Focusing and brainstorming

How to start making your idea real

Harri
Toivonen

Design Thinking - recap

Week 1. Introduction to Design Thinking.

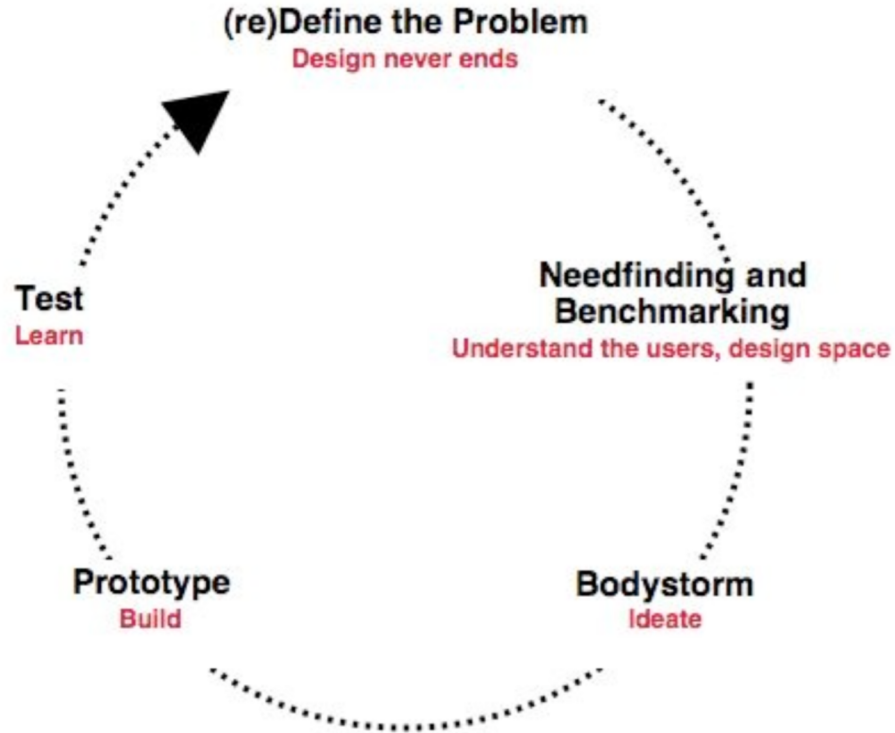**Week 2.** Empathy: beginners mindset, interview & observation preparation.

Week 3. Needfinding & benchmarking : Analyzing gathered information, personas, insights, identifying opportunities, visualization.

Week 4. Generating possible solutions.

Week 5. Prototyping & user testing.

Week 6. Storytelling, design iteration, strategic foresight.

Stanford-IDEO
like design process

(re)Define the Problem
Design never ends

Needfinding and Benchmarking
Understand the users, design space

Test
Learn

Bodystorm
Ideate

Prototype
Build

(Larry Leifer, 2009)

Where the magic happens

Your comfort zone

- *Challenge your assumptions.*
- *There are no stupid questions. Fire away!*
- *[#ideas, #prototyping] Don't worry, be crappy.*
- *Our motto: Work hard, learn & have fun!*

Today we will:
- Define a user (who are you designing for)
- Choose a focus to brainstorm on
- Brainstorm possible solutions
- Prototype (plan)

First:

1. Define a user (who are you designing for)

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- Make a composite persona
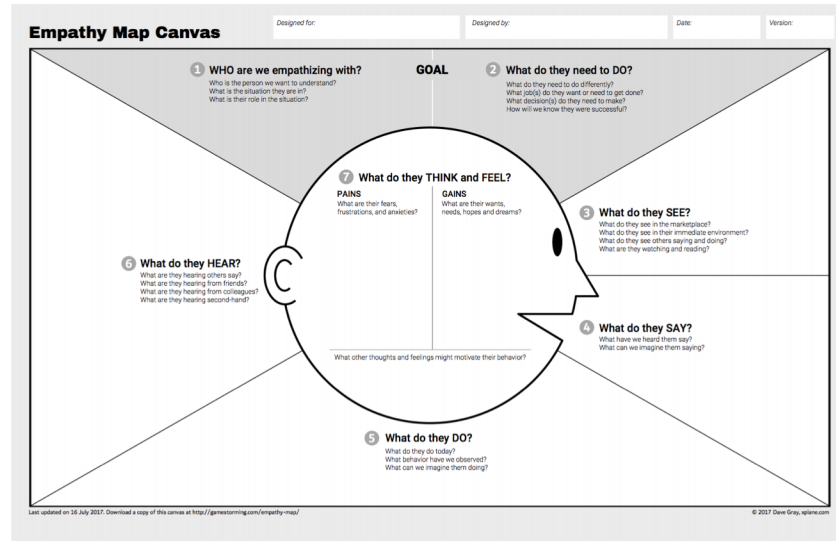

Franklin
- 38 years old
- Divorced
- 2 kids
- Diabetic
- Free-clinic care-giver
- Has extreme tendencies in consumption and preparation of food.
- Balances his health and that of others, favoring the health of others.

