

ITI8740/ITX8522: Software Development Team Project. 2025

03. Intro to Lean Startup

Martin Verrev

martin.verrev@taltech.ee

Common myths:

- **Myth 1:** Ideas are precious.
- **Myth 2:** Effort + Idea + Timing + Great Product = Success
- **Myth 3:** Execution is everything

95% of all
startups
fail



Root Cause:

Building a product that nobody wants



“Relentless execution without knowing what to execute is a crime.”

— Steve Blank, *The Startup Owner's Manual: The Step-By-Step Guide for Building a Great Company*

9 Deadly Sins of New Product Development

- Assuming you know what the customer wants
- The “I know what features to build” flaw
- Focusing on the launch date
- Emphasizing execution instead of testing, learning, and iteration
- Writing a business plan that doesn’t allow for trial and error
- Confusing traditional job titles with a startup’s needs
- Executing on a sales and marketing plan
- Prematurely scaling your company based on a presumption of success
- Management by crisis, which leads to a death spiral

Solution:

The Lean Startup Methodology

1. THE BUILD-MEASURE-LEARN FEEDBACK LOOP

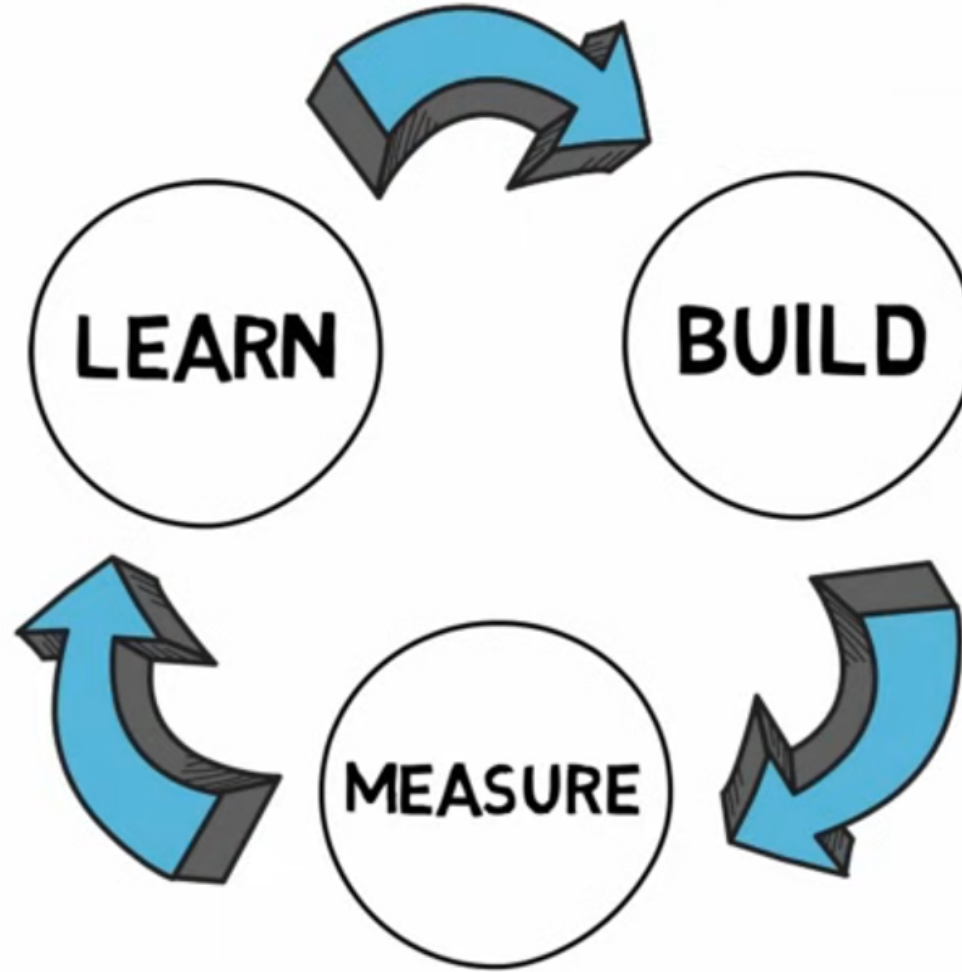
WHAT IF NOBODY
WANTS THIS
ANYWAYS?

