EIT Higher Education Initiative

European Institute of Innovation & Technology

Funded by the European Union

Claim your exclusive access to the EIT Higher Education Initiative Community!

With your participation in this activity, you have unlocked access to the Higher Education Initiative Community where you can take your entrepreneurial and innovation skills to the next level!

🚀 **Join Today**: https://eit-hei.eu/community

Don't miss out on:

- ✓ Access to upskilling and reskilling opportunities
- ✓ Funding and support for your start-up
- ✓ Networking throughout Europe
- ✓ Job listings and career advice
- ✓ Opportunities to increase your visibility

RUN InnoBoost

bioeconomy, future industries, and social innovation

Thursday 25th Sept

Design Sprint

www.website.eu

Supported by

eit Food

Funded by the European Union

Part of EIT Higher Education Initiative

eit-hei.eu

TABLE OF CONTENTS

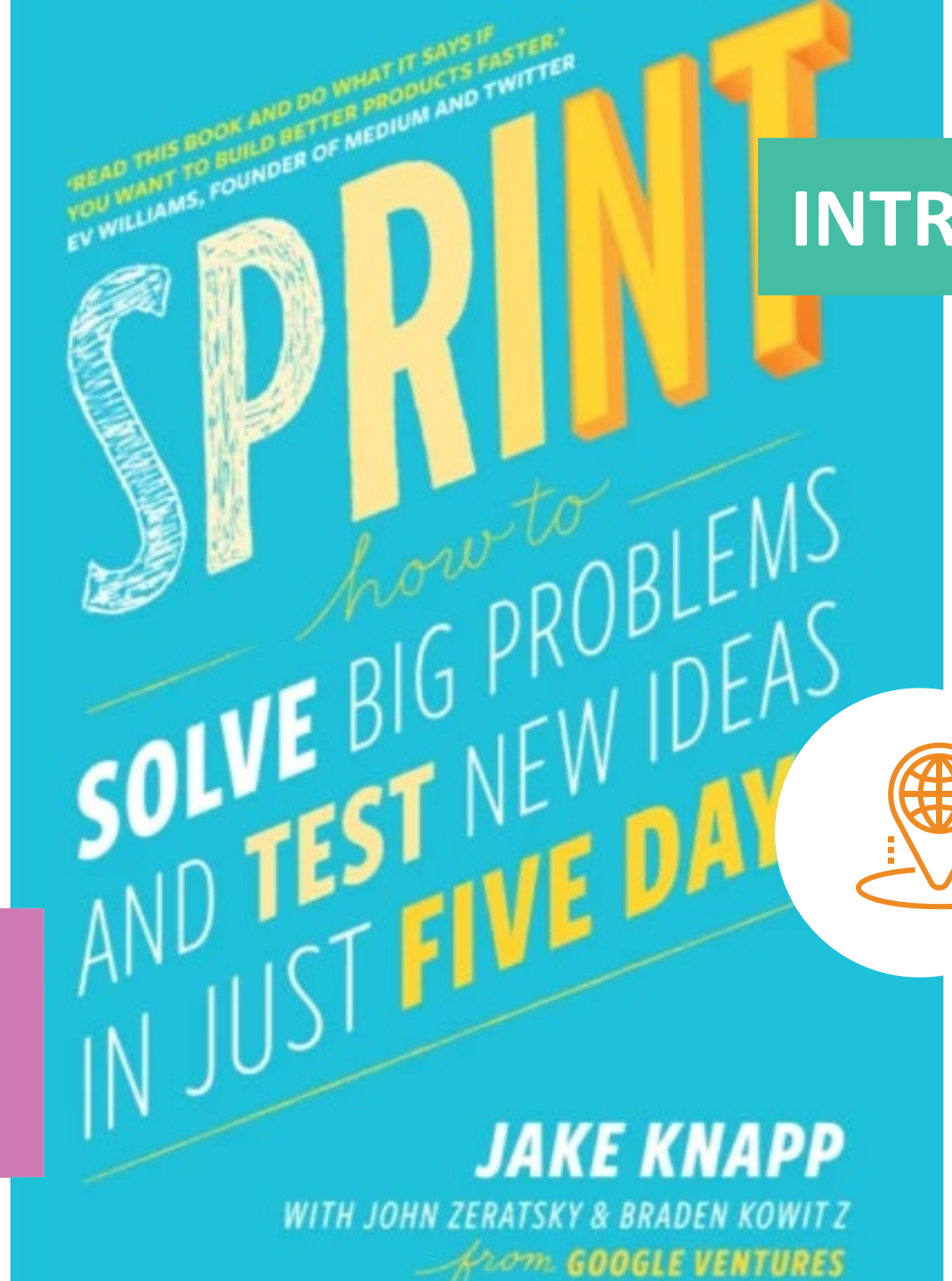
01	Introduction
02	Why Design Sprint
03	Design Sprint methodology
04	How to facilitate a Design Sprint
05	Assignment & general info

