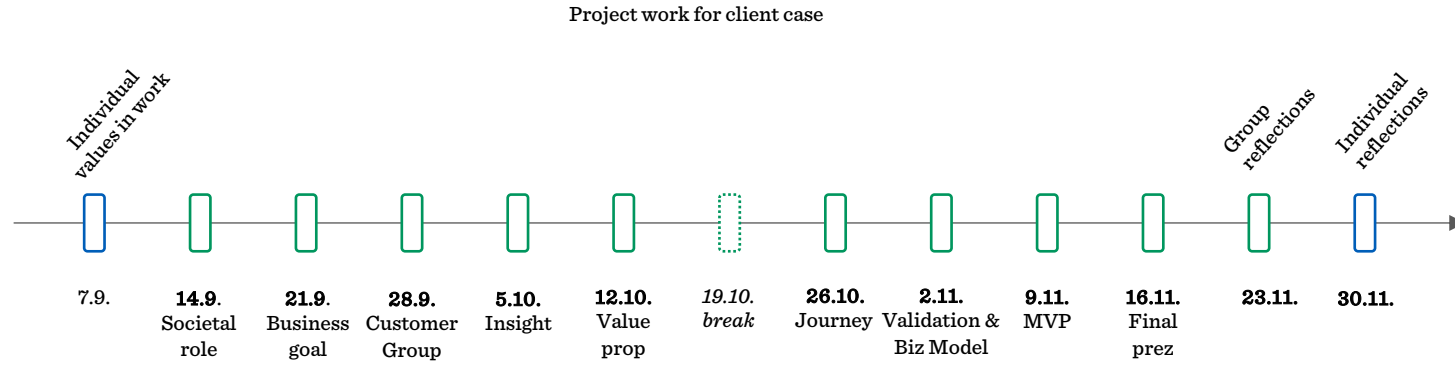


A top-down photograph of various vintage tools and objects arranged on a dark, vertically-grained wooden surface. The items include a large pair of metal pliers on the left, a leather tool sheath, a double-bit axe, a claw hammer, a mallet, a scythe, a flashlight, a circular tin labeled 'CRAFTSMAN NICKEL PLATED', a pair of worn tan leather gloves, a utility knife, a metal bell, and a metal mug. Sunlight casts shadows from the left side of the frame.

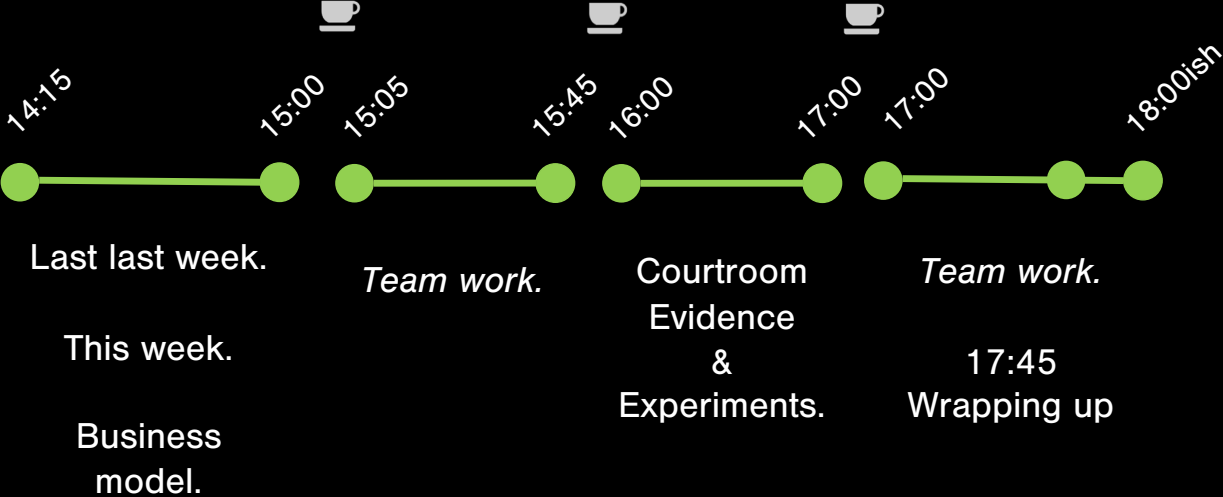
CS-E280  
SOCIETAL  
DESIGN  
PROJECT

Risto Sarvas  
Hanna Hämäläinen  
November 2<sup>nd</sup>, 2020

# Course Schedule



# 2.11. Business Model & Validation



# Part I

## Last week & This week

**Let's look at one video**

**LAST WEEK'S LEARNING GOAL:**

**What are we designing,  
as a journey?**

*How do they hear about it?*

*How do they engage with it?*

*How do they “buy” it?*

*Customer Journey as a  
“tool that brings it all together”*

***Plus:***

***3 foundation blocks of a business model***



# Shadow Lessons Learned?

Power of storytelling?

So many perspectives,  
which one to look at?

Is it all about awareness?

Yes, kinda, but aware about what?

**THIS WEEK'S LEARNING GOAL:**  
**Business model = your engine.**  
**Defense lawyer = your job.**

*Your revenue model?*  
*Your cost structure?*  
*In a balance?*

*Prototype + experiment*  
*= your 2<sup>nd</sup> interviews*  
*= evidence for your assumptions.*

**NEXT WEEK:**  
***MVP & presentation***



# Weekly intros!

# Part II

## Business model is the engine

**Business model IS NOT**  
*business case.*

**Business model =**  
*how do you make that work?*

**Business case =**  
*should we do this?*

A detailed close-up photograph of a car engine's timing belt system. The image shows several black pulleys of varying sizes, some with cooling fins, and a black timing belt. The engine components are metallic and show signs of use. The text is overlaid on the image in white, with dashed white boxes highlighting the three main sections: Key activities, Key resources, and Key partners.

## Key activities:

What Key Activities do our Value Propositions require?  
Our Distribution Channels?  
Customer Relationships?  
Revenue streams?

## Key resources:

What Key Resources do our Value Propositions require?  
Our Distribution Channels?  
Customer Relationships?  
Revenue Streams?

## Key partners:

Who are our Key Partners?  
Who are our key suppliers?  
Which Key Resources are we acquiring from partners?  
Which Key Activities do partners perform?

# Business Model & Market Size

Thinking through the high level business case.



Who pays whom?  
How much?

What is the revenue  
model?

How are customers paying  
today? How much?

Where and how do you  
anchor price perception?



Total addressable  
market:

1st year sales:



Potential target market:

Plan for 1<sup>st</sup> month sales:

Cost structure?

