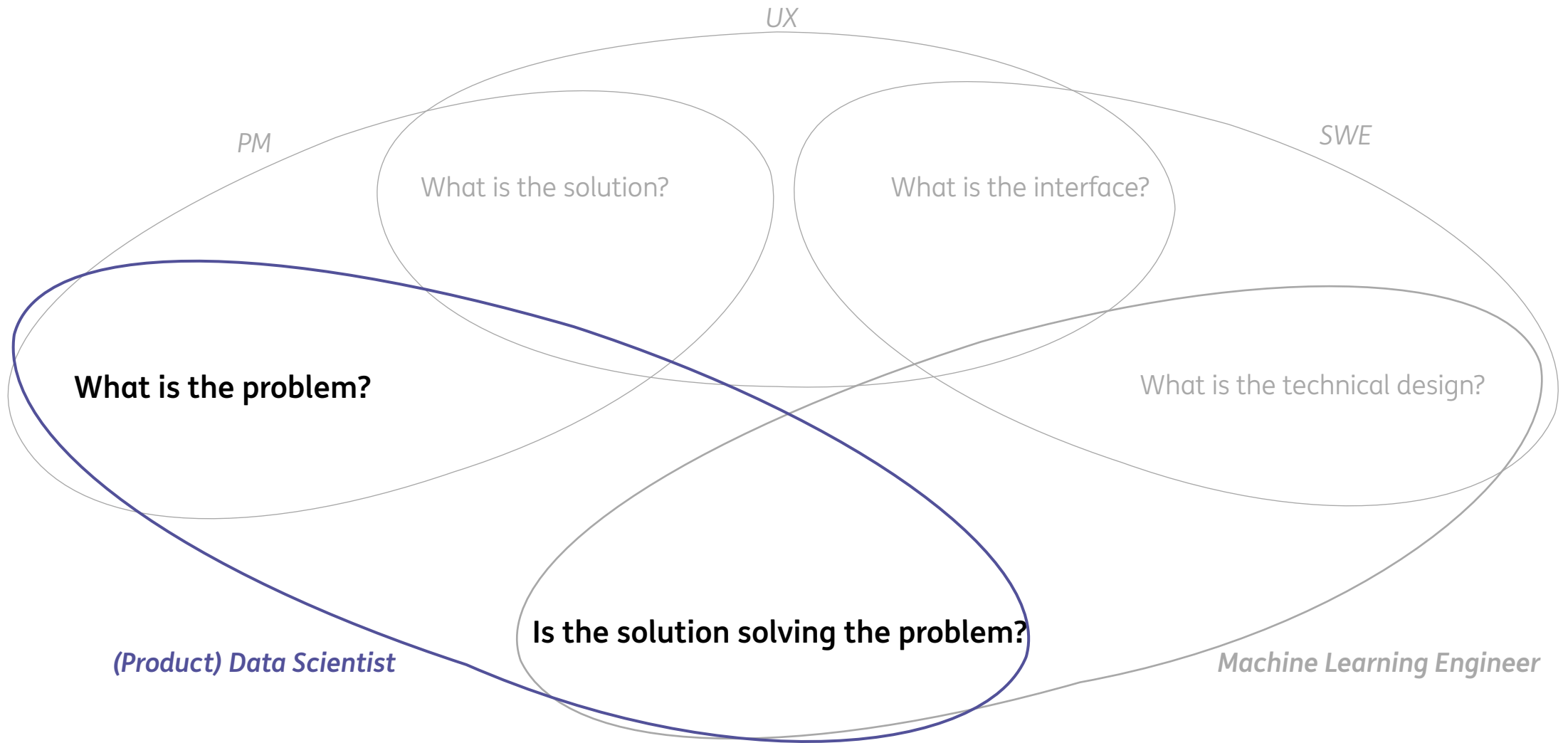
Is the solution solving the problem?
(Product) Data Scientist



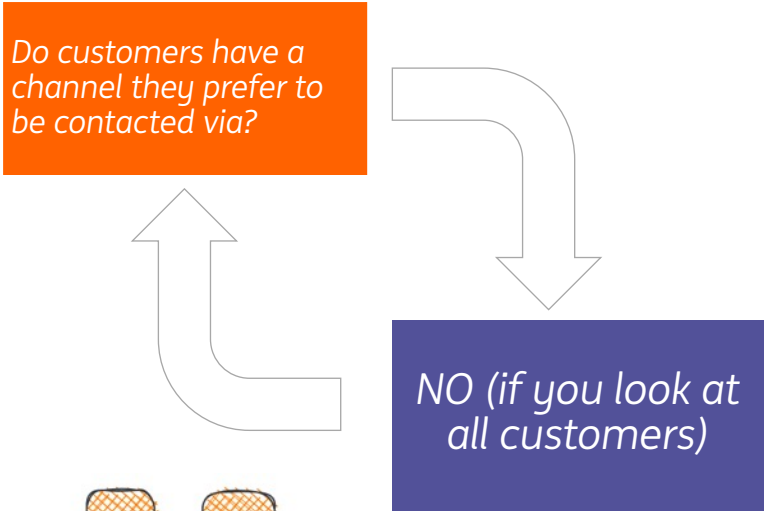
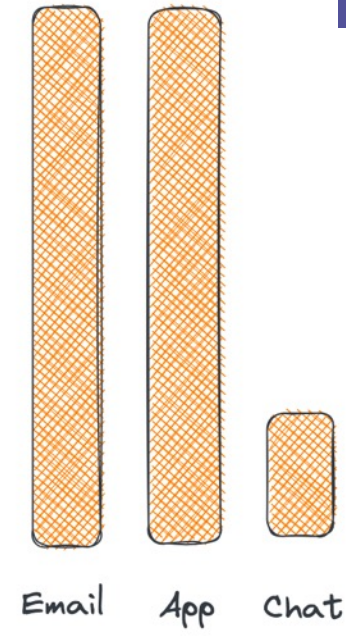
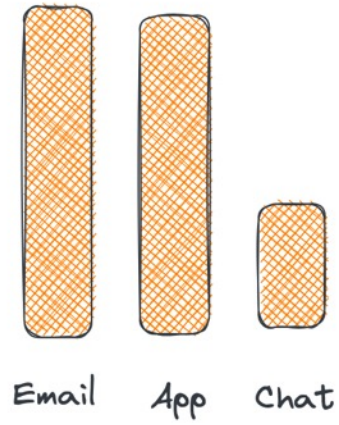
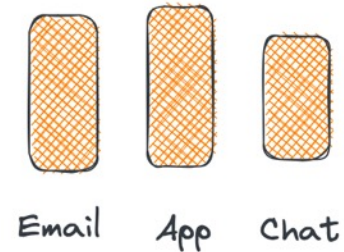