JUST
DO IT!



1. THE BUILD-MEASURE-LEARN FEEDBACK LOOP

IF NOBODY
WANTS THIS
WAYS?



JUST
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Build-Measure-Learn Loop

A continuous cycle at the heart of Lean Startup is

- **Build:** Create a Minimum Viable Product (MVP), the simplest version of your product that allows you to test a core assumption.
- **Measure:** Collect data on how customers interact with it.
- **Learn:** Analyze the data to validate or refute your assumptions. Then decide whether to:
 - Improve the current direction
 - Pivot

What Lean Start-Ups Do Differently?

Source: <https://hbr.org/2013/05/why-the-lean-start-up-changes-everything>

Strategy

Business Model
Hypothesis-driven

Business Plan
Implementation-driven

New-Product Process

Customer Development
Get out of the office and test hypotheses

Product Management
Prepare offering for market following a linear, step-by-step plan

Engineering

Agile Development
Build the product iteratively and incrementally

Agile or Waterfall Development
Build the product iteratively, or fully specify the product before building it

Organization

Customer and Agile Development Teams
Hire for learning, nimbleness, and speed

Departments by Function
Hire for experience and ability to execute

Financial Reporting

Metrics That Matter
Customer acquisition cost, lifetime customer value, churn, virallness

Accounting
Income statement, balance sheet, cash flow statement

Failure

Expected
Fix by iterating on ideas and pivoting away from ones that don't work

Exception
Fix by firing executives

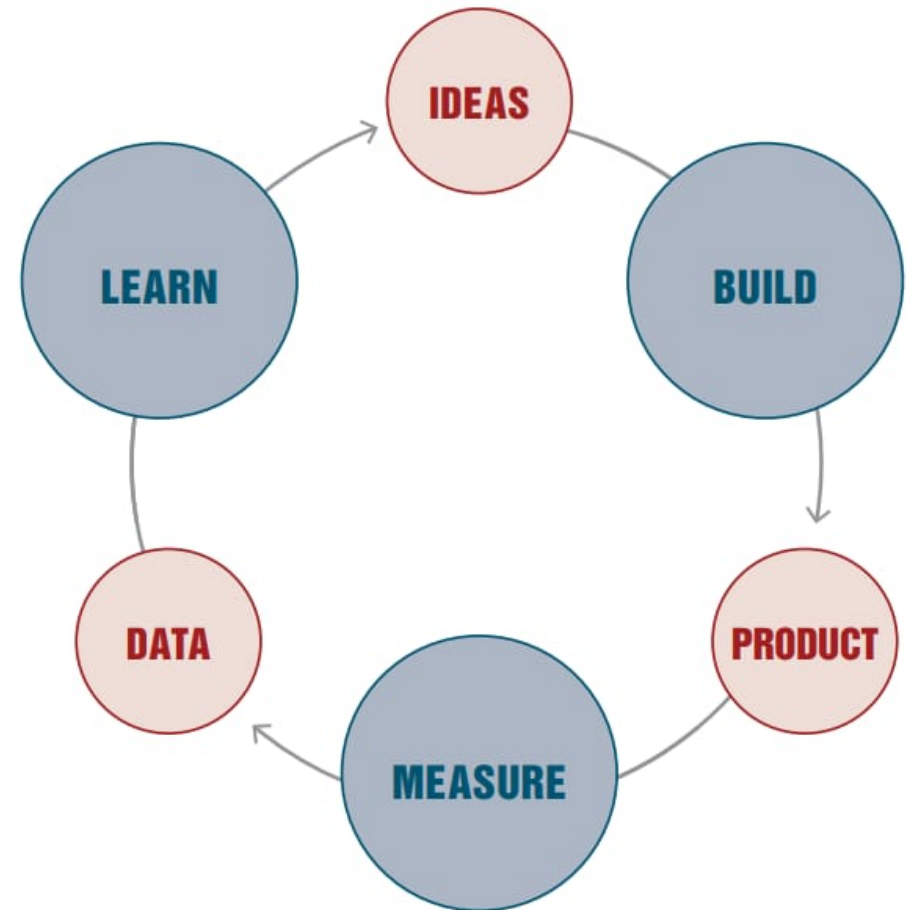
Speed

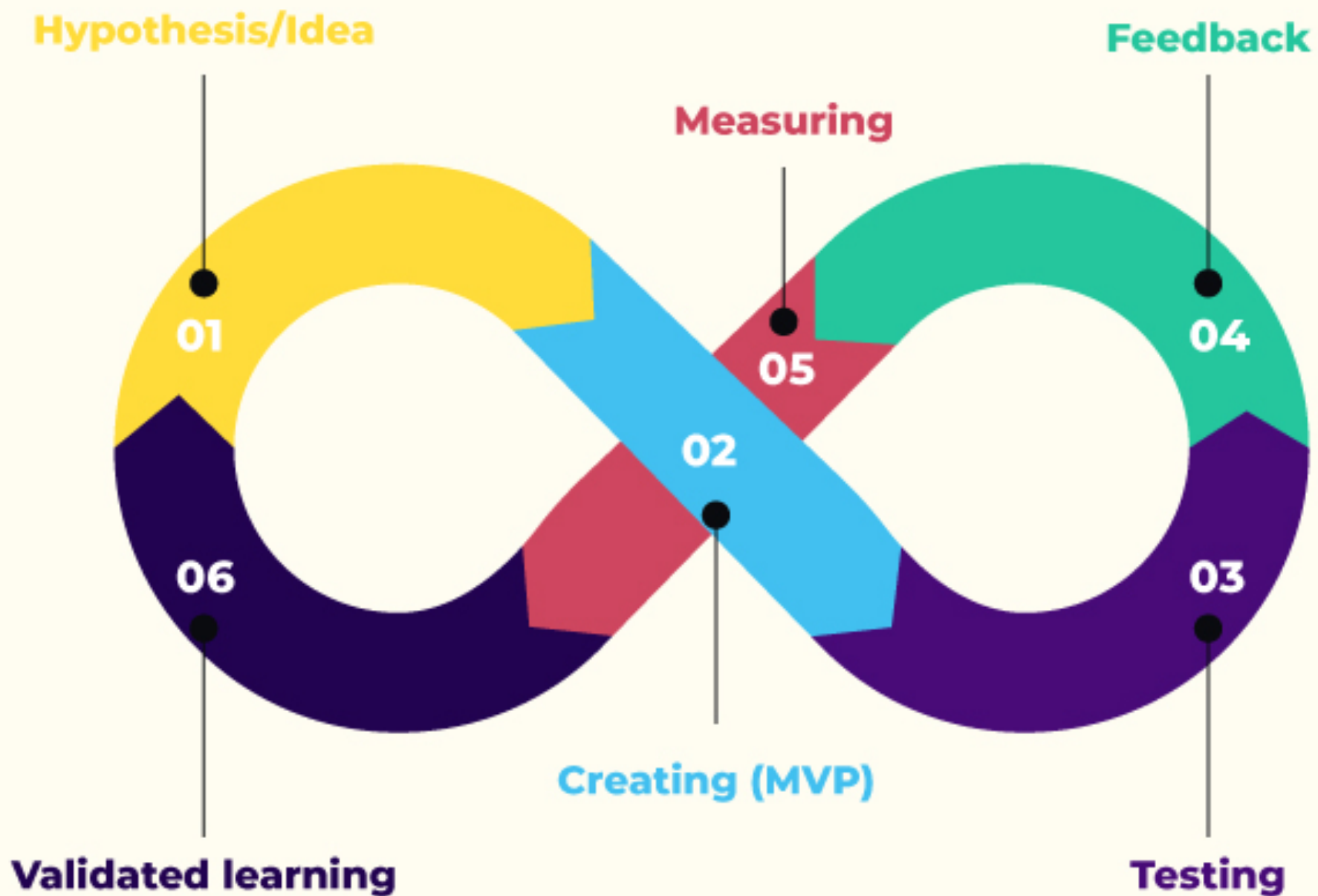
Rapid

Measured

Lean Startup Meta Process

1. Document your **Plan A**
2. Identify the **riskiest** part of the plan
3. Systematically **test** your plan





Everything is an experiment

Observe - do not assume or ask!