01

INTRODUCTION

Purpose

The purpose of **Design Sprint** is to understand the Design Sprint development method, ways to implement it in fast development projects and the steps included in the method. After the part, the students understand and can explain the Design sprint methodology. This part enhances the students' understanding of agile and fast development, the possibilities included but also the limitations and constraints it has. The students get an empirical point-of-view of the development method.



INTRODUCTION

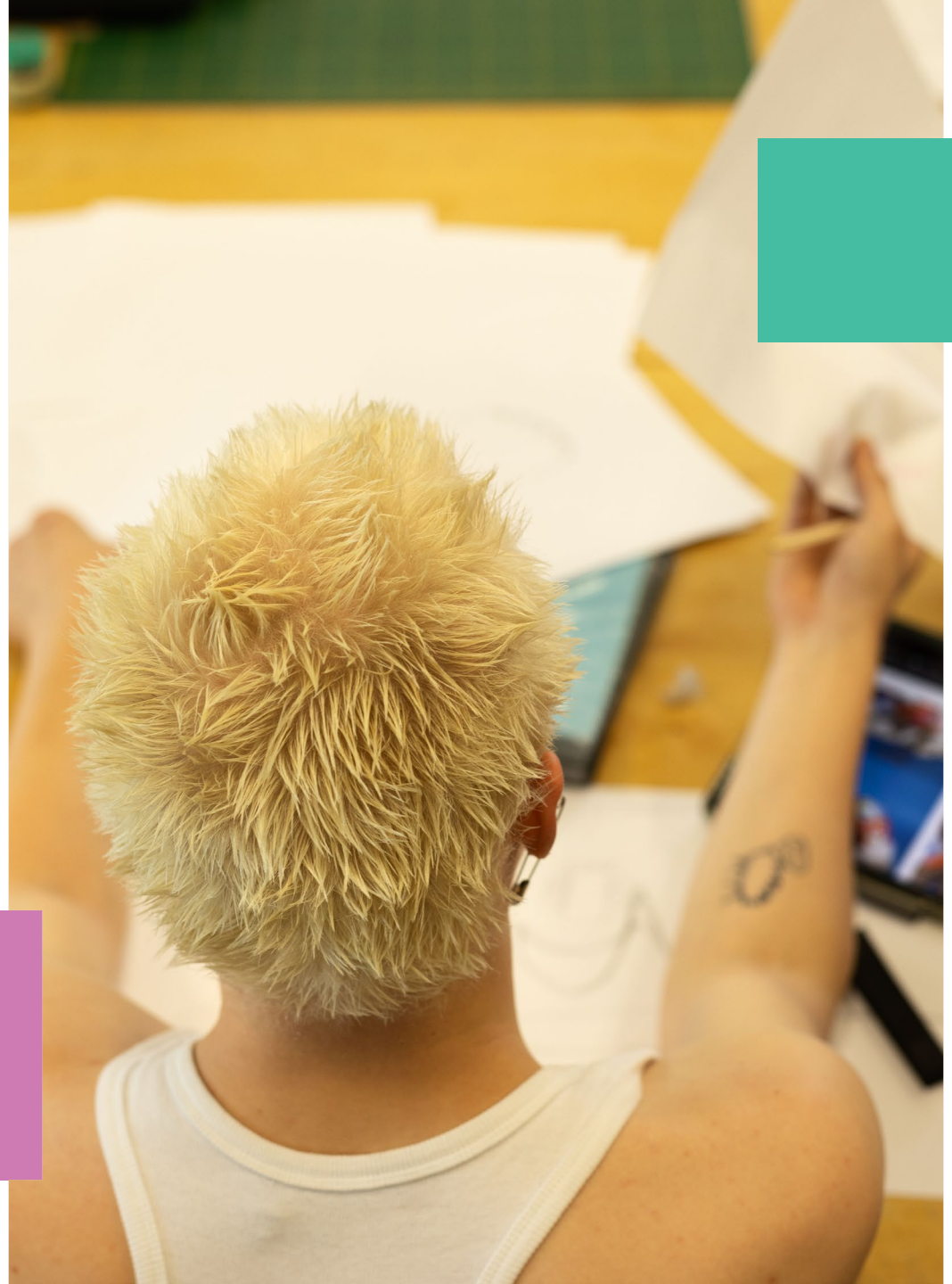
Why are we discussing about Design Sprints? Design Sprint is a method widely used in fast and agile development cycles