1. Define a user (who are you designing for):
- Use empathy map to try and understand your user

Also: Focus and identify what information/data you have, and what are you still missing? (This will be extremely important for you in the next weeks to guide your efforts.)

30 minutes

Second:

2. Choose a focus

- Look at the Pains & Gains of your user and make 3-4 „How might we?" questions.

Third:
3. Brainstorming solutions:

- Put the „How might we..“ questions on the top of the whiteboard/flipchart, and brainstorm possible solutions. The crazier, the better!!

Brainstorming is a group creativity technique designed to generate a large number of ideas for the solution of a problem

- Wikipedia

Rules that *must* be followed by ALL.

1. Un sujet à la fois.

2. Cherchez la Quantité

Quantité
Quantité
Quantité
Quantité
Quantité
Quantité
Quantité
Quantité
Quantité
Quantité
Quantité

VS.

3. Suspendre la critique

NON   MAIS...   EXCUSES
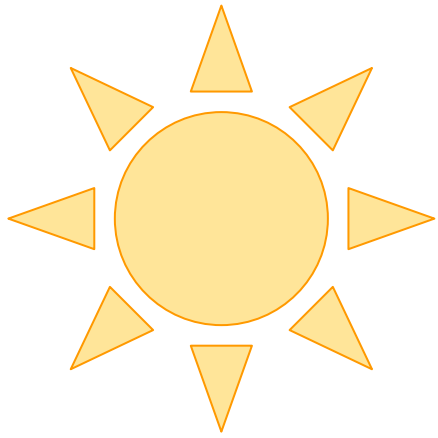
..à la place, utilisez

OUI, ET..

4. Encouragez les idées FOLLES

Go beyond obvious!
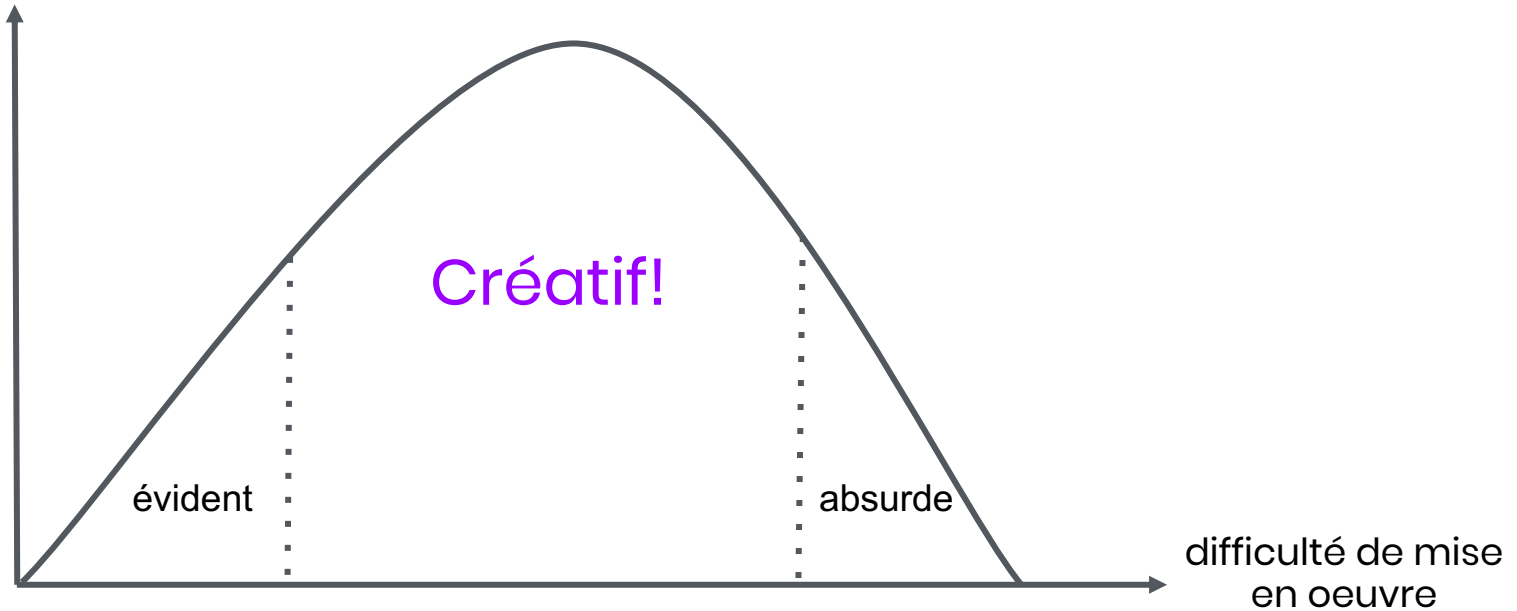
5. Take good ideas further -> Build & combine

6. Soyez visuel.le

Brainstorm!