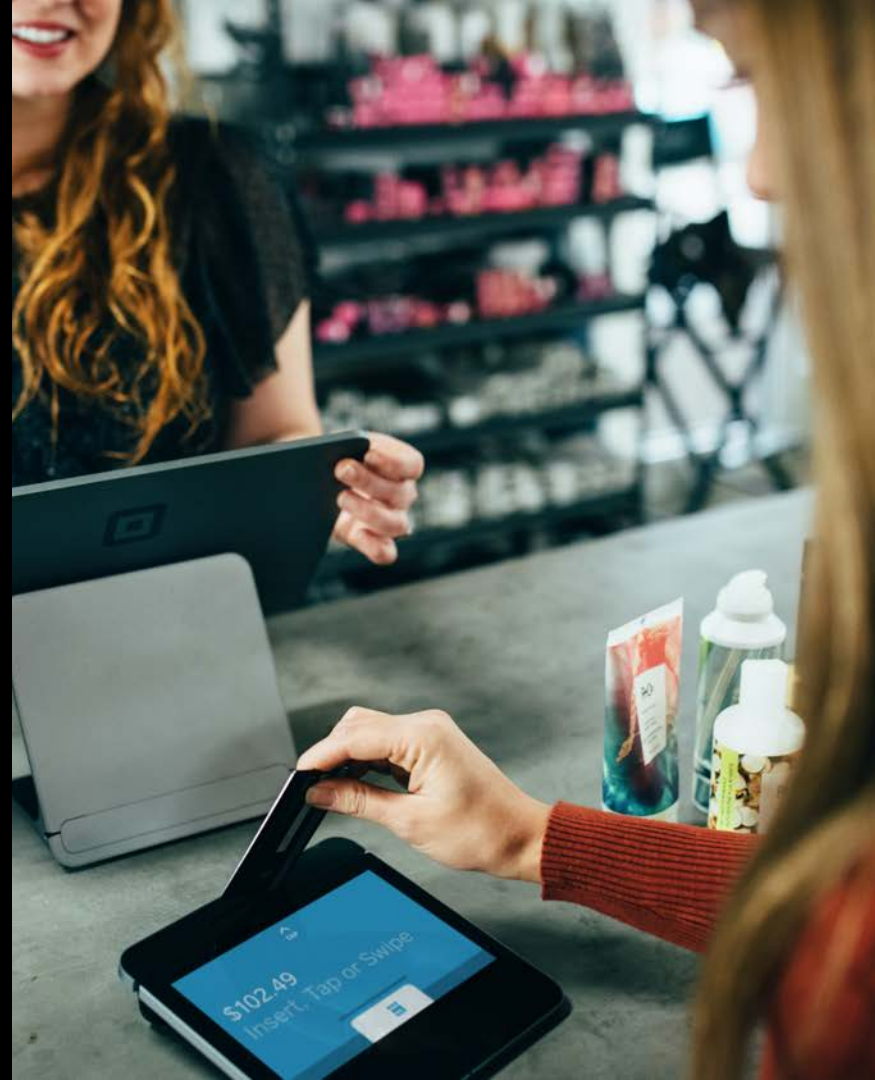


Key elements for EBIT?



# Revenue model

- What is the value the customer is paying for in your model?
- How are customers paying for solving the problem now (money, time, stress, what is the currency)?
- How much are they paying (do they even know)?
- What is your revenue model: Transaction, subscription, rental, advertisements, freemium...?
- What is your pricing strategy: fixed, dynamic?





# Business Model & Market Size

Thinking through the high level business case.



Who pays whom?  
How much?

What is the revenue  
model?

How are customers paying  
today? How much?

Where and how do you  
anchor price perception?



Total addressable  
market:

1st year sales:



Potential target market:

Plan for 1<sup>st</sup> month sales:

# Cost structure

Not development costs!



- What are the costs and expenses to operate your customer journey?
  - Costs of activities?
  - Costs of resources?
  - Costs of partnerships?
- What are the most important costs?
- What are the most expensive resources?
- What are the most expensive activities (personnel, FTEs)?
- Fixed cost? Variable cost?





**Total addressable market:**

**1st year sales:**



**Potential target market:**

**Plan for 1<sup>st</sup> month sales:**

**Cost structure?**



**Key elements for EBIT?**



# Key elements of “EBIT”

- $(value \times number\ of\ customers) - costs = ?$
- The critical elements influencing your profit?  
Bottlenecks? Unknowns?
  - Customer acquisition (awareness, interest)?
  - Cost of resources? Cost of activities?
  - Pricing? Pricing model?
  - Customer retention? Customer churn?

Make sure you know whether you need to make a profit (how much?), only cover your costs, or perhaps be non-profitable due to value generate elsewhere?





Total addressable market:

1st year sales:



Potential target market:

Plan for 1<sup>st</sup> month sales:

*Homework!*

Cost structure?

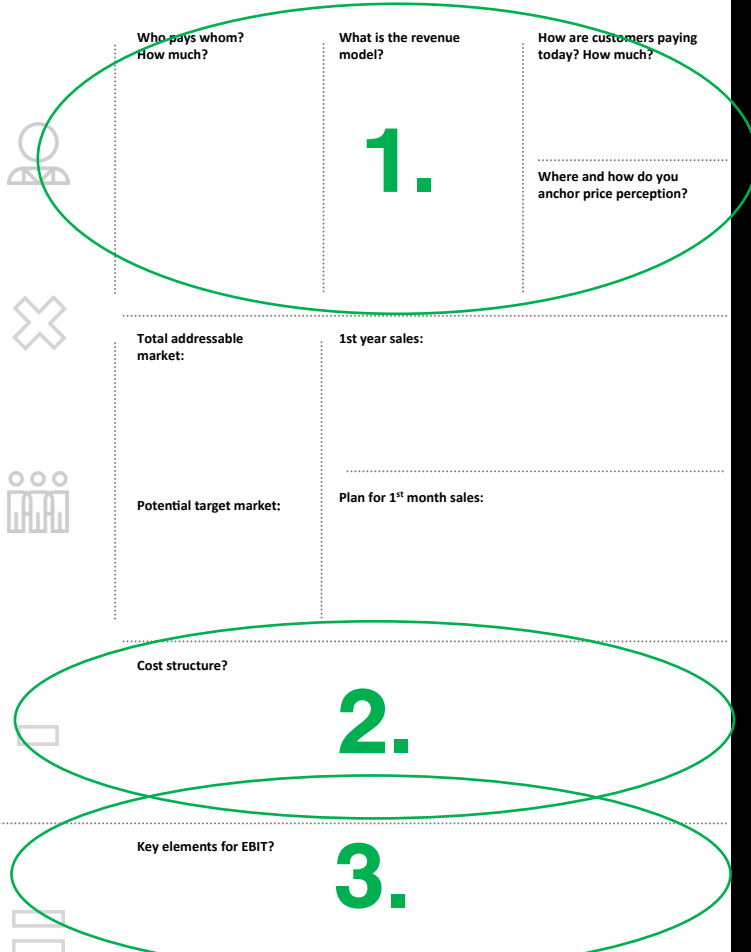


Key elements for EBIT?



# Business Model & Market Size

Thinking through the high level business case.



**Work on the business model.  
Finalize it during the week.**

*Keep your eyes open for changes into your customer journey & concept as you tweak the business model.*

*Take the key activities, key resources, and key partners from last week.*

**Work on your business model.**  
*How do you make it work?*

**Back here 16:00.**  
*Take a break as well.*



# Part III

# Validation & evidence

# Why do we build prototypes?

Evidence to prove you're onto something.



Defense (you)

Jury  
(Maria, Hanno, Samuel)



Judge  
(Risto, Hanna)

Defendant  
(your concept)

Prosecutor (reality, status quo)



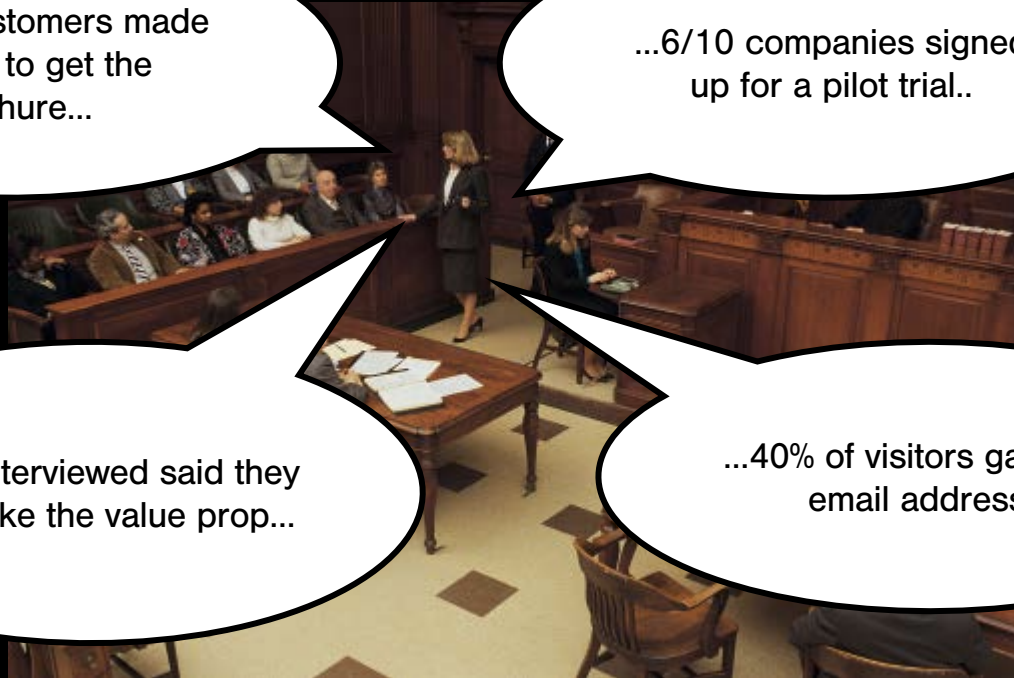
...and the hard evidence to back up my concept is...

...75% of customers made an effort to get the brochure...

...6/10 companies signed up for a pilot trial..

...5/6 interviewed said they really like the value prop...

...40% of visitors gave their email address...