The method first aired by Jake Knapp, John Keratsky and Brayden Kowitz in their book Sprint – How to Solve Big Problems and Test New Ideas in Just Five Days (2016)

It was further developed by Banfield et al. to a more defined development method

02

Why Design Sprint



Design Sprint (Banfield et al., 2015)

Design Sprint is a flexible desing framework to create something the selected customer segment desires. The development method was created for product design, but can also be transferred to service design

For study uses, the Design sprints offer a development environment, where the students can focus on development on a given task with a clear objective, but with possibilities for new exploration.

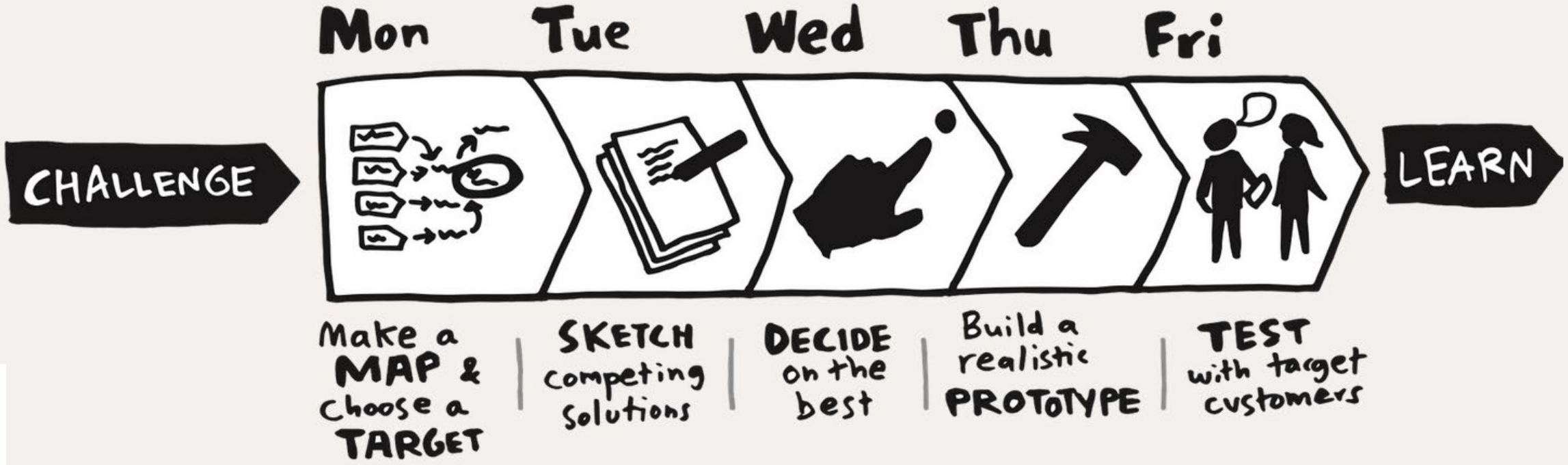
Origins of Design Sprint (Banfield et al., 2015)

- Design Sprints evolved from applied approaches on how to use design in product development. It combines the agile project management and design thinking. As a method developed for project development, Design Sprint is also timeboxed to further accomodate energy economy, process efficiency and social collaboration

- Design Charrettes represented collaborative workshop sessions of designers in the design thinking environments of Stanford d.school. A more refined version of Charrettes was IDEO's Shopping Cart concept, where multidisciplinary teams were faced with a demand to create a working concept in four days.