You have 30 minutes.

(Suggestion: use first 10 mins for "silent" brainstorm, second 10 mins to place them on shared canvas, last 10mins to build on eachothers ideas.)

Come up with 50+ ideas!

Fourth part:
4. Organise your ideas

- Group them in emerging commonalities/themes
- Choose max. 5 of them which you think would be essential to explore and prototype

Share!

Share max 5 ideas that you think would be good to explore further.

Prototyping

Critical functions & experiences

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Toivonen

CERN
Ideas

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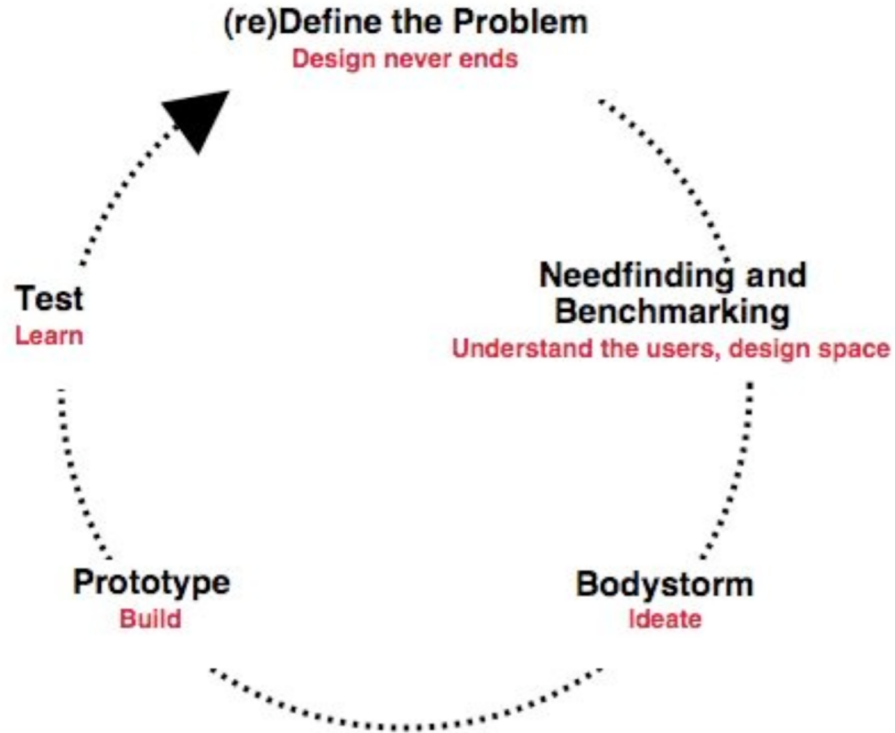
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Prototyping

= getting ideas and explorations out of your head and into the physical world
- can be anything that takes a physical form
  - a role-playing activity, a space, an object, an interface, or even a storyboard
- The resolution is now rough and rapid
- Make something people can experience and interact with.

Why prototype?

- Start a conversation
- Gain empathy
- Learn
- Explore
- Test
- Inspire
- Solve disagreements
- Fail quickly and cheaply
- Manage the solution-building process

First:
1. Choose one idea to prototype

Deconstruction

"There is some negativity in deconstruction. I wouldn't deny this. You have to criticize, to ask questions, to challenge and sometimes to oppose. What I have said is that in the final instance, deconstruction is not negative although negativity is no doubt at work. Now, in order to criticize, to negate, to deny, you have to first say 'yes'. "

Jacques Derrida, 1997

Deconstruction

is understanding.

