MODULE 1 · SESSION 2

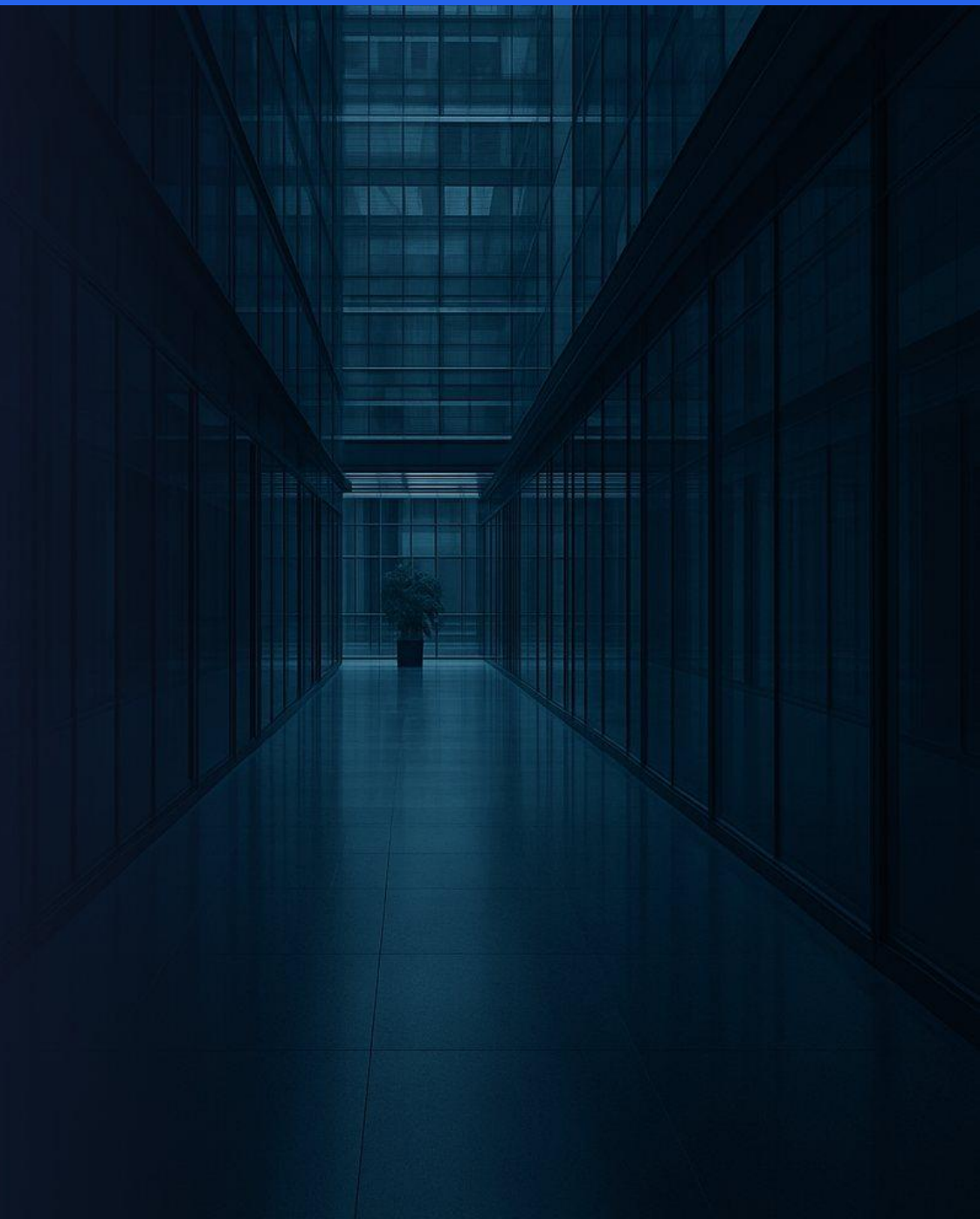
Framing Problems Worth Solving

How to convert a vague observation into a precise, testable problem statement — without smuggling a solution into it.

Theory session

Beginner

Running case: NurtureNest



ORIENTATION

Where this session sits

Session 1.1 established how to act under uncertainty; 1.2 decides what to act on

MODULE 1
Founder Thinking and Problem Framing

MODULE 2
Recognizing and Investigating Opportunities

MODULE 3
Turning Insight into Viable Ventures

SESSIONS IN THIS MODULE

1.1 Adopting an Entrepreneurial Mindset
How to act when outcomes cannot be known

1.2 Framing Problems Worth Solving — YOU ARE HERE
Turning observations into testable problem statements

1.3 Mapping Customer Jobs and Outcomes
What customers are actually trying to get done

SESSION OUTCOMES

What this session explains

How problem definition determines the range of answers you can reach

01

Problem space before solution space

Why time spent defining the problem is not a delay to building, but the thing that makes building worthwhile.