- Latest iteration in Design Sprint development was brought from Google Ventures, where Jake Knapp and his team formed a model of development, which had a time constraint of five days and consisted of five stages

Design Sprint visualized (Knapp et al, 2016)



03

Design Sprint methodology


O'REILLY
design sprint
Richard Banfield
C. Todd Lombardo
Trace Wax
with a foreword by Dave Gray
A Practical Guidebook for Building Great Digital Products
design sprint

Phases of Design Sprint (Banfield et al., 2015)

Prepare

1. Understand (review background and user insight)
2. Diverge (possibilities)
3. Converge (solutions)
4. Prototype (minimum lovable products)
5. Experiment
6. Iterate

Prepare (Banfield et al., 2015)

- Work on the given background materials
- Look for existing materials on your reach, what story do they tell?
- Examine the market, what trends or phenomena can you find from there

Understand (Banfield et al., 2015)

Understanding the opportunity is only the second step in the development. Firstly the team members must recognize who they are and what they want to achieve during the project

After the collective understanding on who **we** are is created, can the team move forward on to the case itself.

The design sprint has some rules, that allow the teams to be effective in creating a joint understanding

Understand: Rules and guidelines (Banfield et al., 2015)

1. Everyone participates
2. One conversation at a time
3. Do not judge ideas before thinking thoroughly
4. Be timely
5. Use on computer and mobile device per group
6. Be present

Understand: Going Forward (Banfield et al., 2015)

1. In a fast-paced development, the teams should already in early phases agree on the goals and anti-goals related to the project. Setting goals will help to steer the project towards a joint objective

2. Next, the teams should focus on what's already in the market – creating a competitor analysis with a broad aspect on who the competitors really are. If you're creating a new beverage, with whom does it really compete with in your selected market?

Understand: Facts and assumptions (Banfield et al., 2015)

- Do not mix facts with assumptions. We all have biases and assumptions, that affect the way we think and perceive the world

- When discussing development, you should use credible sources to back your own thinking. This way, the material provided gives important context to better understand your point-of-view. Opinions are of course important, but the weight of an opinion compared to a proven fact should also be something to take in mind when deciding the development path

Understand: The Problem (Banfield et al., 2015)

- To understand the problem to-be-solved, you need information about the environment, circumstances, customer, competition and the given case by the organization you're creating a solution for. So not an easy task, but the most important one.

- Problem should be pictured clearly, so that you can separete a concrete problem from the background noise

Understand: Conclusion(Banfield et al., 2015)

- Get to know the background material and other solutions to similar problems
- Spent time on defining the problem and connect it with available data
- Make a list of the assumptions, facts and questions related to the problem
- Try to define the customer to whom the problem is a problem, and how it appears in their life
- Create a persona to refine your understanding
- If possible, make a customer journey map to have more context in your decisions and understanding on the points of friction

Diverge (Banfield et al., 2015)

The purpose of the Diverge stage is to create a vast number of ideas to fuel the product or service development

In the diverge stage, the development is flexible as idea development might take a while and demand multiple iterations. Still, Design Sprint is created to be a swift-paced development method, so the ideas should eventually be created and selected during a day or a half

Diverge – Wireframing (Banfield et al., 2015)

Wireframing means creating very rough sketch-type models on how your product or service would look like both on the outside and inside

Wireframing clarifies the user experience and the production and usage. This helps your team to include details in your idea. The wireframes should be firstly created based on a ”happy scenario”, where your solution operates efficiently and fulfills the customers’ need

Diverge – Takeaways (Banfield et al., 2015)

In the diverge stage you should create as much ideas as possible. Quantity over quality

Allow individuals to create their own ideas in the workshop. Combine the individual ideas to group level after the primary ideation

If your idea combines something new to something old, you might be on the right track! Use also old, proven ideas if necessary

Converge (Banfield et al., 2015)

Next, from the vast number of ideas, it’s time to start narrowing the options down. The converge phase. The ideas must be concluded to a single idea set with which the team continues forward

In converge phase you dive deeper to have more thorough understanding on how you’re solving the problem you identified earlier from the perspective of the customer you’ve defined

Avoid fresh, shallow ideas – focus on the depth of ideation on top of what you’ve ideated before

Converge (Banfield et al., 2015)

When converging with your group, remember to also take in notion the ideas from the more silent members should also be taken into consideration. In converging, you should also start having more critique towards your development.