# Also, evidence to stop fooling yourselves (suom. itsensä kusetaminen).

Ok, now I see we  
were just circling  
around our own  
beliefs and  
assumptions.





**Don't just guess.**  
**Don't blindly build version 1.0.**  
**Don't rely (too much) on your own wisdom.**  
**Don't rely (too much) on wisdom of others.**

**Create objective evidence!**

*(stop designing, start gathering evidence 😊 )*

**”Let’s do a proof of concept.”**

**”Yes. To prove what?”**



**Experimenting**

**A prototype is passive.**

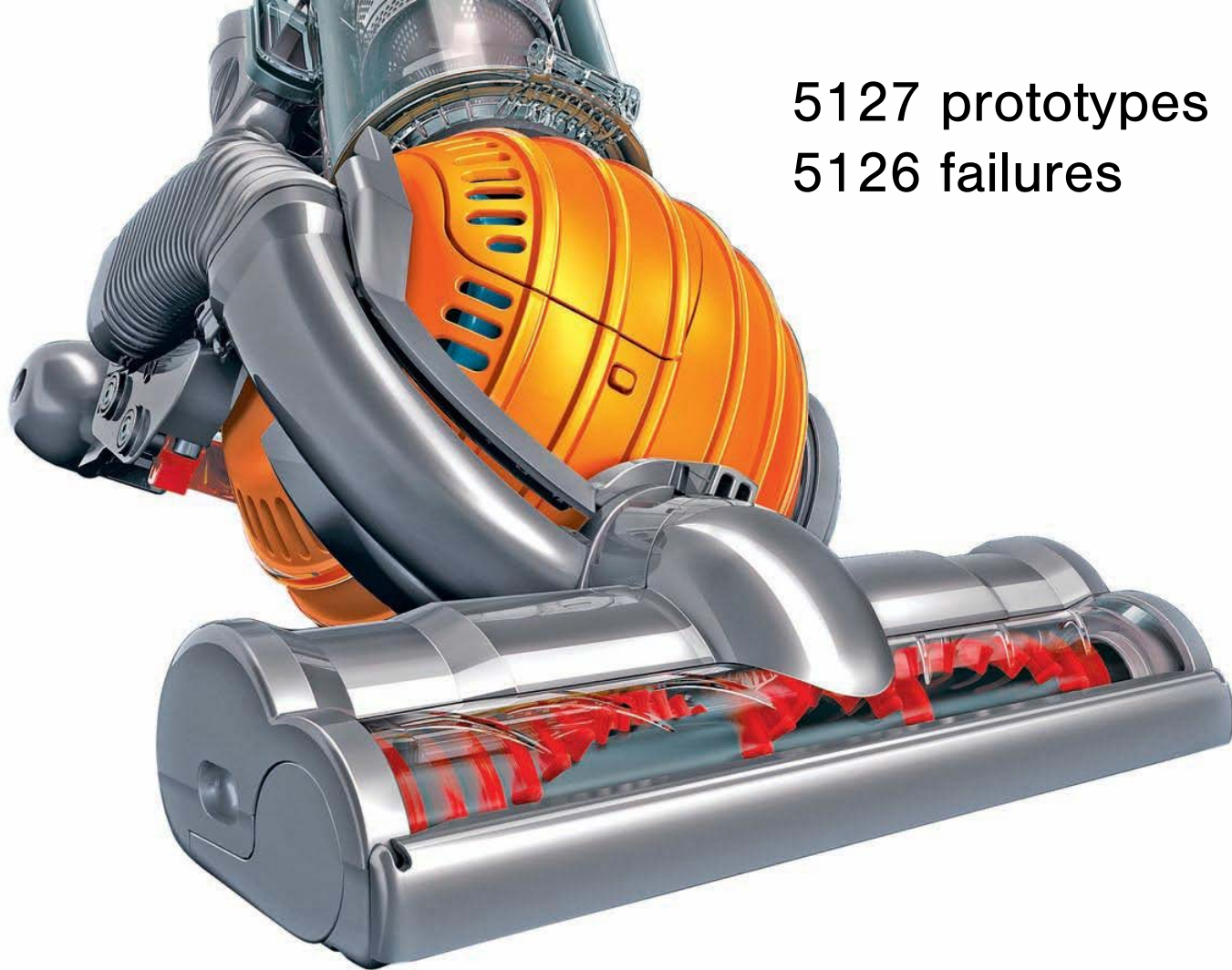
**An experiment is active.**

**An experiment has an objective:  
to gather evidence for you to learn.**

Prototypes... what can we prototype?

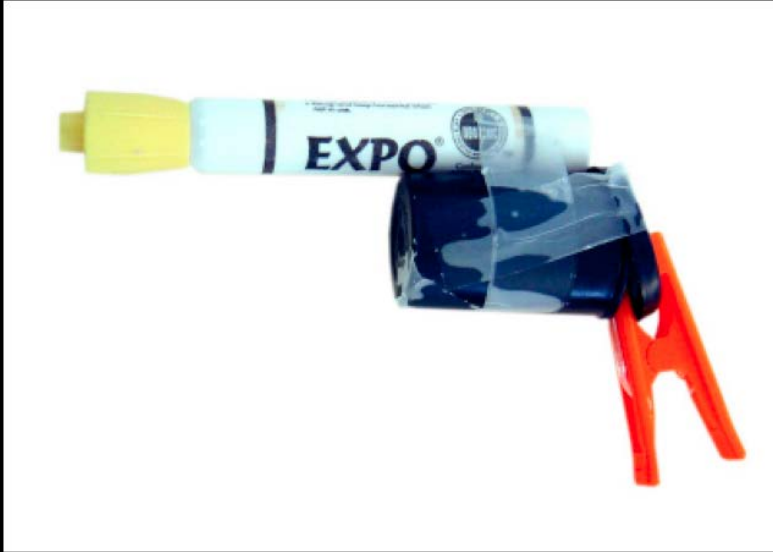


5127 prototypes  
5126 failures





# Prototypes invite interactions







Prototypes  
create  
a point of  
focus!



### RECHARGE YOUR BATTERY ON THE MOVE

No more worrying if your cellphone battery lasts until the end of the day.  
Charge your phone on your way to living to the fullest.  
In a bus.



## GROW YOUR STARTUP WITH US!



We love to give mentoring and guidance to the startups to survive in the market.



We provide technical supports to the startups to accelerate their product development.



The Journey to Growth

[www.kone.com/en/the-journey-to-growth](http://www.kone.com/en/the-journey-to-growth)



## When did you last check your pipes?

Did you know Tapiolan Lämpö's service got 9 949 / 1 0000 points for tested quality. Our experts will find even the smallest issues in your building.  
Let's find them and fix them!

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Order your yearly inspection now at  
[www.tapilanlampo.fi/inspection](http://www.tapilanlampo.fi/inspection)

020 310 310

Prototypes enable communication & co-creation.