Deconstructing: a product
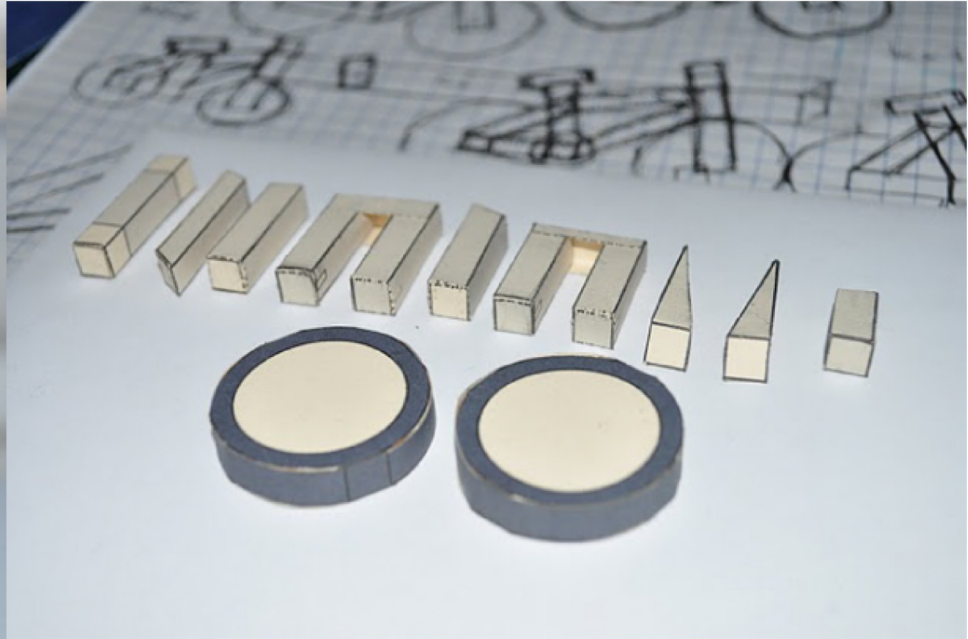
Deconstructing: the system

Deconstructing: a service

AWARENESS		DECIDE		USAGE			SUPPORT	END & EXTEND
Discovery	Research	Negotiations	Purchase	Set-up	Use	Payment	Support	Offboarding
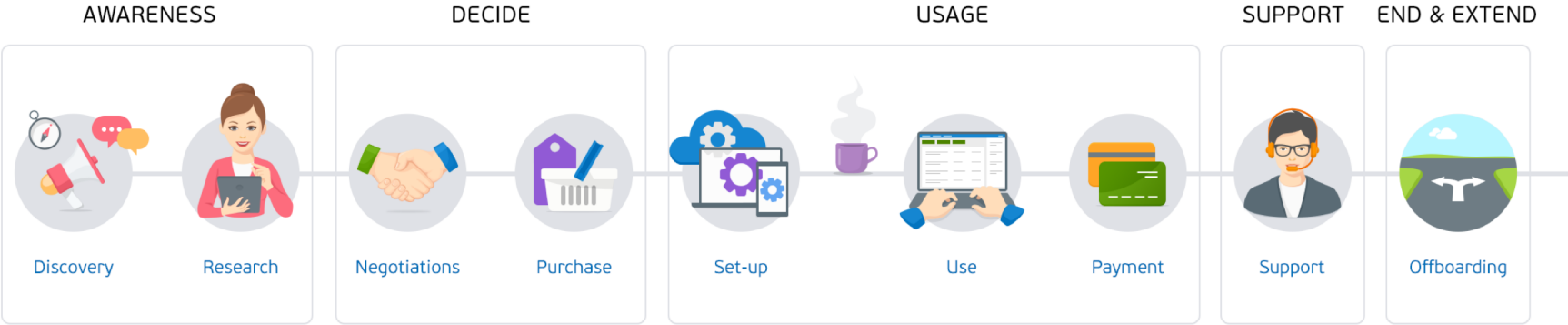
Deconstructing: the system

Rail Europe Experience Map

Guiding Principles

| People choose rail travel because it is convenient, easy, and flexible. | Rail booking is only one part of people's larger travel process. | People build their travel plans over time. | People value service that is respectful, effective and personable. |

Lens

Customer Journey

| STAGES | Research & Planning | Shopping | Booking | Post-Booking, Pre-Travel | Travel | Post Travel |

Journey Model

DOING

Research destinations, routes and products — Enter trips — Review fares — Select pass(es) — Confirm itinerary — Delivery options — Payment options — Review & confirm — Wait for paper tickets to arrive — Activities, unexpected changes — Share experience — Follow-up on refunds for booking changes

Destination pages — Look up time tables — raileurope.com — Live chat for questions — Plan with interactive map — Map itinerary (finding pass) — Blogs & Travel sites — Kayak, compare airfare — Talk with friends — Web — Google searches — Research hotels

May call if difficulties occur

Print e-tickets at home — Change plans — Check ticket status — Plan activities — Web — Research hotels — Paper tickets arrive in mail

E-ticket Print at Station — Get stamp for refund — View maps — Buy additional tickets — web apps — Look up timetables — Arrange travel — Plan/confirm activities

Share photos — Web — Share experience (reviews) — Request refunds — Mail tickets for refund