As you gain more information, what does it tell you related to the problem you're solving with your idea? Does the added information change your perspective on how the customer operates?

Converge (Banfield et al., 2015)

Converge phase is also ideal for identifying alternative solutions for your developed idea. The alternatives should not differ as a whole but include some smaller scenarios that stray from the original. Review and critique the alternatives, and make deductions on how the now-formed scenarios could affect your development

If possible, show your converged concept to a stakeholder to verify your assumptions with them and gain valuable insights on how to further improve your concept

Prototype (Banfield et al., 2015)

Prototypes are examples of the product or service to-be-built that include the selected key operations you want to show to the audience and test your main assumptions. “The customer would prefer touch screen compared to keyboards”

Prototypes vary from quick-and-dirty rough low fidelity prototypes to prototypes that already include multiple functioning operations and are almost ready to be taken into production

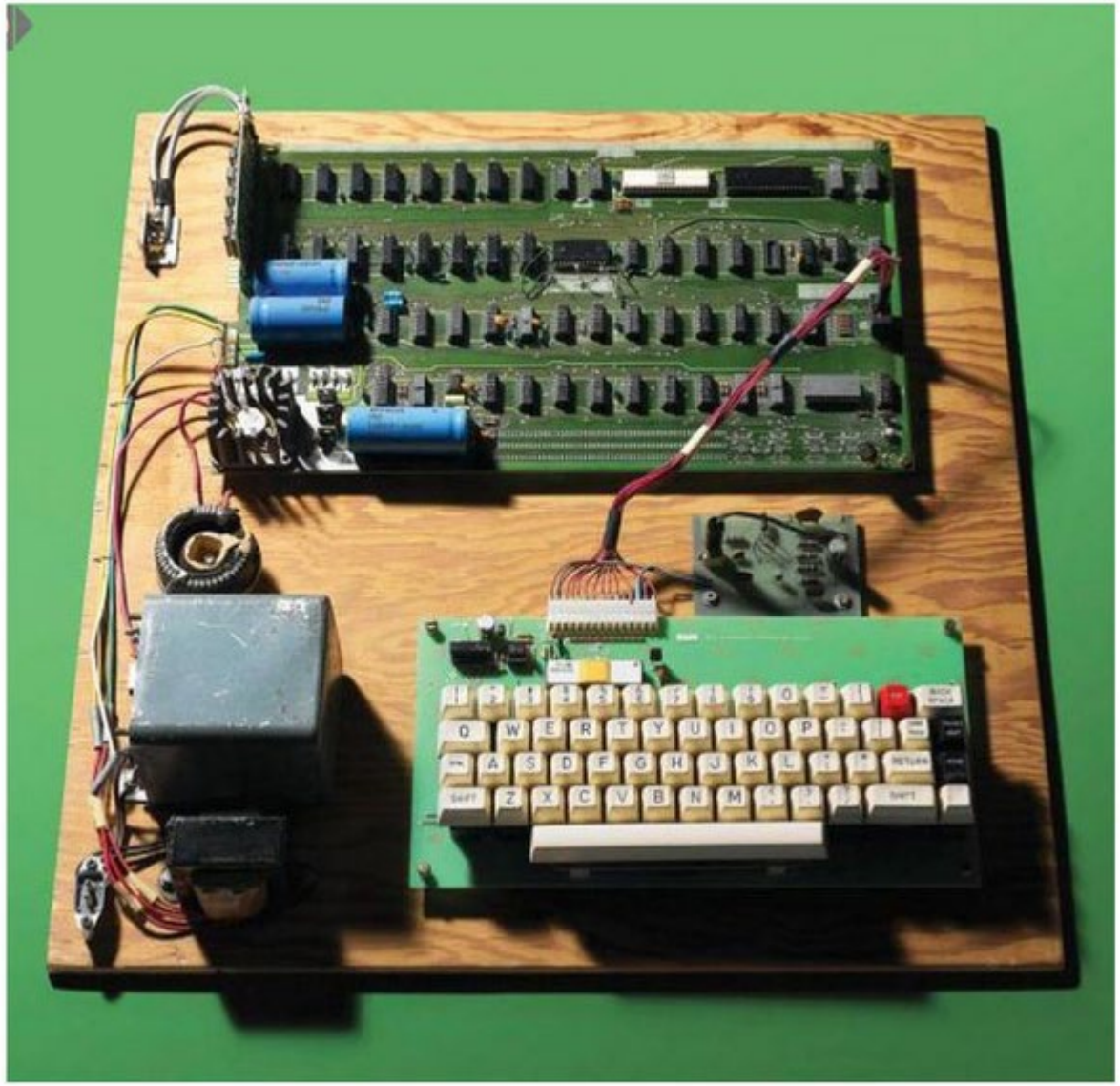
All in all, the goal is to create a mockup from which the users can identify the elements or functions you want to present them, and experiment with