- **Learn experiments**, also called Research or Generative Experiments, are used to learn more about a certain topic. They create new assumptions.
- Their counterpart is called **Confirm experiments**. With Confirm Experiments, you confirm whether an existing assumption is valid or invalid.

While Lean Startup is one of the most influential approaches to innovation, it's not the only one. There are several alternatives and complementary frameworks for building new products, companies, or services. They differ in philosophy, structure, and focus.

Alternative 1: Design Thinking

- **Focus:** Human-centered problem-solving.
- **Approach:** Empathy with users -> Define the problem -> Ideate -> Prototype -> Test.
- **Strength:** Emphasizes deep understanding of user needs before building.
- **Difference from Lean Startup:** Lean Startup prioritizes market validation and business viability early, while Design Thinking emphasizes desirability and creativity first.

The Core Principles of Design Thinking



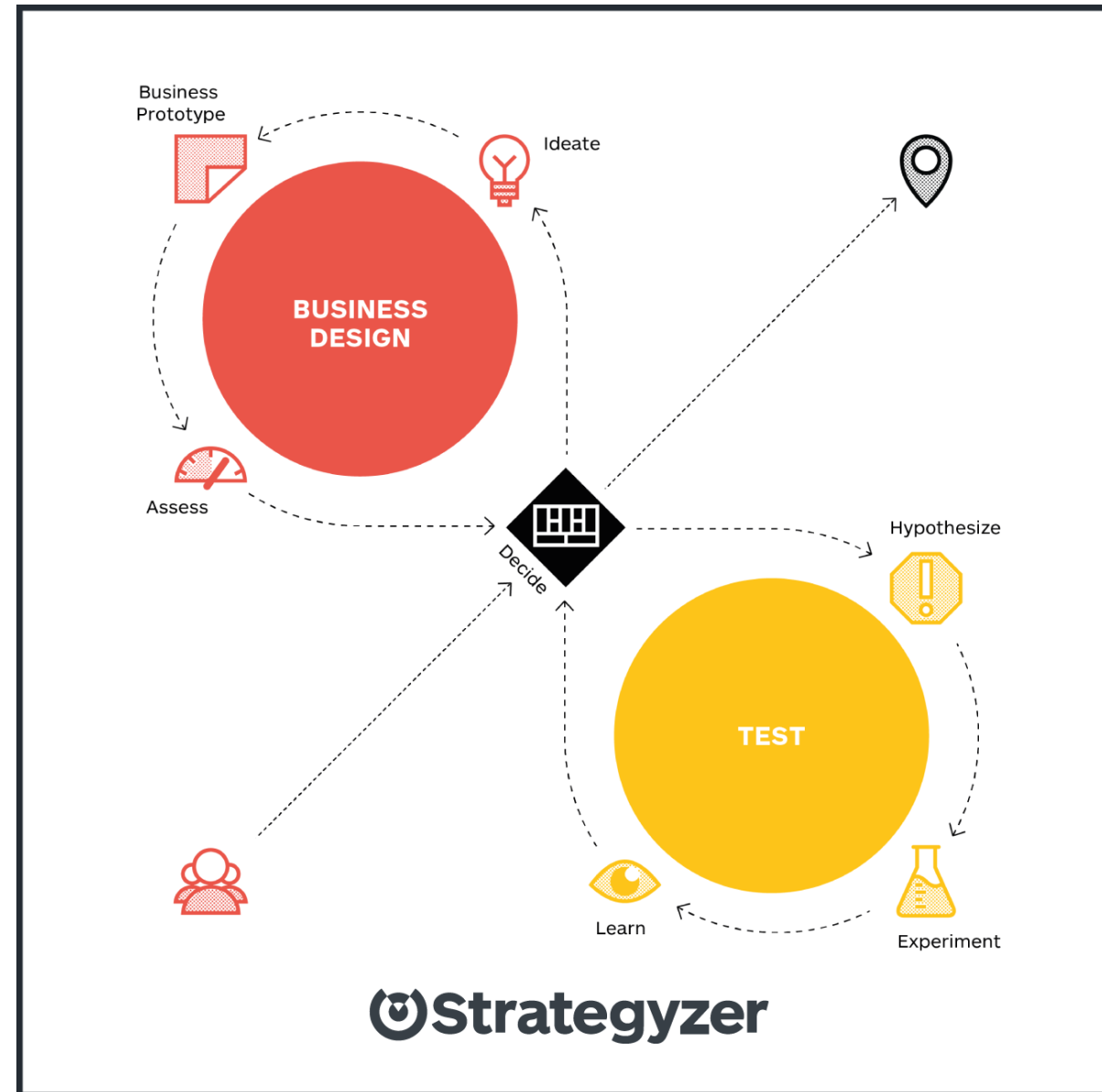
Alternative 2: Agile Development

- **Focus:** Iterative software/product development.
- **Approach:** Short sprints, continuous delivery, responding to change over rigid plans.
- **Strength:** Great for building complex products incrementally.
- **Difference from Lean Startup:** Agile is about *how* to build efficiently, Lean Startup is about *what* to build and *why*.



Alternative 3: Business Model Canvas / Strategyzer

- **Focus:** Visualizing and testing business models.
- **Approach:** Map out value propositions, customer segments, revenue streams, etc.