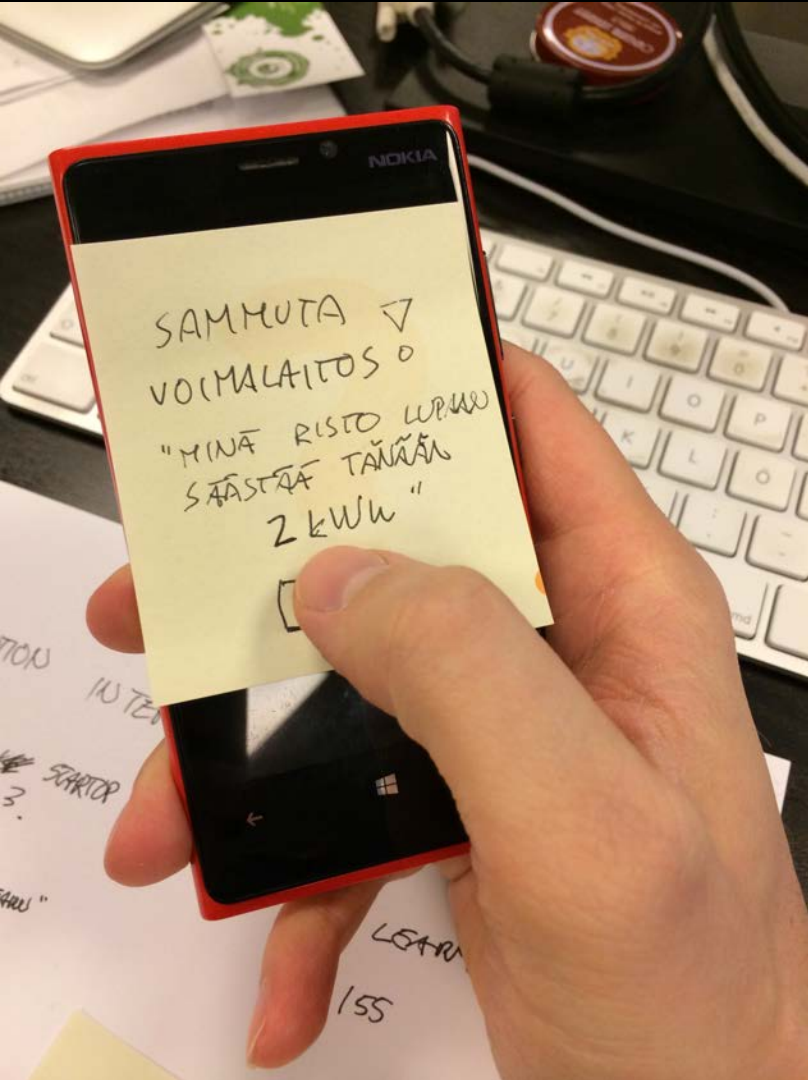


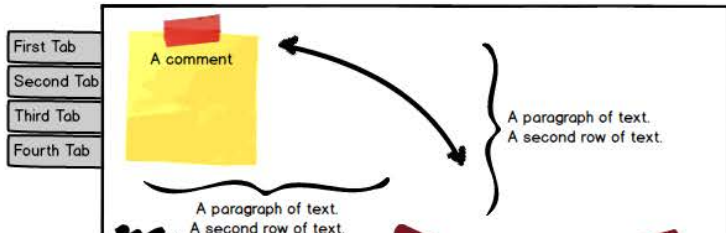
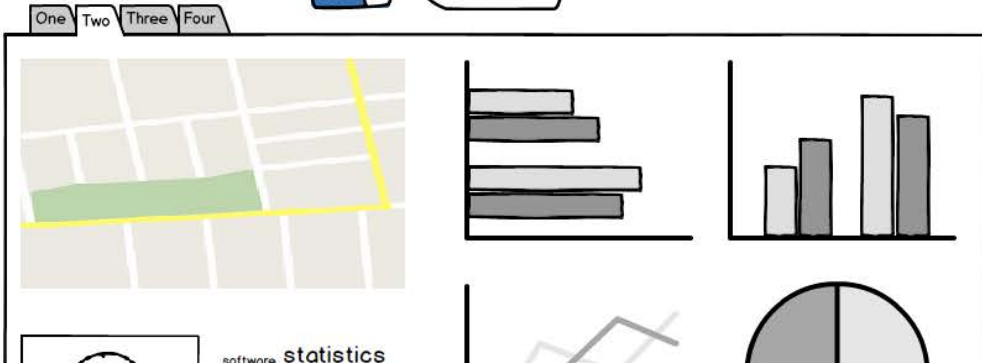
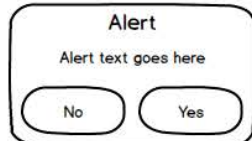
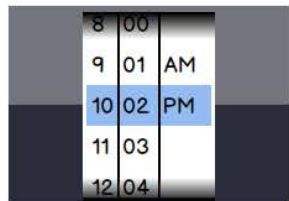
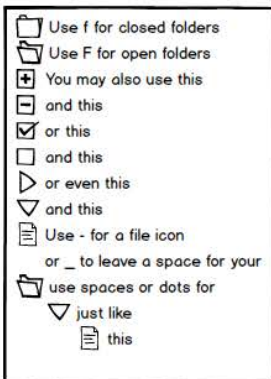
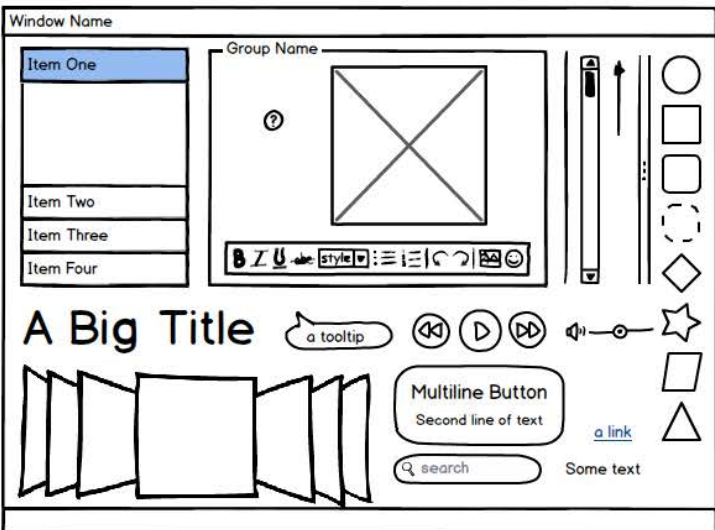
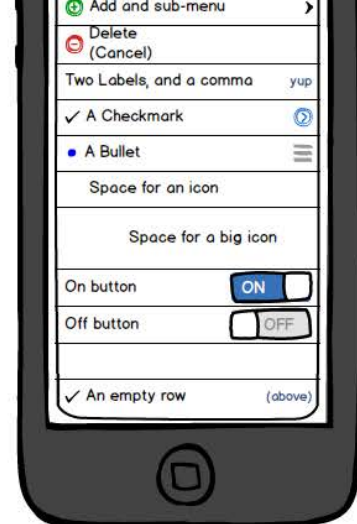
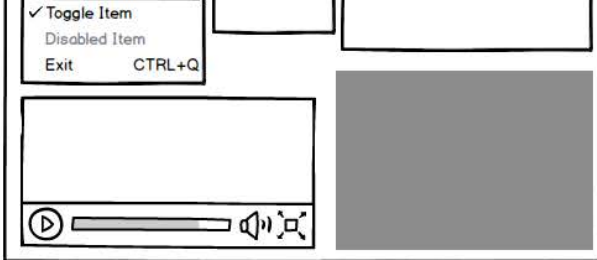
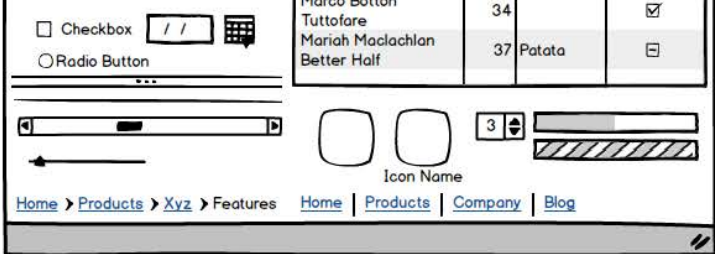