Prototype (Banfield et al., 2015)

Add a copy text to define your service or product (no lorem ipsum or lorem GPT), then choose the method with which you're going to develop your prototype. Prototypes can be either digital or physical, or sometimes both

As you're crafting your prototype, remember to keep in mind what you're doing – the idea should stay intact and guide the whole process forward for validation process

When the philosophy on what you want to create is formed, it's time to start making your masterpiece!



Apple 1 – 1975

Nintendo Playstation – 1998

https://nokiadesignarchive.aalto.fi/?node=A0077

https://www.techeblog.com/10-early-and-rarely-seen-prototypes-of-now-famous-gadgets/

Test (Banfield et al., 2015)

Experimenting with the idea is the final step of your sprint journey. Here the prototype will be shown to a selected mass to be tested in a real-world scenario

The testing phase should be planned so, that we gain realistic opinions and insights on our protype and idea. They might differ from our own perspective, but those opinions are still far better than opinions aimed to please the tester

Test (Banfield et al., 2015)

Testing should be kept as simple as possible, with restricting on how the customers or users interact with your product and also limiting the amount of the test persons. Additional information would of course expand the knowledge base, but at this point in sprint, we are only interested in a mass that will start to bring our some repetition in the answers. This might already happen after you've interviewed some 7-8 participants

Testing materials, tools and the testing environment should be planned both from the perspective of what you're experimenting and what type of a prototype you're presenting

Test (Banfield et al., 2015)

After the experiment it's time to debrief your learnings. Which assumptions were validated and which were not?

Did you delve to understand the problem you tried to solve?

The debrief should focus on your assumptions and hypotheses – what answers did you receive, and did they line up what you thought of the situation? If not, define how your perspective and the results differentiated? Examine what could've been the reason behind the difference?

04

Facilitating a Design Sprint

Why is facilitation a topic of its' own?

Facilitation of the learning situations comes from the lecturers in form of guidelines, instructions and orders but the teams also need facilitation skills and understanding

So, facilitation is important in design sprints as all participants are facilitating the group working, progress and decision making. No one should just be a passive bystander, as then an extremely valuable resource is lost during the development process

Nine principles of Facilitation (Lewrick et al.)

1. Assumption and conclusions – Recognize your own assumptions and review them with your group
2. Share relevant information – Share openly both your direct and indirect knowledge related to the topic, as it might influence the process
3. Use specific examples – Try to use “full” data sets, that include all the necessary and informative data
4. Explain your intentions and conclusions – Share your intentions on what you pursue in the project, so the group understand you and your perspectives more thoroughly
5. Focus on interests – Relationships are connected to situations. Effective groups use interests to create a bond based on desires
6. Create inclusive environments – Avoid monologues and nurture real in-depth conversations
7. Explore the design for progress – The group can select the topics they wish to advance on, and how. Different perspectives between the groups has a meaning
8. Discuss what can’t be discussed – Psychological safe environments allow you to also note tricky, but important subjects effectively (such as differences on how to progress)
9. Support the decision-making processes – Groups operate differently

Tools from Facilitator's Handbook (Knapp, 2025)

- ✓ Trust the process. The recipe for cooking will lead to the best result
- ✓ Explaining the process beforehand will help the participants follow it during action
- ✓ Ice breaks on its own. Eventually, all teams will find a way to function, but they will not all follow the same given path
- ✓ Don't try to outsmart others
- ✓ Hydrate: Caffeini is important, but water intake is crucial
- ✓ Sessions should be 90 minutes at max
- ✓ Be on time
- ✓ Push the teams forward, but also help them push themselves forward

