

ITI8740/ITX8522: Software Development Team Project. 2024

01. Course Introduction

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After the course you ...

1. ... have an understanding 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

ITI8740	Tarkvaraarenduse meeskonnaprojekt	Software Development Team project
ITX8522	Tarkvaraettevõtluse projekt	Software Entrepreneurship Project

- 12 ECT, autumn 2024
- Supporting lectures/seminars.
- Weekly team meetings with supervisor.
- Individual mini-assignments.
- Participation at a hackathon.

A **startup is a human institution designed to deliver a **new product** or service under conditions of **extreme uncertainty**.**

Eric Ries, The Lean Startup

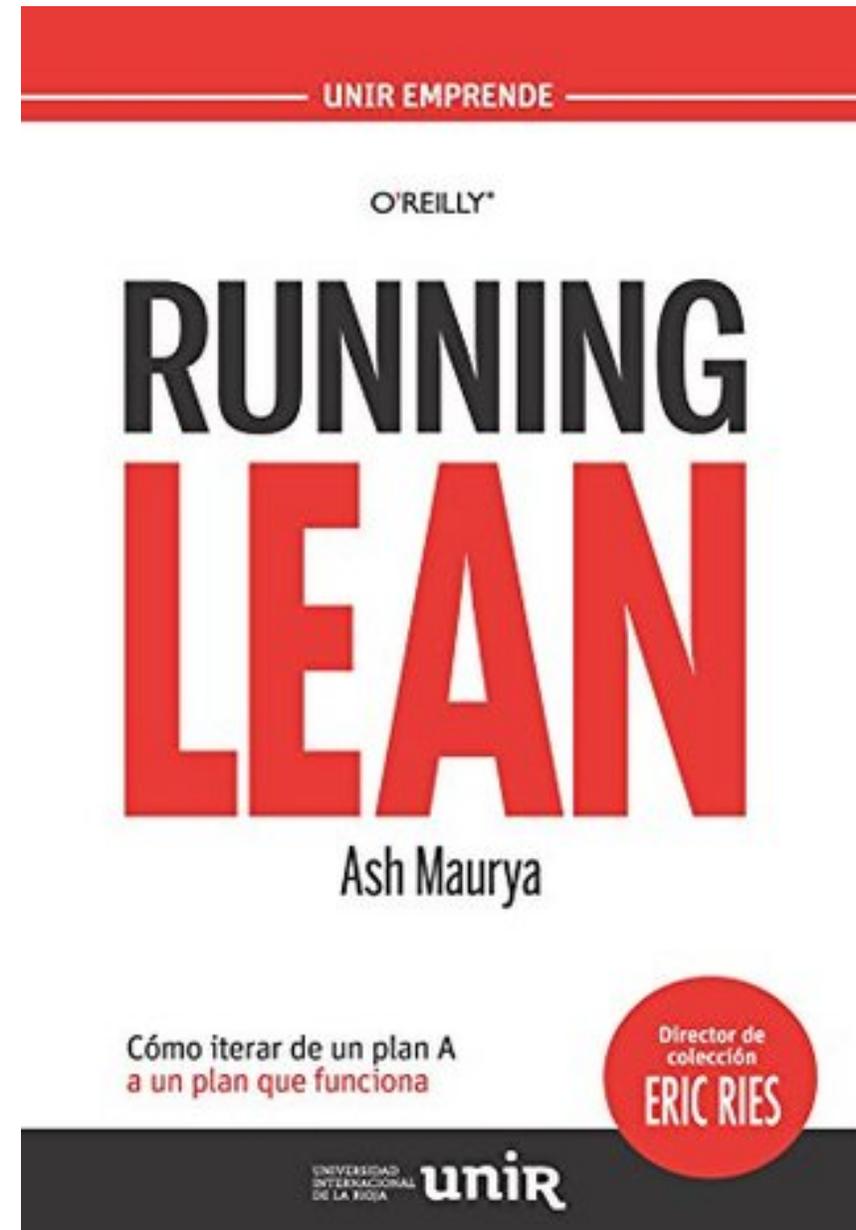
Fail fast and cheap.