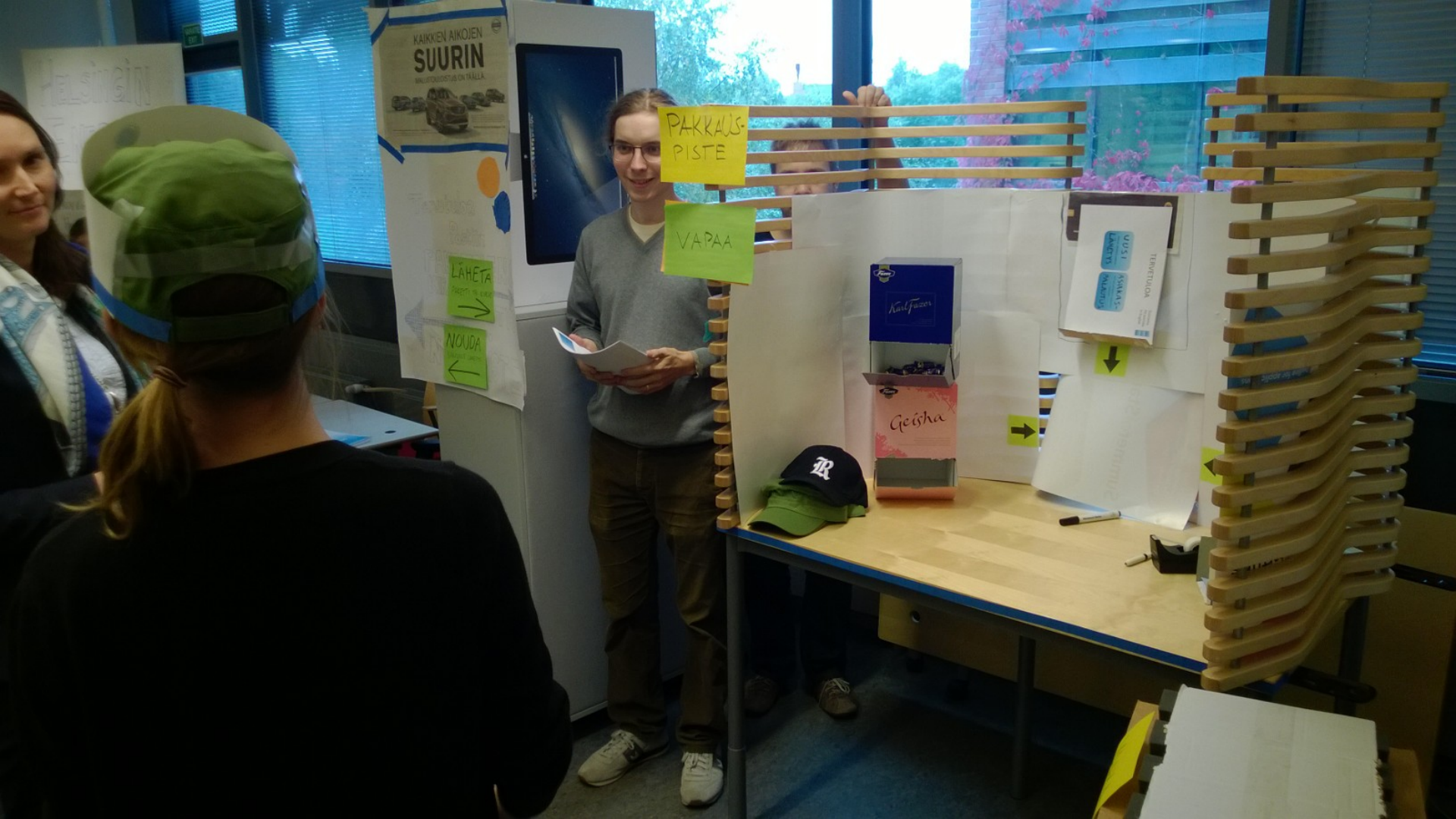
**Is it difficult?**

**No, if you have the right  
mindset.**









KAIKKIEN AIKOJEN  
**SUURIN**  
MÄKIPÖYKÄTÄS ON TÄLLÄ

PAKKAUKSEKSI

VAPAA

LÄHETÄ  
PÖYKÄTÄS  
→

NOUDA  
←

KitKat

Geisha

TIETOKORTTI  
KÄYTTÖ  
KÄYTTÖ

↓

→

LA  
GREEN

MARKER

SCISSORS

WORKSHOP







## Create a Page

Create a Facebook Page to build a closer relationship with your audience and customers.

Pages I Like

Pages I Admin



Local Business or Place



Company, Organization or Institution



Brand or Product



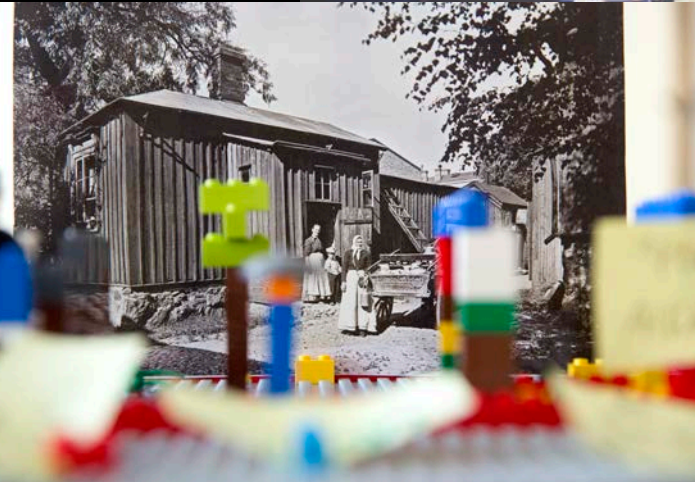
Artist, Band or Public Figure



Entertainment



Cause or Community





261 people like this

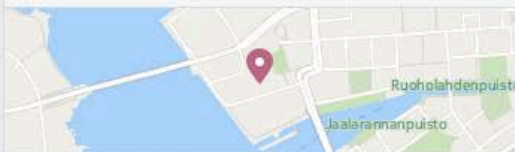


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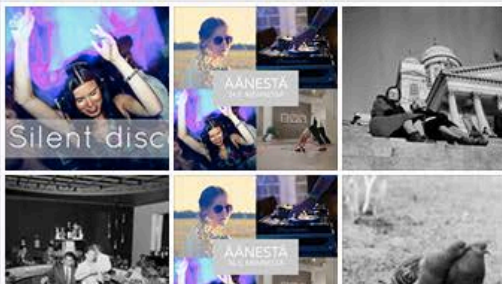


Suomen valokuvataiteen museo, Kaapeliteh... Save Helsinki, Finland

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http://www.valokuvataiteenmuseo.fi/fi/component/con...

PHOTOS



Keikkuva

May 20 · 🌐

Pikkulauantai ja tasan neljä viikkoa siihen, että ensimmäinen Keikkuvan kesäkeskiyöviikko pärähtää käyntiin! Laita 17.6. nyt jo kalenteriisi ja muista vaikuttaa äänestämällä, missä meiningeissä korkataan ihka ensimmäinen Keikkuva Kaapelilla. Kaikkien äänestäneiden kesken arvotaan 5 pääsylippua!





Placeit

Digital Mockups

Apparel + Print Mockups

Design Templates

Pricing

Login

Sign Up

View All (2830)

Devices

iPhone (1444)

iPad (549)

Android (339)

Macbook (247)

iMac (130)

Tablet (95)

Smartwatch (58)

Laptop - Windows (54)

Desktop - Windows (47)

Browser Chrome (8)

More Devices

Template Types

Photo JPG (1837)

Video MP4 (386)

Transparent PNG (331)

Multi Device JPG (188)

App Store Screenshot (88)

Tags

Portrait Position (1784)

iOS (1386)

All Purpose (1273)

Landscape Position (629)

Home (381)

Food (241)

Business / Corporate (175)

Education / Learning (147)

Blurrv Background (136)



iPhone in Portrait Position and MacBook Pro Over a PNG Background Mockup

Use digital mockups to pitch your next app and notice the difference immediately! Go ahead and drop an image of your app



iPhone Mockup Standing on a Colorful Place

Take a look at this super-cool visual asset from Placeit, it's an excellent choice to promote your latest app in a better



Black iPhone Over White Background - App Demo Video

The iPhone has been the best smartphone out there since, well smartphones. And the iPhone 6 is the best version of it yet



iPhone X Mockup Against Transparent Background

Start promoting your latest app for iPhone X with Placeit's iPhone X mockups! This amazing iPhone X template is a great c



MacBook Mockup Template Next to Carefully Arranged Stationery

If you are in the search for eye catching visuals to promote your business, you'll find that it doesn't get any better th



Transparent Mockup of A Pink iPhone 7 In Portrait Position While Floating Angled

Are you looking for a way to convert more with your app? You've reached the right place! Placeit has got beautiful mockup



Frontal Mockup of a White iPhone 7 Plus Over a Transparent Background

Use this very realistic iPhone mockup for your next iOS app pitch! Close the deal instantly by using photorealistic mocku



Black iPad Video Floating in a Black Room

Start showcasing your app with this video of a black iPad floating in a black room. It's a really cool visual that you ca



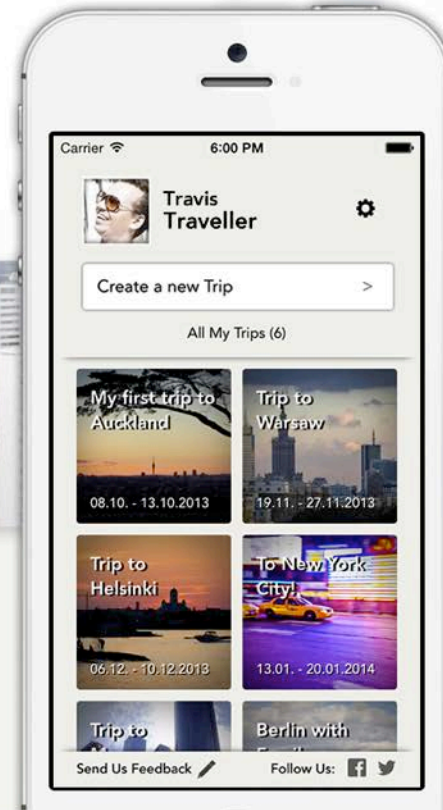
o  
tetet  
ity

# CREATE TRIPS

Social trip planner for the smart traveller.