THINKING

- What is the easiest way to get around Europe?
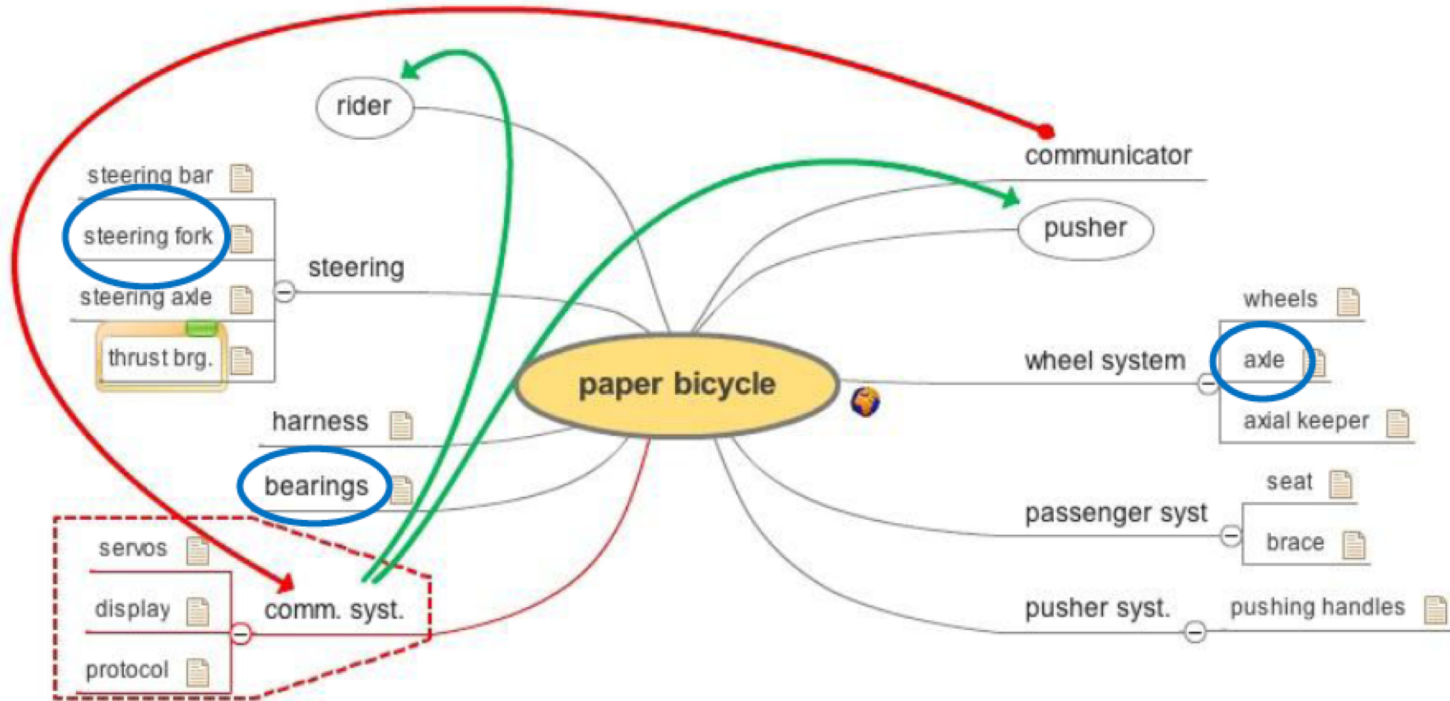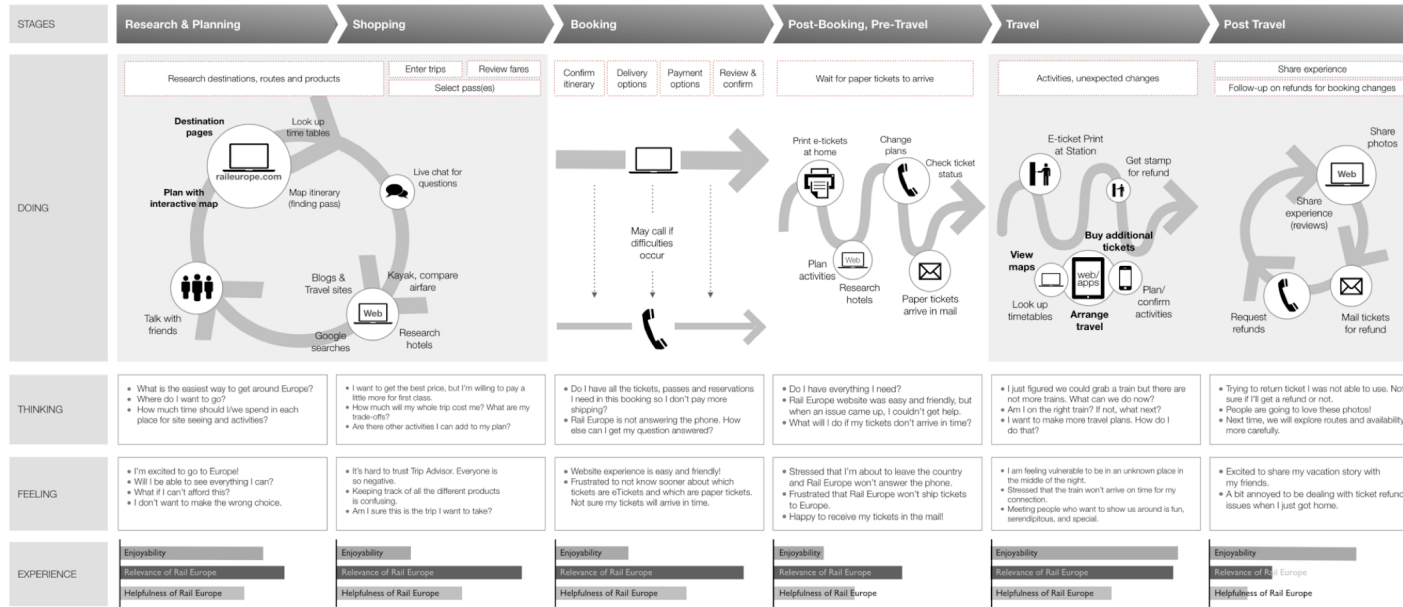- Where do I want to go?
- How much time should I/we spend in each place for site seeing and activities?