02

Framing changes the answer

The same facts, described differently, lead competent people to different decisions.

03

Symptom is not cause

How to move from what you observed to the mechanism producing it, without guessing.

04

Not every problem is worth solving

The criteria that separate a real problem from a genuine-but-unviable one.

DEFINITION

What a problem statement is

A claim about the world that could turn out to be wrong

WORKING DEFINITION

A problem statement names a specific customer, in a specific situation, doing something today that produces a consequence they do not want — stated so plainly that evidence could contradict it.

1

It is falsifiable

If no observation could disprove it, it is a belief, not a problem statement — and nothing can be learned from testing it.

2

It is solution-free

"Parents lack an app for check-ins" already assumes the answer. "Parents forget to raise concerns between visits" does not.

3

It is bounded

One customer, one situation. A statement covering everybody in every context cannot guide a single decision.

Simon, H. (1973) distinguishes well-structured problems, where the goal and the test are given, from ill-structured ones, where defining them is the work.

CONCEPT 1 · PROBLEM SPACE

The double diamond: diverge, then converge — twice

The common failure is to skip the first diamond entirely

PROBLEM SPACE — WHAT IS ACTUALLY GOING ON

1. Observe widely without judging
2. Gather many candidate problems
3. Cluster and compare them
4. Commit to one framed problem

SOLUTION SPACE — WHAT COULD ANSWER IT

1. Generate options against that frame
2. Explore several rough approaches
3. Narrow on evidence, not preference
4. Commit to one approach to test

WHY THE FIRST DIAMOND MATTERS

Jumping straight to the second diamond feels faster and usually is not: every option generated is anchored to a problem nobody checked.

Design Council (2005), the Double Diamond. · Dorst, K. (2011). The core of design thinking. Design Studies, 32(6).

CONCEPT 2 · FRAMING

The same facts, framed two ways

Framing is not presentation. It changes which action looks reasonable.

FRAME A

“A missing feature”

HOW IT READS

Parents do not have a quick way to log a concern.

WHAT IT MAKES YOU BUILD

A logging feature — because the frame already names the gap as a missing tool.

WHAT IT HIDES

Whether parents would use any tool at that moment, or whether the moment is the problem.

FRAME B

“A moment that is missed”

HOW IT READS

Concerns surface at bedtime and are gone by the next appointment.

WHAT IT MAKES YOU INVESTIGATE

When concerns arise, what parents do instead, and what makes them fade.

WHAT IT OPENS UP

Timing, prompts, who else is present — options a feature frame never reaches.

FRAMING EFFECTS

Tversky and Kahneman showed that logically equivalent descriptions of the same choice reliably produce different decisions. The lesson for founders is that the first description of a problem is rarely neutral.

Tversky, A. & Kahneman, D. (1981). The framing of decisions and the psychology of choice. Science, 211(4481), 453–458.

CONCEPT 3 · ROOT CAUSE

From symptom to mechanism

Each step down the ladder widens the set of workable answers

SYMPTOM

"Engagement is low." Observable, but true of almost every early product.

BEHAVIOUR

"Parents open the app once, then not again that week." Now it is specific.

SITUATION

"The reminder arrives at 9am, while the concern occurs at bedtime."

MECHANISM

"The prompt is not present at the moment the need exists." This can be tested.

Ohno, T. (1988). Toyota Production System. · Sakichi Toyoda's Five Whys, as applied to problem definition rather than manufacturing defects.

THE TECHNIQUE

Ask why, but bound it

Five Whys is a discipline for descending the ladder. It fails when the answers are guesses rather than observations.

THE STOPPING RULE

Stop at actionable

Descend until you reach something you could change and measure. Going further reaches explanations you cannot act on.

WARNING

One symptom, many mechanisms

Low engagement can be timing, relevance, trust or effort. Choose one and test it; do not assume.

CONCEPT 4 · ANATOMY

The five parts of a usable problem statement

Each part removes one way the statement could stay vague

Part	The question it answers	NurtureNest example
Who	Which specific person, not which market?	Parents of children under five who already attend routine check-ups.
When	In what situation does this arise?	In the evening, when a worry surfaces outside clinic hours.
What they do now	What is the current behaviour?	They search online, ask a relative, or decide to wait and see.
Consequence	What undesired outcome follows?	The concern is not raised at the next appointment, so it goes unaddressed.
Evidence	How do we know this, rather than assume it?	Observed in six of ten parent conversations; not yet quantified.