CreateTrips will be available in **New Zealand** very soon!

Sign up to latest news and special offers. Follow us on Twitter or Facebook to get informed when CreateTrips reaches your App Store.

# EVIDENCE!!!

Defense (you)

Jury  
(panel)

Judge  
(Risto, Hanna)



Defendant  
(your concept)

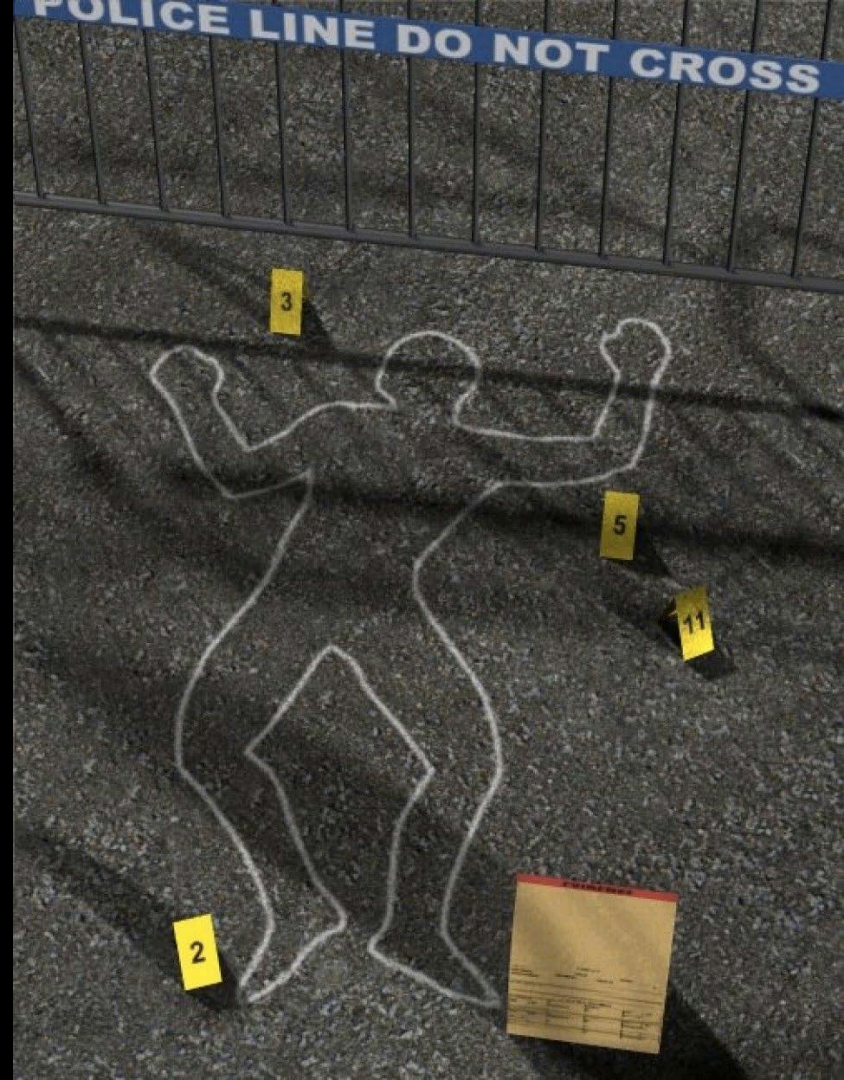
Prosecutor (reality, status quo)

**How does it sound to you?**



# Three approaches to gathering evidence\*

\*your end-user strategy this week!





# INTERVIEW





Are we solving the right problem?

Do we know the motives?

Is our solution understandable?

Am I talking to the right person?

Is our value prop attractive?

Do we speak the same language?

What are their processes?

# Interview:

**Find a problem worth solving**

Who are our customers?

What are our segments?

What are their practical problems?

What are their business goals & problems?

How is the customer organized?

Who decides what?

Getting to know the customers.

Building rapport.

*Fuzzy data.*

*Eyes and ears open.*

*Walking a mile in their shoes.*



# Pitching



# Declan Squared - Microfiber pocket squares & handkerchiefs

by Jason Fullmer

Home

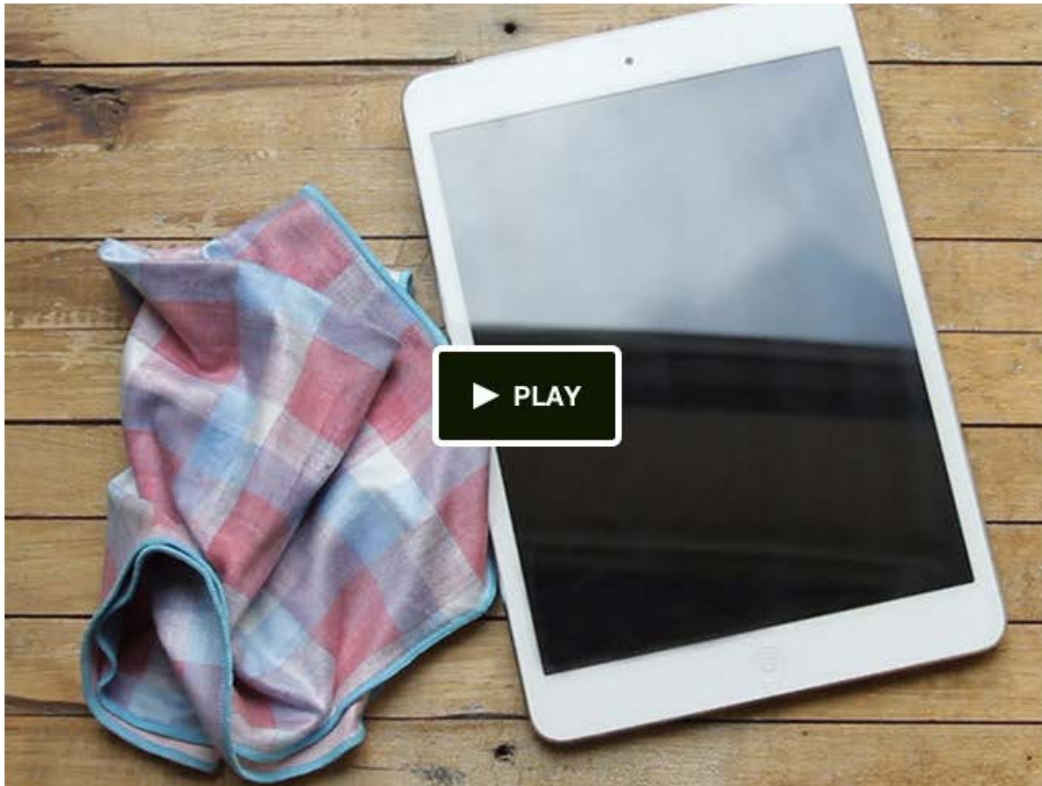
Updates **6**

Backers **1,561**

Comments **37**

📍 Salt Lake City, UT

👜 Fashion



**1,561**

backers

**\$50,673**

pledged of \$6,000 goal

**10**

days to go

**Back This Project**

\$1 minimum pledge

This project will be funded on Thursday Jan 16, 9:00pm EST.

Share

1,018

Tweet

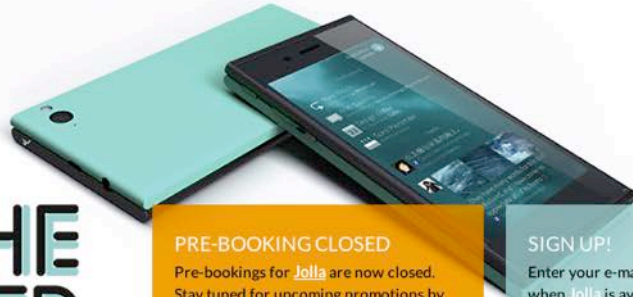
Embed

Remind me



Project by

Jason Fullmer



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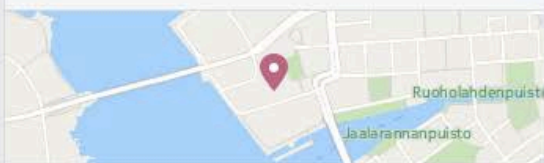
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<http://www.valokuvataiteenmuseo.fi/fi/component/con...>

PHOTOS



Keikkuva

May 20 · 🌐

Pikkulauantai ja tasan neljä viikkoa siihen, että ensimmäinen Keikkuvan kesäkeskiviikko pärähtää käyntiin! Laita 17.6. nyt jo kalenteriisi ja muista vaikuttaa äänestämällä, missä meiningeissä korkataan ihka ensimmäinen Keikkuva Kaapelilla. Kaikkien äänestäneiden kesken arvotaan 5 pääsylippua!







