ITI8740/ITX8522: Software Development Team Project. 2022

01. Course Introduction

Martin Verrev

martin.verrev@taltech.ee

After the course you ...

1. ... have an understadning of methods, tools and approaches that can be used when initiating a new startup or in-house project in established organization.

2. ... formulated a problem statement and validated it on a real target audience.

3. ... built a Minimal Viable Product that solves said problem.

Course Overview

- 12 ECT, autumn 2021

Course workflow

- Weekly team meetings with supervisors.
- Supporting classes.
- Individual mini-assignments.
- (Participipting at a hackathon).

A **startup** is a human institution designed to deliver a **new product** or service under conditions of **extreme uncertanity**.
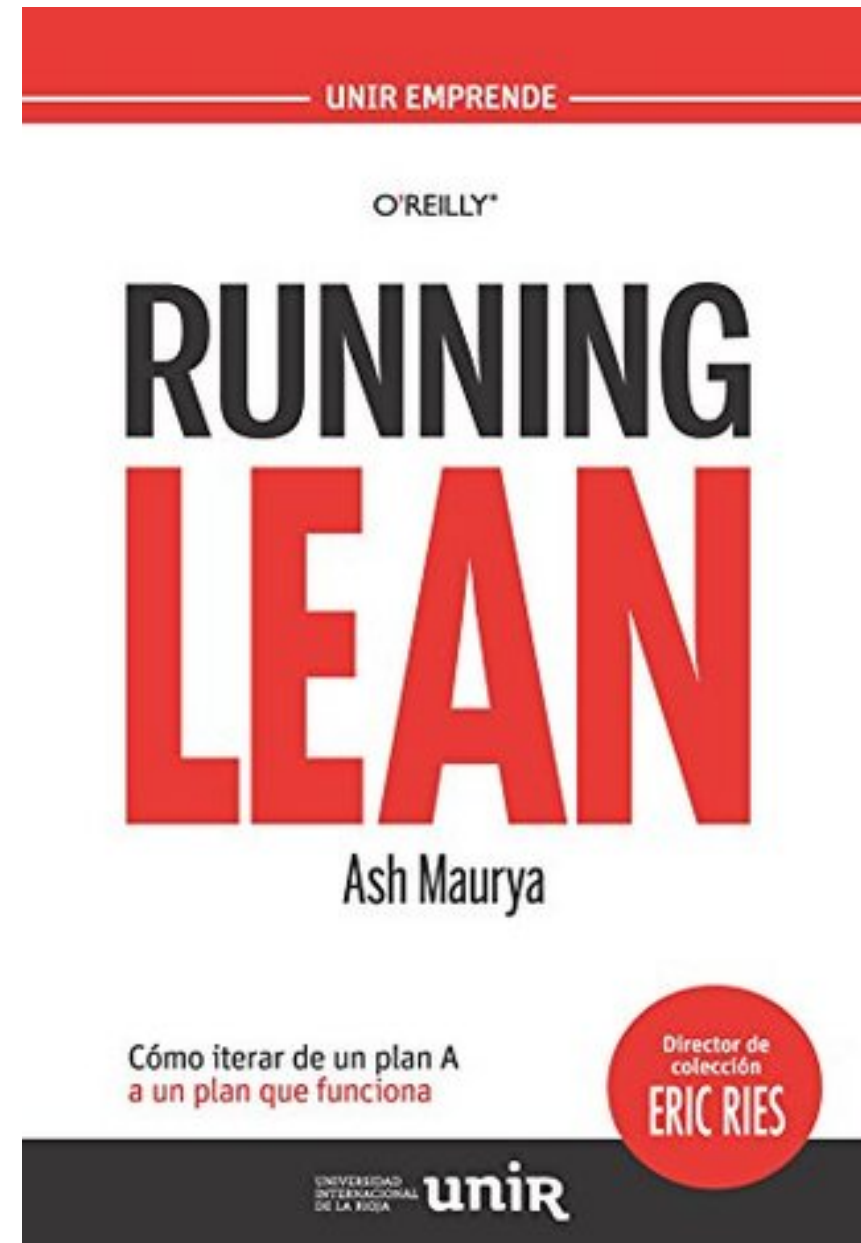
Eric Ries, Lean Startup
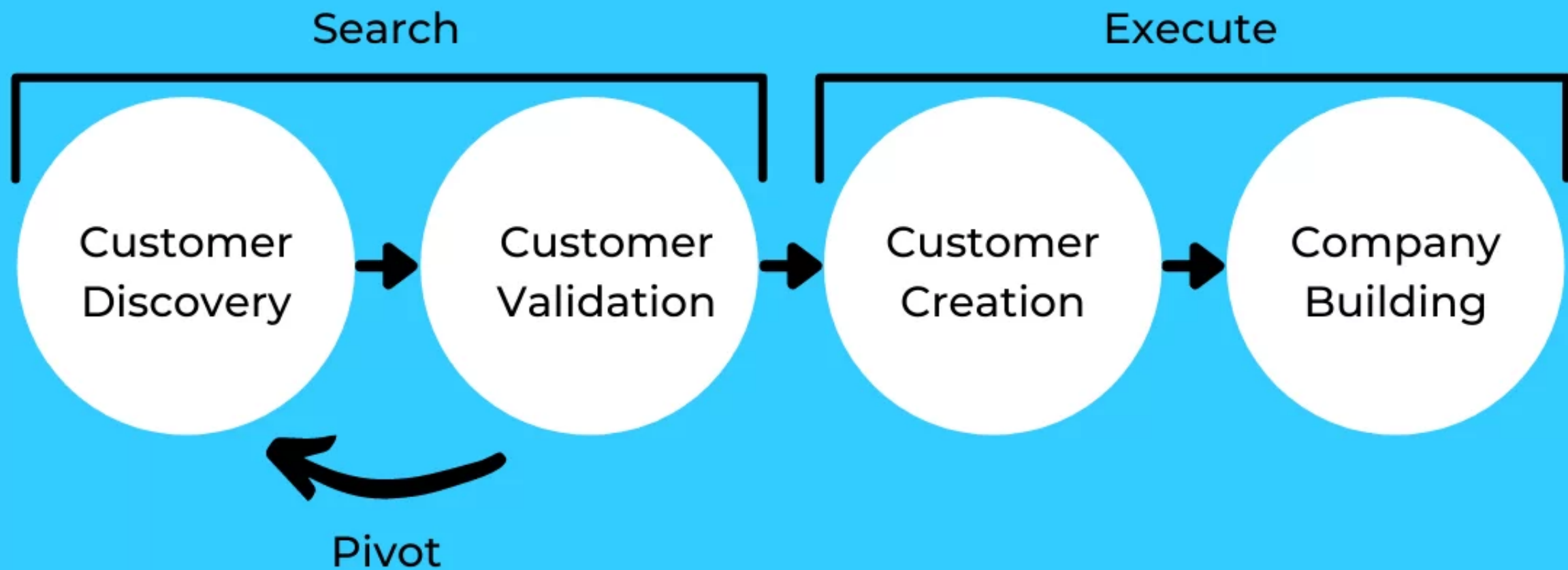
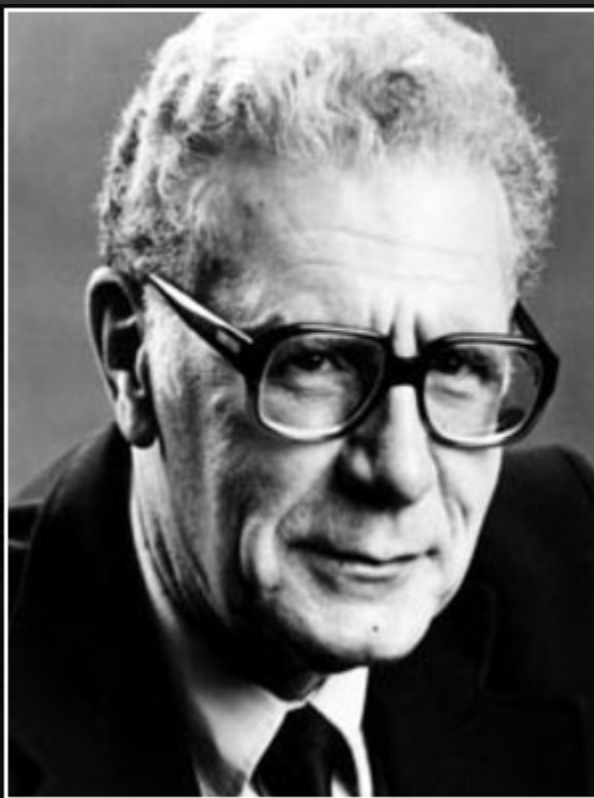Fail fast and cheap. Fail often. Fail in a way that doesn't kill you.

