Customer Discovery

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> **Customer discovery** is the process of turning an initial idea or vision about a market or customers into a set of *facts*. The process tests whether the business model for a company solves real customer problems, and whether the product features fit those customer problems.

It is the first stage of the customer development process in lean-startup[1], and the stage COMP1100 spends nearly all its time in — all three assessment submissions are iterations of it.

The four-step process

```
1. Define hypotheses
        ↓
2. Test the problem
        ↓
3. Test the solution
        ↓
4. Verify, pivot, or refine  →  (customer validation)
```

The loop repeats. Each pass turns more of the business-model-canvas[2] from hypothesis into fact.

[1] courses/comp1100/lean-startup.pdf
[2] courses/comp1100/business-model-canvas.pdf

Step 1 — define our hypotheses

The initial hypotheses *are* our vision. Write answers to:

1. What are our customers' top problems?
2. How does our idea help to solve these problems?
3. What would a day in the life of a customer look like before and after our product?

These are **guesses or assumptions at best** — which is exactly why they get tested rather than built on.

The step also includes sketching a vision. This means a rough sketch, not a polished rendering.

Step 2 — test the problem

Gather data to **refute or confirm** our hypotheses about the problem. This is where the distinction that runs through the whole course appears:

	Who they are
User	People who *use* a product
Customer	People who *pay for or approve* a product

They are frequently not the same people, and a hypothesis needs to say which it's about.

Step 3 — test the solution

Gather data to refute or confirm hypotheses about our *solution*. The thing being sought is **product/market fit** — the match between the customer's problems and needs on one side, and the product's features and value proposition on the other.

> "Ideas are like babies because everyone thinks theirs is cute, therefore be objective when judging your own ideas."
>
> — Tina Seelig

Step 4 — verify, pivot, or refine

Refine the product, pivot the strategy, or (rarely) rethink the vision. See lean-startup[3].

[3] courses/comp1100/lean-startup.pdf

A worked example: the medical alert system

The running example is an emergency alarm for older people living alone, with a speaker, microphone, emergency button, well-being check button, status light and a wireless transmitter.

Initial hypotheses:

1. Older people want to be safe.
2. Families of older people want to know, on a daily basis, that their older family member is safe.
3. Older people want to be able to initiate a call for help and cancel any call for help.
4. Older people want to maintain their independence/autonomy.
5. Older people want to be cared for.
6. Older people do not want to have to press the green button each day to let the care company know that they are alive.
7. Older people do not want to wear a visible (and ugly!) emergency alarm around their neck or wrist.

Hypothesis 1 is about both users and customers, while hypothesis 2 is mainly about *customers* — the family, not the user.

After testing the problem, hypothesis 5 was refuted outright and 7 was partly refuted, producing **new hypotheses**:

- 5. Older people want to be cared **about**. *(the original said "cared for" — a small wording change carrying a completely different product)*
- 8. Some older people wouldn't mind wearing a wireless transmitter if it was not visible to others.
- 9. Older people wanted to be in touch with **their family members**, rather than a service provider.
- 10. Older people would prefer a medical alert that allowed them to be mobile — the existing alarms were attached to a phone line and the transmitters had short range.

This is the whole method in miniature: the product that survives contact with real users is not the one that was sketched.

Early adopters

Not all of the market matters at the start. The adoption curve:

Segment	Share
Innovators	2.5%
Early adopters	13.5%

Segment	Share
Early majority	34%
Late majority	34%
Laggards	16%

The first release targets early adopters, not the majority.

Customer development heuristics

1. **There are no facts inside your building, so get outside.**
2. Develop for the few, not the many.
3. Early adopters make your product.
4. And they know more than you.
5. Focus groups are for big companies, not startups.
6. Surveys don't give insight compared to interviews — follow-up questions are difficult.
7. The goal for release 1 is the **minimum feature set for early adopters**.

Heuristic 6 is the reason the course's assessment requires recorded, transcribed interviews rather than a survey: you cannot ask "why?" to a form.

See value-proposition-canvas[4] for the ground rules on actually conducting those interviews, and test-cards-and-learning-cards[5] for the format the hypotheses and results are written in.

[4] courses/comp1100/value-proposition-canvas.pdf
[5] courses/comp1100/test-cards-and-learning-cards.pdf