- Placeholder
- Placeholder
- Placeholder
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- Placeholder
- Placeholder
- Placeholder



+ [Red button] [Dropdown 1] [Dropdown 2] [Dropdown 3] [Dropdown 4]

<input type="checkbox"/>	<input type="radio"/>				
<input type="checkbox"/>	<input checked="" type="radio"/>				
<input type="checkbox"/>	<input checked="" type="radio"/>	[Blue bar]	[Grey bar]	[Grey bar]	[Grey bar]





# Pitch

## Validate your solution

How can I test this in a real environment?

Can I add a realistic spin into this?

How can I prove that I am wrong?

Can I scale this up?

I need more quantitative data.

Do I have a business here?

Is my value proposition working?

*Fuzzy and/or clear data.*

*Getting real!*

*Quid pro quo: value for value.*

VIATION

CONCIERGE





## Take the stress out of dinner today!

Five weekly dinner menus based on your preferences, delivered to your app, with a grocery list and sales for your local store.

[Start Now »](#)









**Zappos**  
•com





# Concierge

going all the way

How to test the whole service, not just a feature?

What details, emotions, practicalities etc are there?

Would someone pay me to do all this?

Is my value proposition working? Really working?

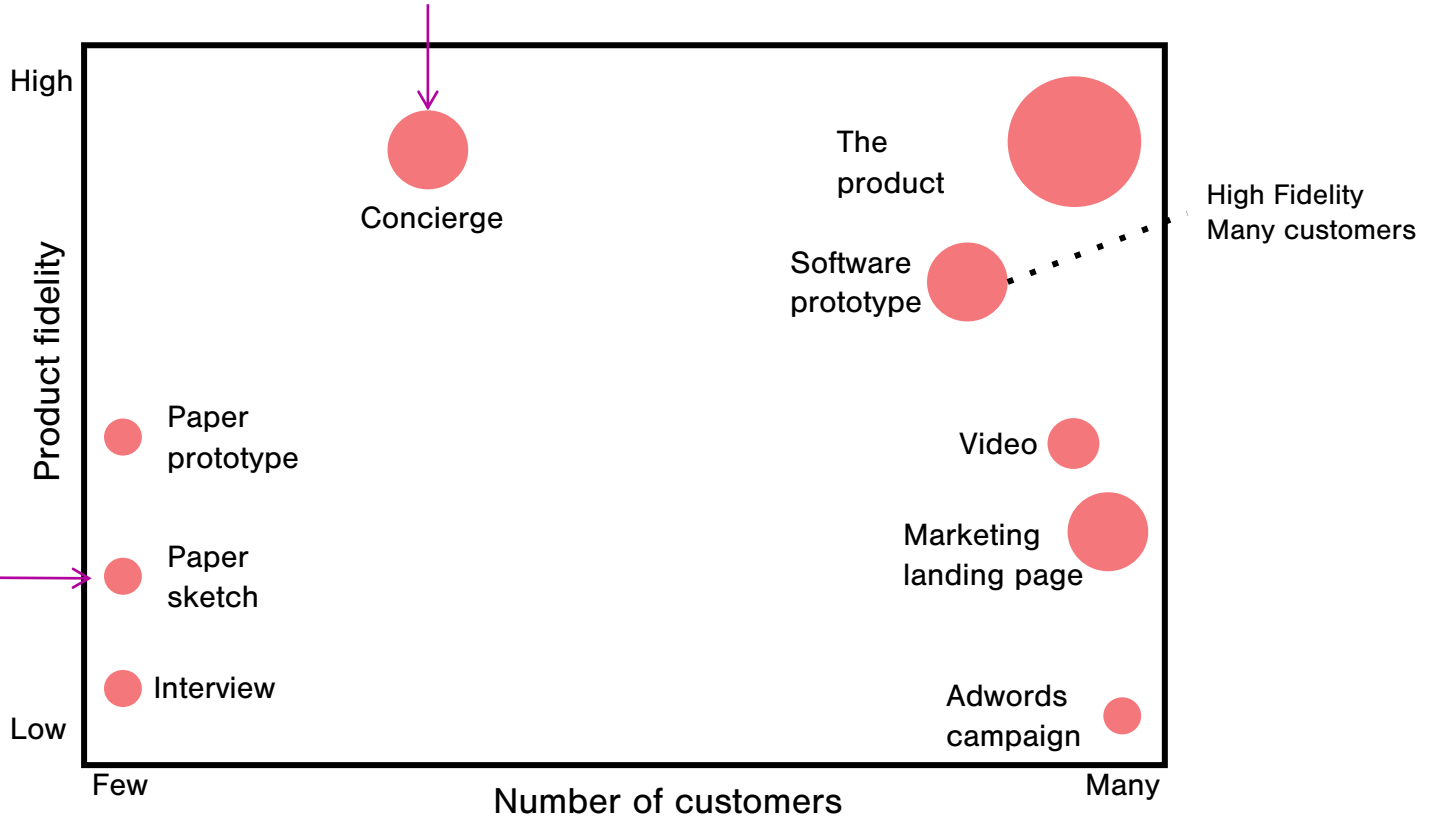
Fake it till you make it!

*Fuzzy and clear data*

*Only few customers.*

*What to automate? What NOT?*

Zappos  
Food on the table



Fake ads →

High Fidelity  
Many customers

**...one more thing.**

**How do you know what to  
experiment first?**

You need to  
identify your most  
*critical assumption.*

The what umption?



Of all the decisions, best guesses, and design decisions  
(i.e., assumptions about your final thing)...  
**which one is most critical  
at this stage?**

Week 2 - Social impact

Week 3 - Business goal

Week 4 - Customer grouping

Week 5 - Insights

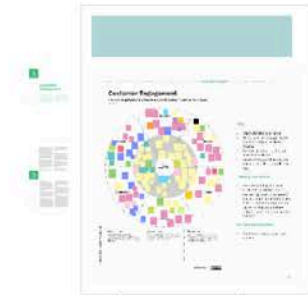
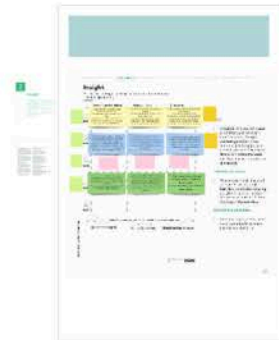
Week 6 - Value proposition

Week 7 - Break

Week 8 - Customer journey



Customer  
Persona  
Value Proposition  
Empathy







**If this assumption  
is wrong, our  
whole concept  
falls apart.**

***Where do we  
need evidence  
the most?***

# Recipe for solid defense

1. Identify with your team, what is your *most critical assumption*.  
(start by listing all critical assumptions alone, share them, and choose one)
2. Discuss what do you want to learn about that assumption?
3. Discuss what kind of evidence would be ideal to make the assumption solid.
4. Plan an experiment that can generate the evidence.  
(Interview, Pitch, Concierge or a combination of these?)
5. Make sure the experiment can prove you wrong!!!
6. **Build** the experiment.
7. **Measure** the results.
8. **Learn** about your assumption.
9. Revise concept.
10. Return to step 1.



Keep in mind!

A prototype without an experiment  
is useless.

An experiment is to generate evidence  
to back up your guesswork.

A good experiment can  
prove YOU wrong!  
And it should.

Keep the threshold low!

What can we experiment  
before lunch / tomorrow / this week  
to get more evidence?

What is our weakest point at the moment?

Customer knowledge?

Technical feasibility?

Lack of strategic alignment?

Unproven value prop?

Anything that requires more knowledge!

**Work on your experiment  
this week. Do the recipe.**

**Back here 17:45.**



# How to prototype a value prop?



**What is the first thing your  
customer's see of your product / service?**

**Your value proposition!  
(not your “solution”)**

# Ohhoh... 250,30 euroa lastenvaatteisiin?



## Rahankäytön seuraaminen ei ole koskaan ollut näin helppoa

Uuden ja helppokäyttöisen Tulot ja menot -näkymän avulla näet verkkopankissasi, mihin rahasi kuluvat.