- **Strength:** Helps entrepreneurs think holistically about the business, not just the product.
- **Difference:** Lean Startup tends to zoom in on product-market fit; BMC is about aligning the entire business model.



Alternative 4: Jobs-to-be-Done (JTBD)

- **Focus:** Understanding the “job” customers hire a product to do.
- **Approach:** Study customer behaviors and outcomes, not just demographics or features.
- **Strength:** Sharpens value propositions and product fit.
- **Difference:** JTBD is more about *why* customers adopt, while Lean Startup is about *how* to validate assumptions.



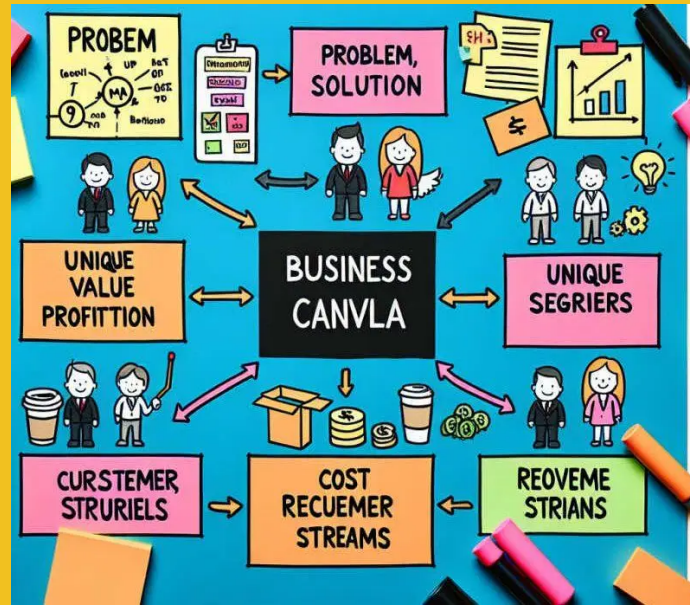
How Different Approaches Relate

Lean Startup often works best when combined with others:

- **Use Design Thinking** to generate ideas ⇒
- **Apply JTBD** to refine the value proposition ⇒
- **Use Lean Startup** to validate ⇒
- **Use Agile** to build iteratively.

The next step

The Lean Canvas



References

- The Lean Startup Framework: Closing the Academic–Practitioner Divide. <https://journals.sagepub.com/doi/full/10.1177/1042258719899415>
- For God’s sake, follow the Lean Startup Method. <https://www.june.so/blog/lean-startup-method-2024>
- Write Down Your Concept. <https://learningloop.io/plays/write-down-your-concept>
- Validated Learning with the Learn-Build-Measure Loop. <https://thoughtbot.com/blog/validated-learning-with-the-learn-build-measure-loop>
- 18 of the most used Lean Startup experiments (+examples) <https://togroundcontrol.com/blog/10-experiment-design-examples/>

Thank you!