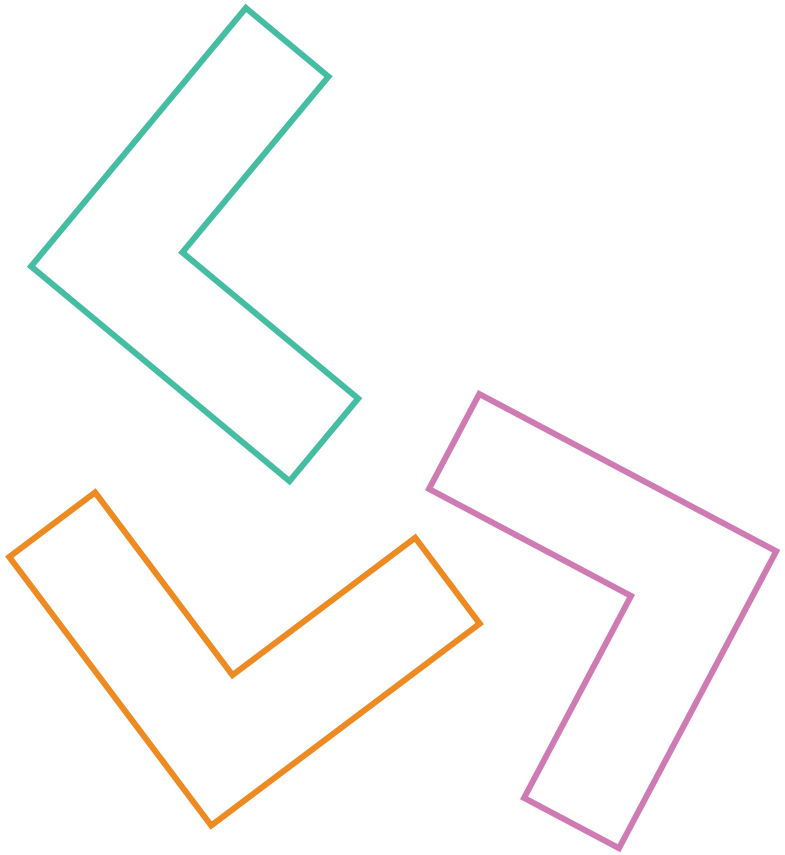
05

ASSIGNMENT & GENERAL INFO

Assignment

Read a given article on creating a Design Sprint. Compare the design sprint methodology to another development format of your choosing (For HAMK 1st year students HAMK DIILI). What similarities and differences can you locate? What pros and cons are in the development methods?

Grading criteria:
The student submits a detailed learning report of their findings and analysis of Design Sprint as a development method. The report is referenced based on the HAMK referencing guide. The length of the learning report is between 1,5 and 2 pages. The report can include pictures.



References

Banfield, R., Lombardo, C. T., & Wax, T. (2015). *Design Sprint*. O'Reilly Media, Inc.

Huić, I., Horvat, N., Škec, S. (2023) 'Design Sprint: Use of Design Methods and Technologies', in Proceedings of the International Conference on Engineering Design (ICED23), Bordeaux, France, 24-28 July 2023. DOI:10.1017/pds.2023.132

Knapp, J. (2025) The Facilitator's Handbook: 24 Design Sprint Tips. The Sprint Book. Retrieved 10th of September from https://www.thesprintbook.com/articles/the-facilitators-handbook-24-design-sprint-tips

Knapp, J., Zeratsky, J., & Kowitz, B. (2016). *Sprint: How to solve big problems and test new ideas in just five days*. Simon & Schuster.

Lewrick, M., Link, P., Leifer, L. J., Langensand, N., & Langensand, N. (2018). *The design thinking playbook: Mindful digital transformation of teams, products, services, businesses and ecosystems*. John Wiley & Sons Inc.

What's next?

Next open session is on Friday 26th of September at 11:00 EET

- Familiarize yourself with the reading list, and start working on your assignment

One material used in your case study can be video of Vesa Tuomela, and their experience using Design sprint. You can locate the video from https://innoboost.eu/run-innoboot-camp/

All the materials can be found from https://bit.ly/BootCampHAMK

RUN InnoBoost

bioeconomy, future industries, and social innovation

Follow our Journey

www.website.eu

Supported by

eit Food

Funded by the European Union

Part of EIT Higher Education Initiative
eit-hei.eu