- I want to get the best price, but I'm willing to pay a little more for first class.
- How much will my whole trip cost me? What are my trade-offs?
- Are there other activities I can add to my plan?

- Do I have all the tickets, passes and reservations I need in this booking so I don't pay more shipping?
- Rail Europe is not answering the phone. How else can I get my question answered?

- Do I have everything I need?
- Rail Europe website was easy and friendly, but when an issue came up, I couldn't get help.
- What will I do if my tickets don't arrive in time?

- I just figured we could grab a train but there are not more trains. What can we do now?
- Am I on the right train? If not, what next?
- I want to make more travel plans. How do I do that?

- Trying to return ticket I was not able to use. Not sure if I'll get a refund or not.
- People are going to love these photos!
- Next time, we will explore routes and availability more carefully.

Qualitative Insights

FEELING

- I'm excited to go to Europe!
- Will I be able to see everything I can?
- What if I can't afford this?
- I don't want to make the wrong choice.

- It's hard to trust Trip Advisor. Everyone is so negative.
- Keeping track of all the different products is confusing.
- Am I sure this is the trip I want to take?

- Website experience is easy and friendly!
- Frustrated to not know sooner about which tickets are eTickets and which are paper tickets. Not sure my tickets will arrive in time.

- Stressed that I'm about to leave the country and Rail Europe won't answer the phone.
- Frustrated that Rail Europe won't ship tickets to Europe.
- Happy to receive my tickets in the mail!

- I am feeling vulnerable to be in an unknown place in the middle of the night.
- Stressed that the train won't arrive on time for my connection.
- Meeting people who want to show us around is a fun, serendipitous, and special.

- Excited to share my vacation story with my friends.
- A bit annoyed to be dealing with ticket refund issues when I just got home.

EXPERIENCE

Enjoyability — Relevance of Rail Europe — Helpfulness of Rail Europe

Quantitative Informatioin

Opportunities

GLOBAL

| Communicate a clear value proposition. | Help people get the help they need. | Support people in creating their own solutions. |
| STAGE: Initial visit | STAGES: Global | STAGES: Global |

PLANNING, SHOPPING, BOOKING

| Enable people to plan over time. | Visualize the trip for planning and booking. | Arm customers with information for making decisions. |
| STAGES: Planning, Shopping | STAGES: Planning, Shopping | STAGES: Shopping, Booking |

POST-BOOK, TRAVEL, POST-TRAVEL

| Improve the paper ticket experience. | Accommodate planning and booking in Europe too. |
| STAGES: Post-Booking, Travel, Post-Travel | STAGE: Traveling |

| Make your customers into better... | Engage in social media with... | Connect planning, shopping and... | Aggregate shipping with a... | Proactively help people deal... | Communicate status clearly at... |

Takeaways

Constructing: the system

- When constructing a system

  - break it down into *manageable pieces.*

  - *Test the most critical functions early* even if they are the most intimidating.