Fail often. Fail in a way

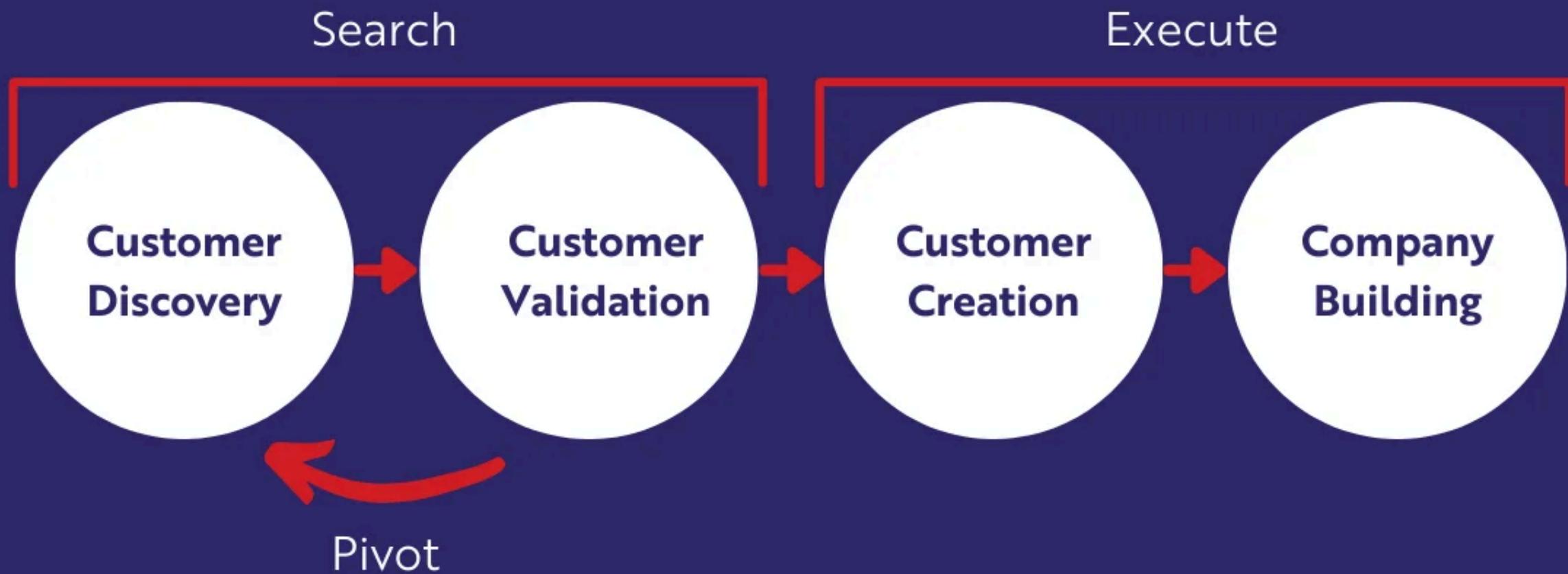
that doesn't kill you.

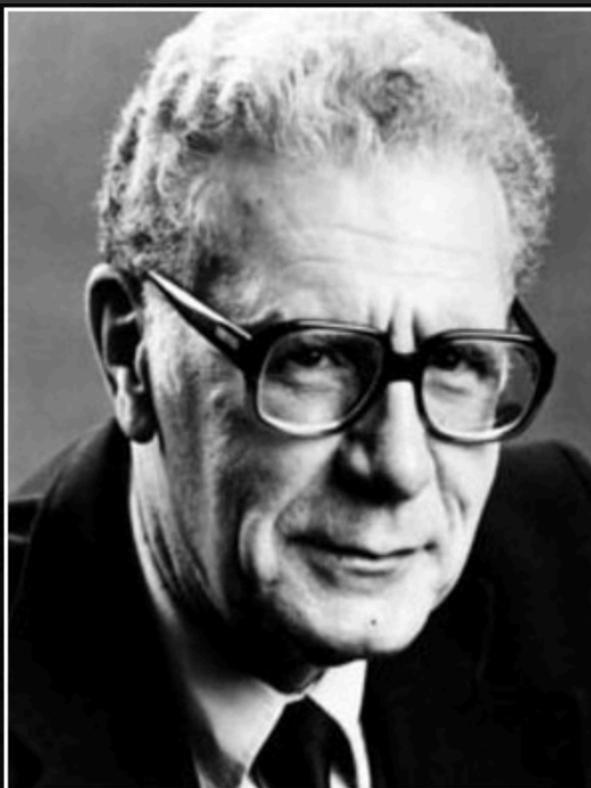
Running Lean: Iterate from Plan A to a Plan That Works

Ash Maruya.



Customer Development Process





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* —

AZ QUOTES

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 a wider group in a society.
- Use the unfair advantage of your education - try to apply the problem statement of your thesis to a real world scenario.



Candy



Vitamin



Painkiller

	Painkiller	Vitamin	Candy
Tagline	"Must have."	"Need to have."	"Fun to have."
Type	Must haves, and the are easiest to sell.	Can improve yout life, but they are only nice-to-have.	A nice treat, but you can live without it.
Examples	Google Maps. Amazon Echo. Uber	Grammarly. Fitness trackers.	Pleasure, desire and luxury products.

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

Describing 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.