Korttistokset ja maksetut laskut luokitellaan automaattisesti esim. asumiseen, liikkumiseen ja päivittäishankintoihin. Voit itse muokata

luokitteluja ja näätäliöidä oman näkymäsi.

Tulot ja menot -näkymä on käytössäsi Danske Bankin Verkkö-, Tablet- ja Mobiilipankeissa.

Lue lisää [danskebank.fi/tulotjamenot](http://danskebank.fi/tulotjamenot)

**A DELICIOUS  
MOUTH-WATERING  
FOOD PICTURE  
HERE WOULD MAKE  
YOU 73% MORE  
INTERESTED IN  
TRYING OUR  
OAT FRAICHE.**

**APPARENTLY,  
WE ARE NOT  
VERY INTERESTED  
IN SALES.**



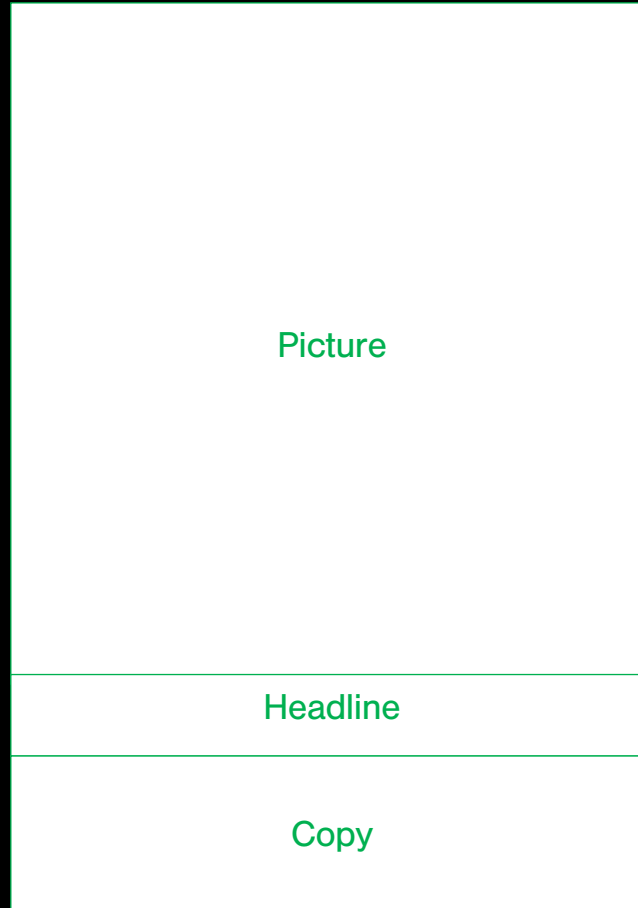
JCDecaux



**OGILVY**  
**ON** “I hate  
rules”  
**ADVERT-**  
**TISING**

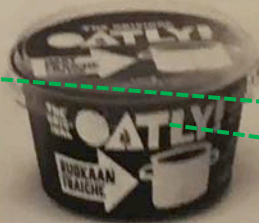
# LAYOUT

Order of importance:  
Picture, headline, copy



**A DELICIOUS  
MOUTH-WATERING  
FOOD PICTURE  
HERE WOULD MAKE  
YOU 73% MORE  
INTERESTED IN  
TRYING OUR  
OAT FRAICHE.**

**APPARENTLY,  
WE ARE NOT  
VERY INTERESTED  
IN SALES.**



JCDecaux

Picture

Headline

Copy

Logo

**The Fake Ad/Brochure  
forces your team to  
communicate:**

**What is it we are doing?**

**What's the value to the  
customer?**

**How does it differentiate  
from other solutions?**



**KEEP  
CALM  
AND  
FAKE  
IT**

## **NOTE!**

**The idea is NOT to become an Art Director for an advertisement agency!**

**Think more of a brochure than a super stylized advertisement.**



Helppoa pankkiasiointia

Henkilökohtaista  
neuvontaa.  
Kotonasi.



Asiantuntijamme  
tavattavissa myös verkossa  
Verkkotapaamisessa saat  
asiantuntijaneuvontaa vaikkapa  
omassa keittiössäsi – aivan kuten  
konttoreissamme.



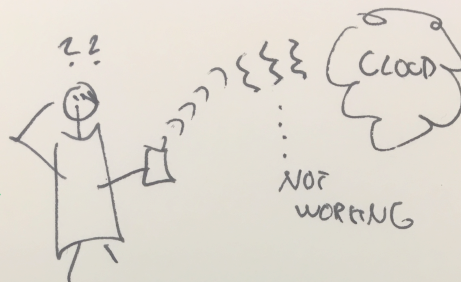
Palvelemme itäisiin  
puhelimessa  
Sijotus- ja asuntolaina-asiantunti-  
jamme ovat vain puhelinsoiton päässä  
– aamusta iltaan (ma–pe klo 8–18).  
Soita 0200 2580 (pvm/mpm).



Helppokäyttöinen näkymä  
menoihisi  
Verkkopankin henkilökohtaisen  
Tulot ja menot -näkyminen on helppo  
helposti nähdä rahasi kuluvat.

Tutustu muihin helppoihin tapoihin  
hoitaa pankkiasioita: [danskebank.fi](http://danskebank.fi)

Danske Bank



Picture

HEADLINE

• BENEFIT # 1

• BENEFIT # 2

Headline

• BENEFIT # 3

Copy

CALL-TO-ACTION

LOGO

**A!** Aalto-yliopisto  
Aalto-universitetet  
Aalto University



## ANKOSÄHKÖ A SUOMESSA

ijöiden joukkoon. Aurinkokum  
eelin aurinkovoimalasta ja pää  
van energian tuotantoa Suome

rinko

 Helsingin Energia



VAIN  
19,95  
€/KK

## AURINGO VIRTAA KOTIISI?

Haluatko paikan auringosta ja ympäröivästä  
Saat sen omasta nimikkopaneelista ja  
uudessa aurinkovoi

Lue lisää: [www.helen.fi/aurinko](http://www.helen.fi/aurinko)



VAIN  
19,95  
€/KK

## AURINKO KASVAA SUOMESSA

Liity tulevaisuuden tekijöiden joukkoon ja  
saat oman nimikkopaneelin aurinkovoimalla  
kasvattamaan uusiutuvan energian tuotantoa Suome

Lue lisää: [www.helen.fi/aurinko](http://www.helen.fi/aurinko)



VAIN  
19,95  
€/KK

## ÄMPÄRILLINEN BENSAA VAI KUUKAUDEN AURINGOT KOTIISI?

Ryhdy kerrostalosi aurinkokuninkaalliseksi. Saat osuuden  
aurinkovoimalasta ja nimikkopaneelisi kuukauden tuoton.

Lue lisää: [www.helen.fi/aurinko](http://www.helen.fi/aurinko)

 Helsingin Energia



Your three biggest risks this week

**Doing “just a user test”,  
not having an evidence mindset.**

**Not seeing the business model  
as a key piece of design.**

**Not starting to see the **value** for  
the client organisation  
(you’re too solution focused)**



## Final Prez Structure?

Positioning: what was the brief? Business goals? Societal connection?

Strategic Focus of Customer Groups:  
how well did you argue your focus?

Customer transformation (video, perhaps):  
the story of who do you want them to become.

The whole concept (under the hood):  
what is it, how does it work, how does it differentiate,  
benefits to client & end user? Which parts are critical at this stage?

**Evidence:** what is your argumentation + evidence to back up  
your decisions, focus, and next steps.

**Your contribution:** what is the value of your work?

Clarity of presentation. Remember, it should be understandable to outsiders.

A photograph of two men in dark suits and ties, crouching on a dark asphalt surface at night. They are examining a dark-colored car. The man on the left is pointing towards the car, while the man on the right is looking down at the ground. Three yellow evidence markers are visible on the ground: marker 1 is near the front of the car, marker 3 is in the middle, and marker 2 is near the rear. The scene is dimly lit, with a dark background.

## Video #7: Experiment & Evidence

What is the most critical assumption in your concept?

What kind of an experiment did you do? How did you maximize realism?

What is your evidence after the experiment?

What did you learn?

How has this changed or validated your concept?