Find validation evidence in data

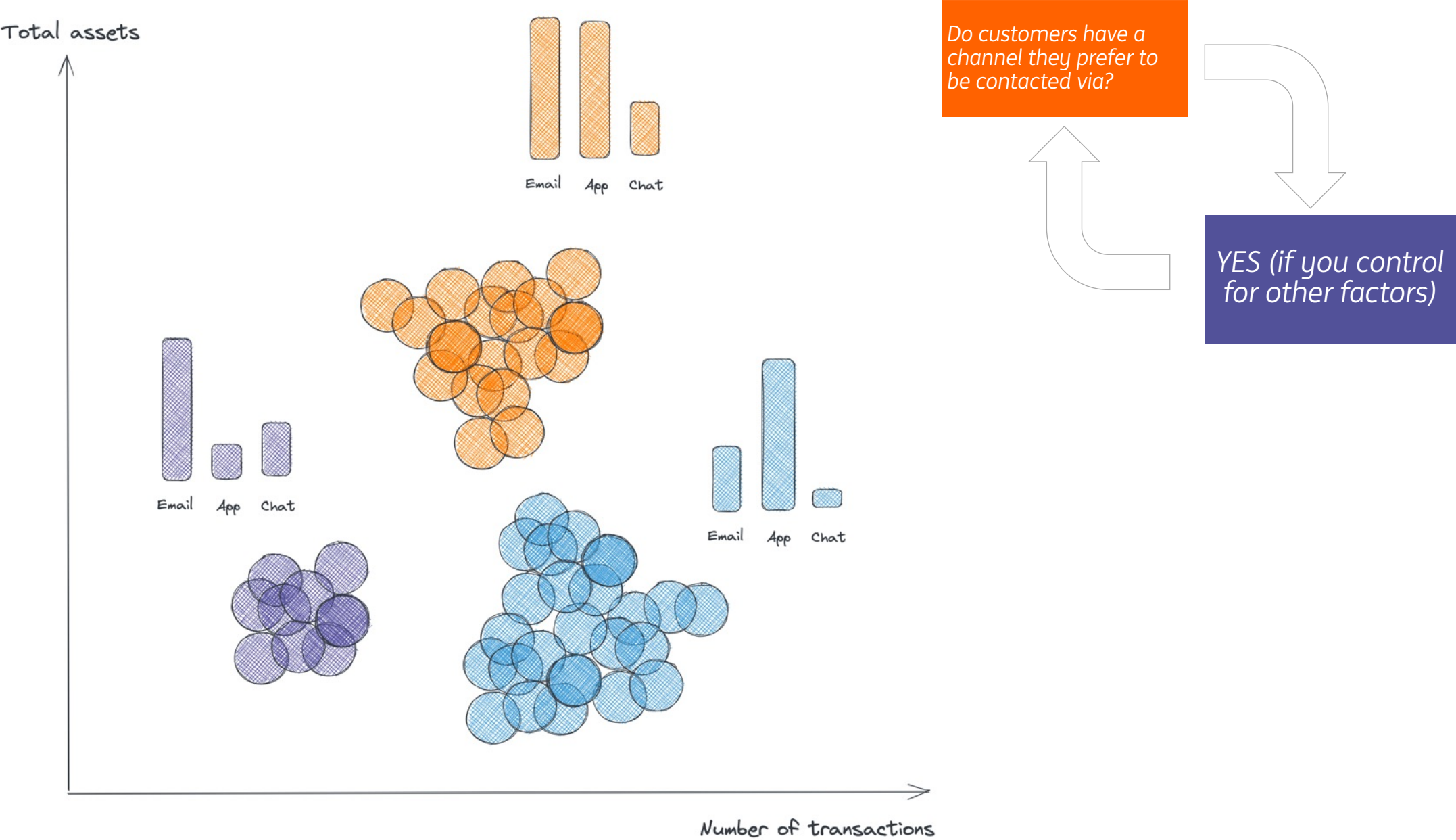




Case: Finding most suitable channel



Case: Finding most suitable channel



Key takeaways

We make assumptions on every step.
Validate them

Done imperfectly is **way** better
than done late

Use your toolset for things
other than model building



do your thing