THE ROW PEOPLE SKIP

If the “evidence” row is empty, you have a hypothesis worth testing — which is fine, as long as you do not treat it as a finding.

CONCEPT 5 · SELECTION

Which problems are worth solving

A real problem can still be the wrong problem to take on

FREQUENCY	How often does the situation occur? A yearly irritation rarely changes behaviour.
INTENSITY	How much does it cost them when it happens — in money, time, risk or worry?
EVIDENCE	Have we observed it, or only been told about it in the abstract?
REACHABILITY	Can we actually find and talk to these people repeatedly?
WILLINGNESS TO ACT	Is anyone already spending money, time or effort on a workaround?

Criteria adapted from customer-development practice; see Blank, S. (2013) and Fitzpatrick, R. (2013).

THE STRONGEST SINGLE SIGNAL

An existing workaround

If people have built their own imperfect solution, they have already priced the problem.

THE WEAKEST SIGNAL

Agreement

"That sounds useful" costs nothing to say and predicts nothing about behaviour.

NOTE

Score, do not total

These are five separate questions. A single number hides which one is failing.

CONCEPT 6 · FAILURE MODES

Four ways a problem statement goes wrong

Each one is easy to write and hard to notice afterwards

The smuggled solution

Looks like "Parents need a reminder app."

Why it fails The answer is already fixed, so every test can only confirm it.

Fix Remove every noun that names a product.

The universal problem

Looks like "Families are busy."

Why it fails True of everyone, so it cannot direct a single design decision.

Fix Add the situation and the moment.

The restated wish

Looks like "Parents want better wellness."

Why it fails It describes a desirable state, not a blocked behaviour.

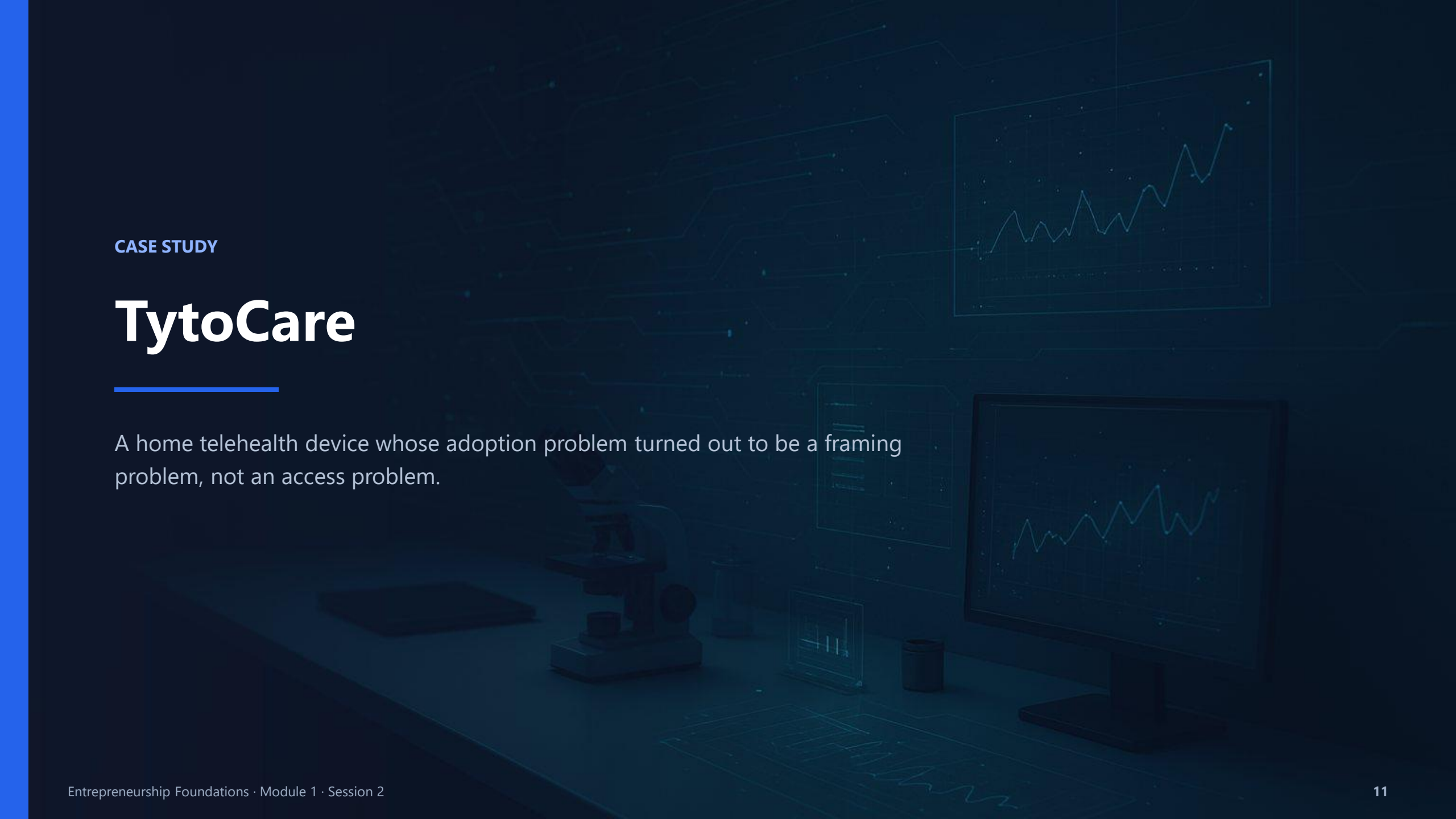
Fix Name what they do today and what it costs them.