  - *"Make mistakes early on so you can succeed sooner."*
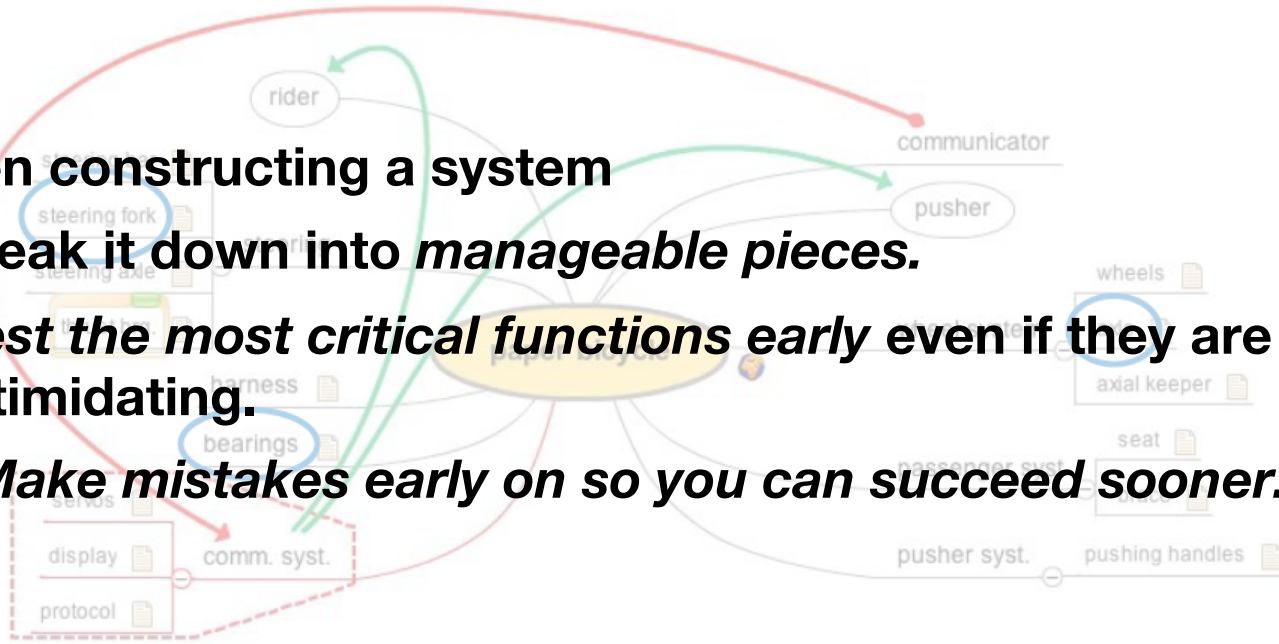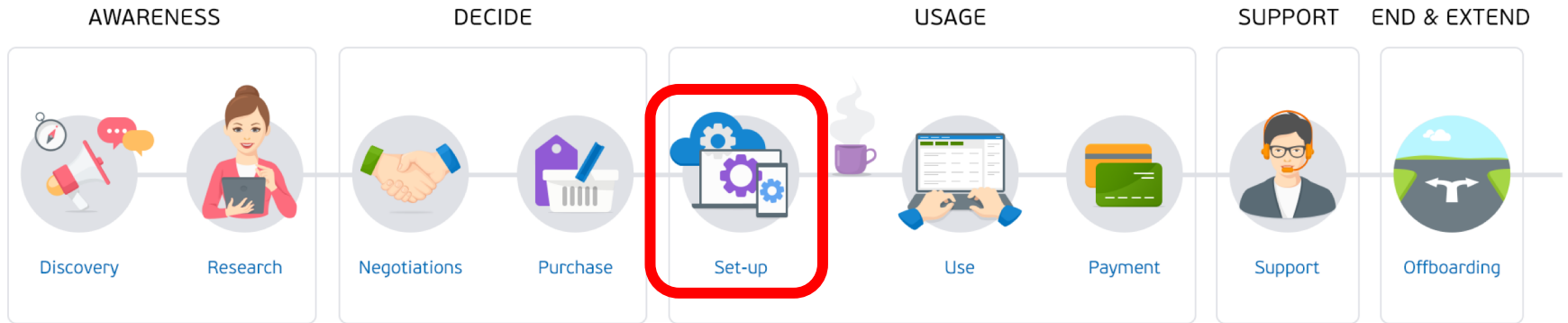
Constructing: the system

"When you put your ideas in the world, then, and only then, do you know if they're real."