Running Lean: Iterate from Plan A to a Plan That Works

Ash Maruya.

Customer Development Process

Search

Execute

Customer Discovery → Customer Validation → Customer Creation → Company Building

Pivot

Successful problem solving requires finding the right solution to the right problem. We fail more often because we solve the wrong problem than because we get the wrong solution to the right problem.

— Russell L. Ackoff —

Coming up with a good idea

Think about everyday problems in your field ...

- Repeating everyday activities

- Annoying activities

- Tasks requiring a lot of manual work, or prone to error

- Unreasonably slow processes

- Unreasonably expensive solutions or processes

Coming up with a good idea

Think about everyday problems in your field ...

- Also think **wider on life** and try to **have a more general** view on things. What can be changed or fixed?

- Raise the **level of ambition** - expand the solution for wider society.

- Use the unfair advantage of your education - try to appy the problem statement of your thesis to a real world scenario.
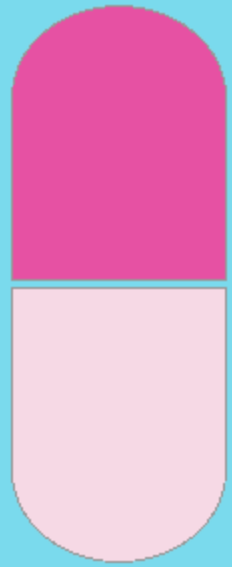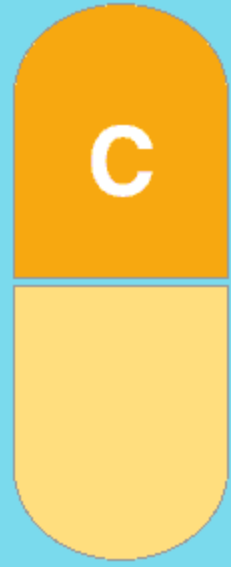
PAINKILLER 💊	VITAMIN 🍎
"Need to have"	"Nice to have"
Solves unmet customer needs	Improves an existing solution
Want to use	Should use
Google Maps Amazon Echo Lyft/Uber	To-Do List Apps Fitness Trackers Nextdoor

https://medium.com/strategy-dynamics/painkillers-vs-vitamins-d3bdc76ddd31

Formulating an idea

1. **What's the problem you are solving?** Write the problem down with one sentence

2. **Who's the customer** - the profile of the person you are solving the problem for?

3. **What's the solution** for this problem? Write it down with 1-2 sentences.

4. **Why is the solution special?** Different of competitors? Sentence or two.

5. **How will it earn money?** Does it have any business potential? Describe the revenue source with a sentence.

Humans understand stories. Most used narrative by startups is the problem - solution statement.

During next class we will present the ideas to each other and start building teams. You will have 90 seconds to present your idea.

You already have the structure

1. Say Hello, say your name.

2. What's the problem?

3. What's the solution?

4. The special sauce.

5. Is there money to be made?

6. Say thank you and smile while listening for the applause :)

Just practice a bit - easy!

To Get Started

- Creative thinking - how to get out of the box and generate ideas: Giovanni Corazza at TEDxRoma. https://www.youtube.com/watch?v=bEusrD8g-dM

- Think Small to Solve Big Problems, with Stephen Dubner. https://www.youtube.com/watch?v=fypkPgeQxBQ

- The art of innovation. Guy Kawasaki, TEDxBerkeley. https://www.youtube.com/watch?v=Mtjatz9r-Vc

- Generating ideas. Shimpei Takahashi, TEDxTokyo. https://www.youtube.com/watch?v=ZdJOhgSQJ1Q

- Adam Neumann: How to Find a Problem Worth Solving | Inc. Magazine https://www.youtube.com/watch?v=8NooqQKrdGE

Reading Materials

- Hard Ideas. https://medium.com/entrepreneur-first/hard-ideas-7f815e90d714
- A never-ending list of business ideas and problems to solve https://medium.com/@paulegraves/a-never-ending-list-of-creative-jazzy-business-ideas-6c9782d2d470

Thank you!