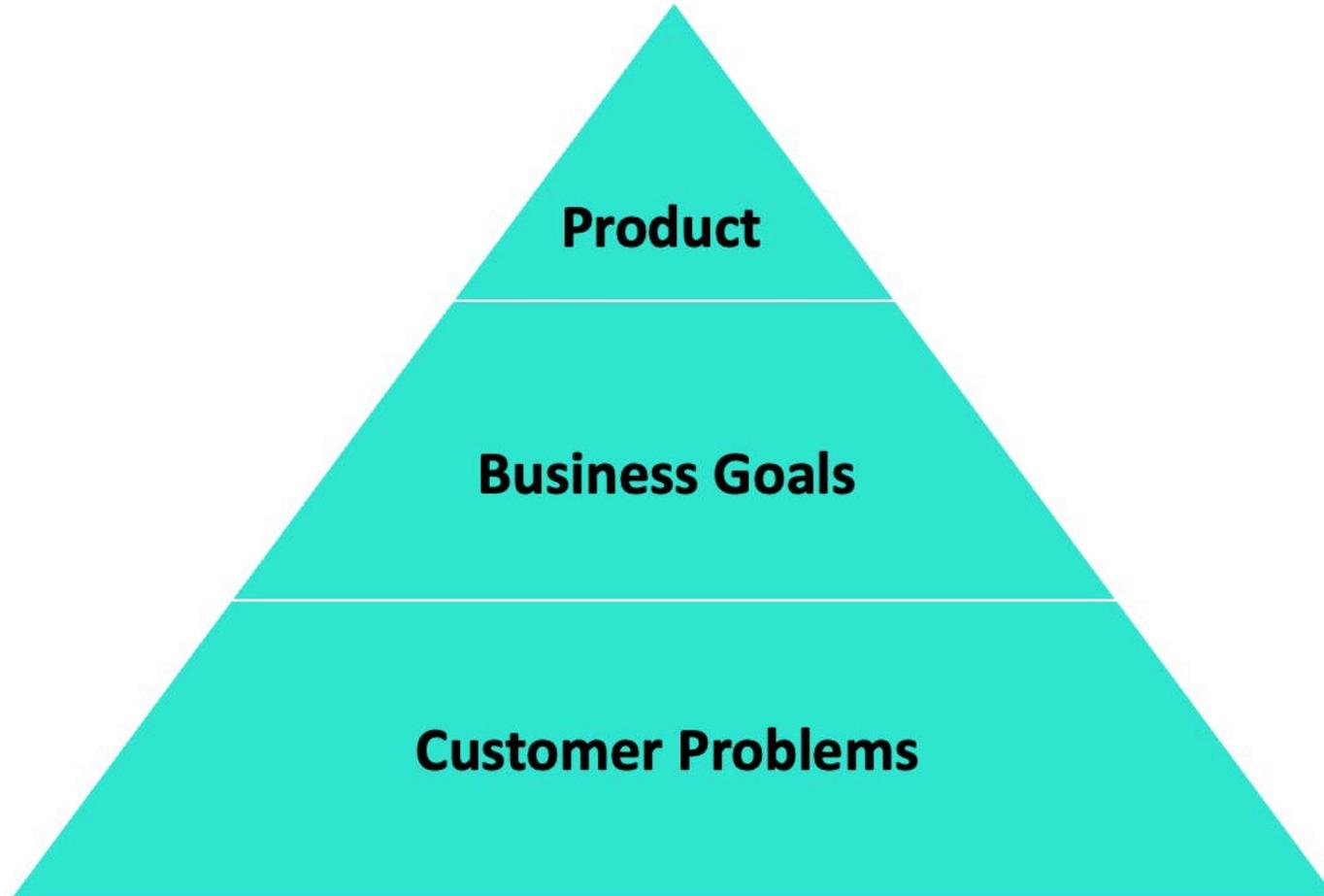
During next class we will present the ideas to each other and start building teams. You will have 90 seconds to present your idea.

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!

CUSTOMER PROBLEMS ARE THE BEDROCK OF ANY GREAT PRODUCT



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

- Decoding the 'Candy, Vitamin, Painkiller' Framework in Product Marketing. <https://www.linkedin.com/pulse/decoding-candy-vitamin-painkiller-framework-product-anna-borbotko-1zj4e/>
- And Ideas, Or Ideas. <https://www.alexcrompton.com/blog/and-ideas-or-ideas>
- 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>
- Startup Lesson 1: Vitamin vs. Painkiller. <https://www.linkedin.com/pulse/startup-lesson-1-vitamin-vs-painkiller-vitaly-pecherskiy/>
- Is AI a Painkiller, a Vitamin, or a Candy? Unveiling the Multifaceted Nature of Artificial Intelligence. <https://aimresearch.co/council-posts/is-ai-a-painkiller-a-vitamin-or-a-candy-unveiling-the-multifaceted-nature-of-artificial-intelligence>

Thank you!