

# PROBE DESIGN TEMPLATE

## RISKY ASSUMPTION

We believe

A risky assumption is something that you need to be true but that might not be, especially an assumption it would be costly to be wrong about. Capture it as a strong, testable statement of belief.

## PROBE APPROACH

To test this, we will

The probe should be a small, safe-to-fail test that would quickly provide real information about the validity of the assumption above. Include detail here about the length of the test, who will be involved, etc.

## SENSE

And observe

What will you observe to know if your assumption is true or false? This can be quantifiable but doesn't have to be. It should, however, be possible to obtain objective data that people could agree about, even if they disagree about the assumption above.

## VALIDATION CRITERIA

We are right if

## INVALIDATION CRITERIA

We are wrong if

For validation criteria, ask, "What would we observe that would convince a skeptic that they assumption above actually is true?"

For invalidation criteria, ask the opposite: "What would we observe that would convince someone who believes the assumption above that it's actually false?"

Use this area to evaluate your probe on these four attributes. Note that there are often tradeoffs between the attributes, and you may need to decide between two possible probes for the same assumption.

REAL

least most

REAL means you actually change the system in an observable way

CLEAN

least most

CLEAN means we limit variables and design with an awareness of our cognitive biases.

SHORT

longest shortest

SHORT means low cycle time to get results

SAFE

least most

SAFE means "failure" is informative, not risky for the business or for you.

The riskier the assumption, the stronger these thresholds should be. For a lower-risk assumption, you may be fine with criteria that don't prove validity but that just make it more or less likely.

There will usually be a gap between the validation and invalidation criteria. If the results land in that gap, you may need to run another experiment to get more info.