Second:
2. Map out your understanding of components of the idea: product/service you have chosen

Critical functions

AWARENESS | DECIDE | USAGE | SUPPORT | END & EXTEND

Discovery | Research | Negotiations | Purchase | Set-up | Use | Payment | Support | Offboarding

Deconstructing: the language

- CFP =

  - Critical

  - Function

  - Prototype

- CEP =

  - Critical

  - Experience
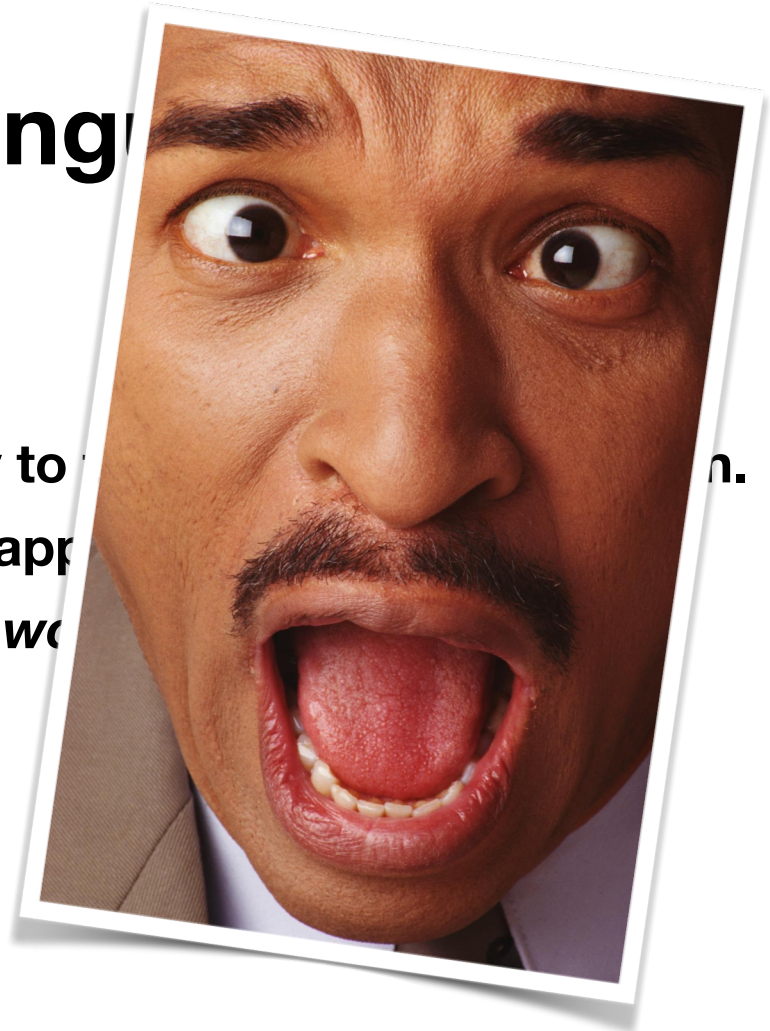
  - Prototype

Deconstructing: the language

- **Critical**
  - Something fundamental and necessary to the success of the design.
  - If this component were to fail, another approach would be needed.
  - In other words: the piece you are most worried about.
- **Function**
- **Prototype**

Deconstructing: the langu

- **Critical**
- Something fundamental and necessary to ... n.
- If this component were to fail, another app
- In other words: *the piece you are most wo*
- **Function**
- **Prototype**

Deconstructing: the language

- **Critical**

- **Function**

  - **What the element, piece or subsystem must do (not what it is or should be).**

  - **Identify the function and the parameters for success.**

  - **Can you make it work?**

- **Prototype**

Deconstructing: the language

- **Critical**

- **Experience**

  - **procedural knowledge vs. propositional knowledge**

  - **Identify the type of experience**

  - **How can you represent / recreate / simulate it?**

- **Prototype**

Deconstructing: the language

- **Critical**
- **Function**
- **Prototype**
  - Something physical that you have made (not a calculation, sketch, research or user tests).
  - It allows you to perform real tests and obtain useful results.
  - It does not necessarily reflect the final design.

Prototype to demonstrate
a one particularly important
function of the product

CFP - Critical
Function
Prototyping

CFP - Critical Function Prototyping

CFP - Critical Function Prototyping

Third:

3. Define what is the critical function and/or experience you need to test

On prototyping

- We know you want to do an outstanding job.
- At this stage, resolution does not matter.
- Function over aesthetics!
- You want information/data you can build your next ideas and decisions on.
- Think of prototype as a „scientific experiment" to learn from – what does the output data look like? How will you interpret it?

**You can prototype everything.
You can prototype with anything.**

Prototype!

You have 1 hour.
We want a prototype (or at least a plan what to build one and how) that is tested (or shared) with at least one person who is not a member of the program.

Make it happen!

Contact for help:

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