Each failure keeps the statement comfortable — which is precisely why it survives review.

CASE STUDY

TytoCare

A home telehealth device whose adoption problem turned out to be a framing problem, not an access problem.



CASE STUDY · TYTOCARE

A framing problem wearing a product problem's clothes

The same evidence, re-described, produced a different set of interventions

THE REFRAME

From access to relevance

THE ORIGINAL FRAME

"Families need a way to run a medical exam at home." That frame points straight at the device.

THE BEHAVIOURAL DIAGNOSIS

Working with Irrational Labs, the team found a mental-model problem: "healthcare is individual-centric, not telehealth."

THE REFRAMED PROBLEM

Families could not tell **who** the service was for or **when** it belonged in their care journey.

WHAT THE REFRAME PRODUCED

Interventions at points of doubt

ELIGIBILITY QUIZ

Built the mental model by clarifying who the product is for. Purchase rate 53% for completers vs 37% for non-completers.

ACTIVATION CARD

Prompted the first call at setup — cited by 56% of patients as most important.

HOUSEHOLD REGISTRATION

Replaced individual framing with bulk, family-level setup.

READING THE CASE

Nothing about the device changed. Re-describing the problem at the point where families actually hesitated is what moved the numbers.

Drawn from the session case pack; figures as reported there.

APPLICATION

Bringing the theory to NurtureNest

From a first observation to something that can be tested

Step	What you do	Worked example
1 · Observe	Record what happened, without interpreting it.	“Three parents mentioned worrying at night.”
2 · Descend	Move from symptom to a mechanism you could change.	The worry arises when no clinician is reachable.
3 · Frame	Write who, when, current behaviour, consequence, evidence.	See the five-part statement earlier in this session.
4 · Reframe once	Write a second, genuinely different frame of the same facts.	“A timing problem” versus “a confidence problem.”
5 · Score	Apply the five selection criteria to each frame.	Choose the frame with evidence and reachable people.

WHAT COMES NEXT

Session 1.3 takes the framed problem and asks what the customer was actually trying to get done.

SUMMARY

What to carry out of this session

1. **A problem statement is a claim, not a description.**
   If no observation could contradict it, testing it will teach you nothing.

2. **Framing is a decision, not a wording choice.**
   The first description of a problem quietly fixes the range of solutions you will consider.

3. **Descend from symptom to mechanism.**
   Stop at the first level you could actually change and measure.

4. **Keep the solution out of the problem.**
   Any product noun in the statement has already decided the answer.

5. **Real is not the same as worth solving.**
   Frequency, intensity, evidence, reachability and existing workarounds are separate tests.

FURTHER READING

Sources for this session

Primary references behind each concept

PROBLEM STRUCTURE	Simon, H. (1973). The structure of ill-structured problems. *Artificial Intelligence*, 4(3–4), 181–201.
FRAMING	Tversky, A. & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, 211(4481), 453–458.
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CUSTOMER EVIDENCE	Fitzpatrick, R. (2013). *The Mom Test.* London: Founder Centric.
CUSTOMER DEVELOPMENT	Blank, S. & Dorf, B. (2012). *The Startup Owner's Manual.* K&S Ranch.
JOBS FRAMING	Christensen, C. et al. (2016). *Competing Against Luck.* New York: HarperBusiness.