THE SCIENCE OF IMPROVING INNOVATION

IMPLEMENT
CONSULTING GROUP_

HYBRID AGILE & THE MISSING LINK

Efficient development of irresistible products & services

LPPDE Europe 2023, Munich April 24th

Who am I?

Henrik Sonnenberg

Lives in Copenhagen, wife, 3 kids, 1 dog, 1 cat

Sports (tech) nerd, snowboard, nordic skiing, in-line skate, swimming & mtb. Anything Garmin can track

Education

- Engine fitter/ CNC Operator (Denmark)
- Mechanical engineer (DK/ Germany)
- MBA Operations (USA/ France)

Work

- MAN Energy Solutions (DK)
- Mercedes Benz (Germany)
- KUKA (Germany)
- Yaskawa Electric (Germany)
- Gemini Consulting (Germany)
- Implement Consulting Group (Denmark)
  - Partner, Agile & Innovation

IMPLEMENT
CONSULTING GROUP_

NORDIC ROOTS GLOBAL PERSPECTIVE

Headquartered in Copenhagen with offices in Aarhus, Stockholm, Malmo, Gothenburg, Oslo, Zurich, Hamburg, Düsseldorf, Munich and North Carolina, our heart is in the North. With +1300 consultants, multinational clients and worldwide projects, we offer expertise with a global perspective.

We believe that great organisational impact leads to great impact for humanity. Implement was created to help make true expertise turn into real change.

Founded in **1996**

Employee-owned

Average CAGR of **20%**

Working **globally**

Raleigh, North Carolina

Oslo

Stockholm

Gothenburg

Aarhus   Malmo

Copenhagen

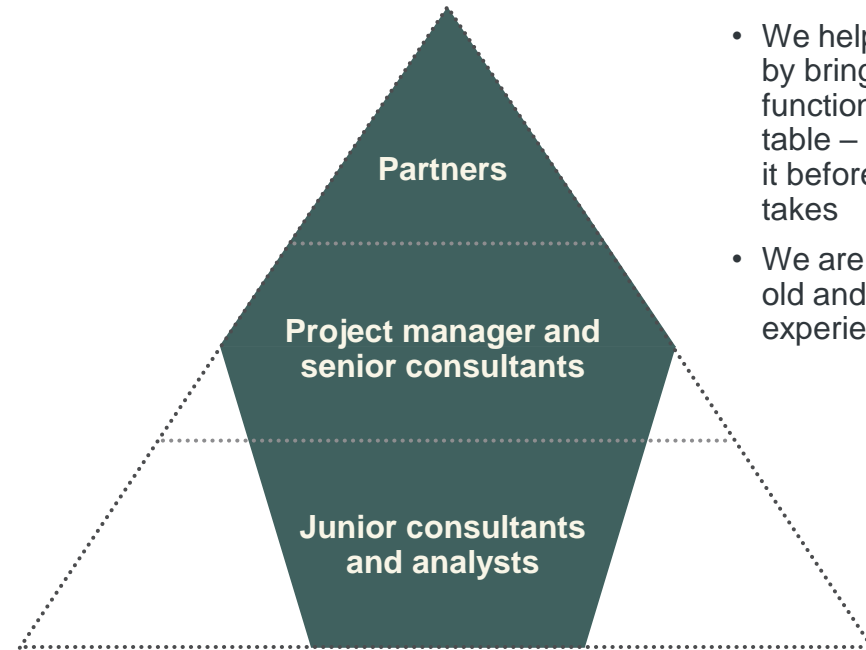Hamburg

Düsseldorf

Munich

Zurich

COLLABORATIVE CONSULTING...

We don't work for our clients – we work with our clients

Only **1/3** of all change initiatives have the desired **impact** …

We aim to bridge analytical depth with a deep sense of what it takes to make things happen

SOLVING THE PROBLEM

Analytical understanding	**Change with Impact**
	Understanding of change

MAKING IT HAPPEN

Partners

Project manager and senior consultants

Junior consultants and analysts

- We help companies transform by bringing seniority and functional expertise to the table – people who have done it before – and know what it takes

- We are on average 37 years old and rely much more on experience than our US peers

WORKSHOP OBJECTIVE

- Help our companies & colleagues develop the products and services that the world really needs

- Help do that with greatest possible engagement and lowest possible resource consumption

- Inspire each other with new thoughts and practice around Agile NPD & validation

- Reflect and capture the best "next thing" to do (different) back home, improving performance of my company

AGENDA:

08:30 **Introduction & individual choice of reflection "objects"**

09:20 **Challenges in Product Development + Group Talk**

09:55 Break

10:05 **New thinking needed: Hybrid Agile & The missing link + Group Talk**

11:10 Break

11:20 **Deep-Dive into validation**

12:10 **Outro & the Letter to Myself**

12:30 End-of-Workshop

- Name & company

- Responsibility & vision/ targets

- Agile maturity (0-10) you & your firm

- 1 thing your company is good at regarding Agile NPD

- Expectations of this workshop

WHO
ARE
YOU

WORKSHOP GROUND RULES

Open for other ideas

Trust to share

Active together – we make this great

Practical

Even participation

What happens in Vegas

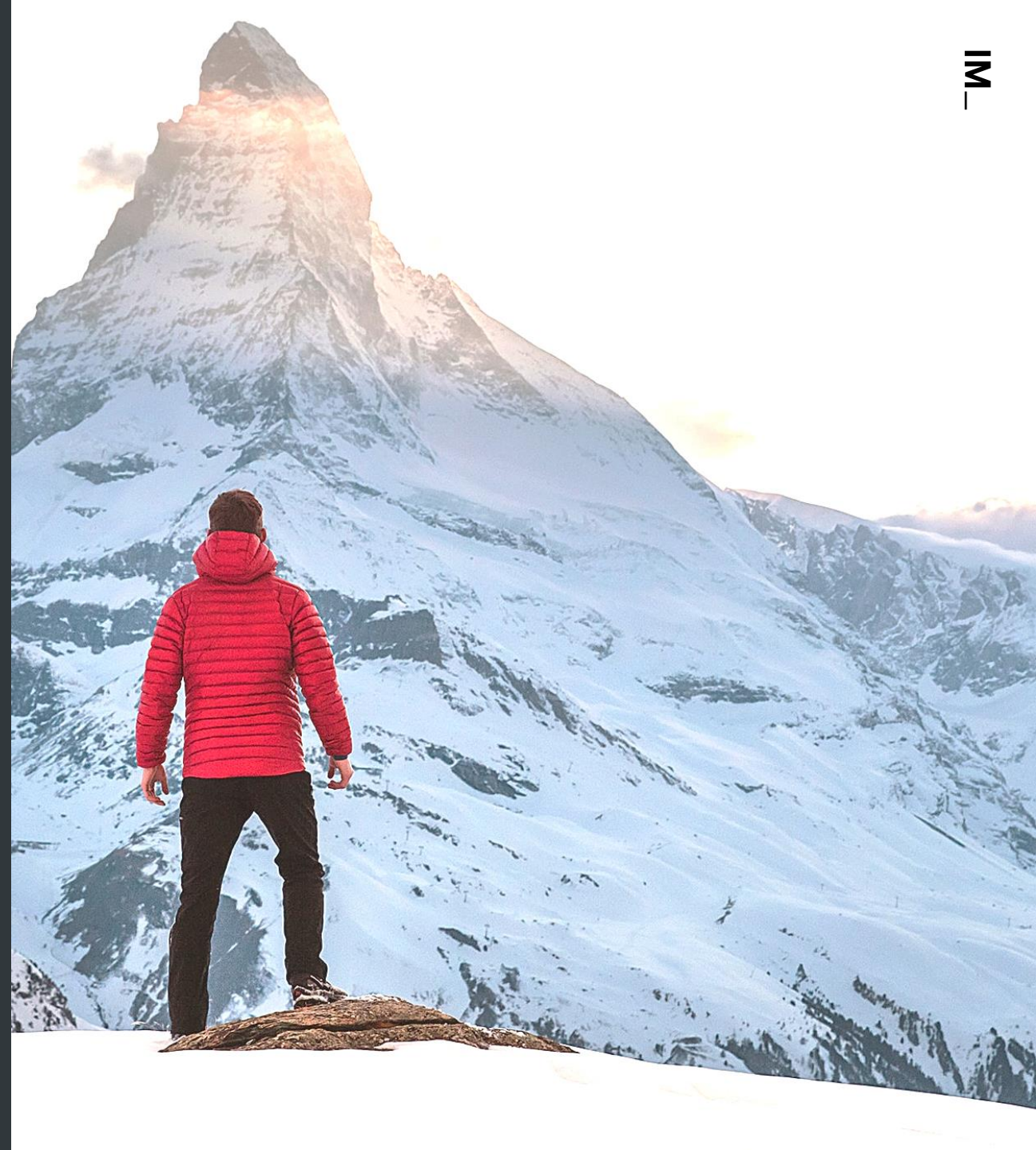# LET'S ENSURE MAX RELEVANT & CONCRETE DISCUSSIONS

It stays in Vegas ☺

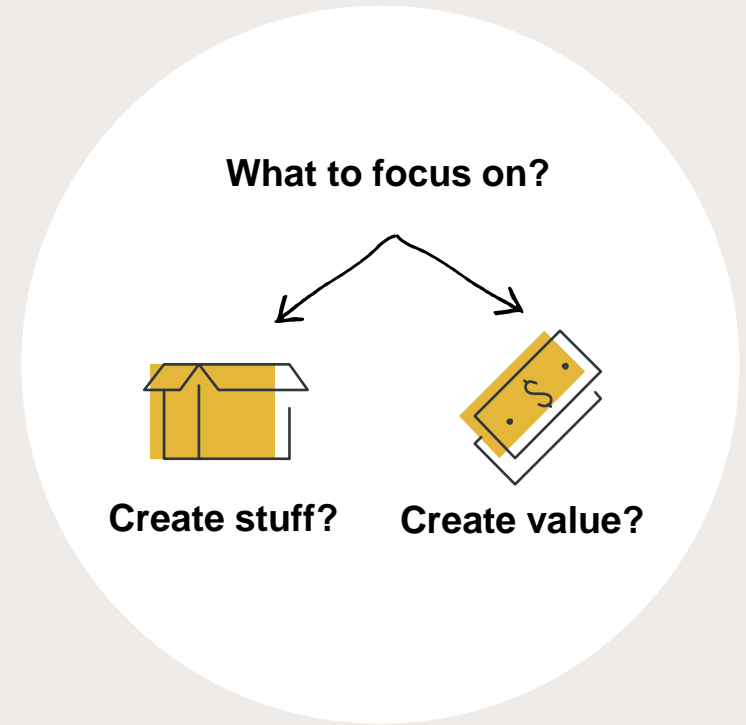Individually, please think an "object" for discussion and improvement

- A unit/ area you are part of or leading

- A specific & important NPD project
  - Early in its journey
  - Target impact
  - Launch date

5 BIG

challenges of product development

#1
IT'S CALLED
PRODUCT DEVELOPMENT

What to focus on?

Create stuff?   **Create value?**

Strategy/
insights

Research and
development

Sell like
mad

Idea ◆ **Concept** ◆ **Detailed design** ◆ **Testing**

#2
LAUNCH IS THE END
— NOT THE BEGINNING
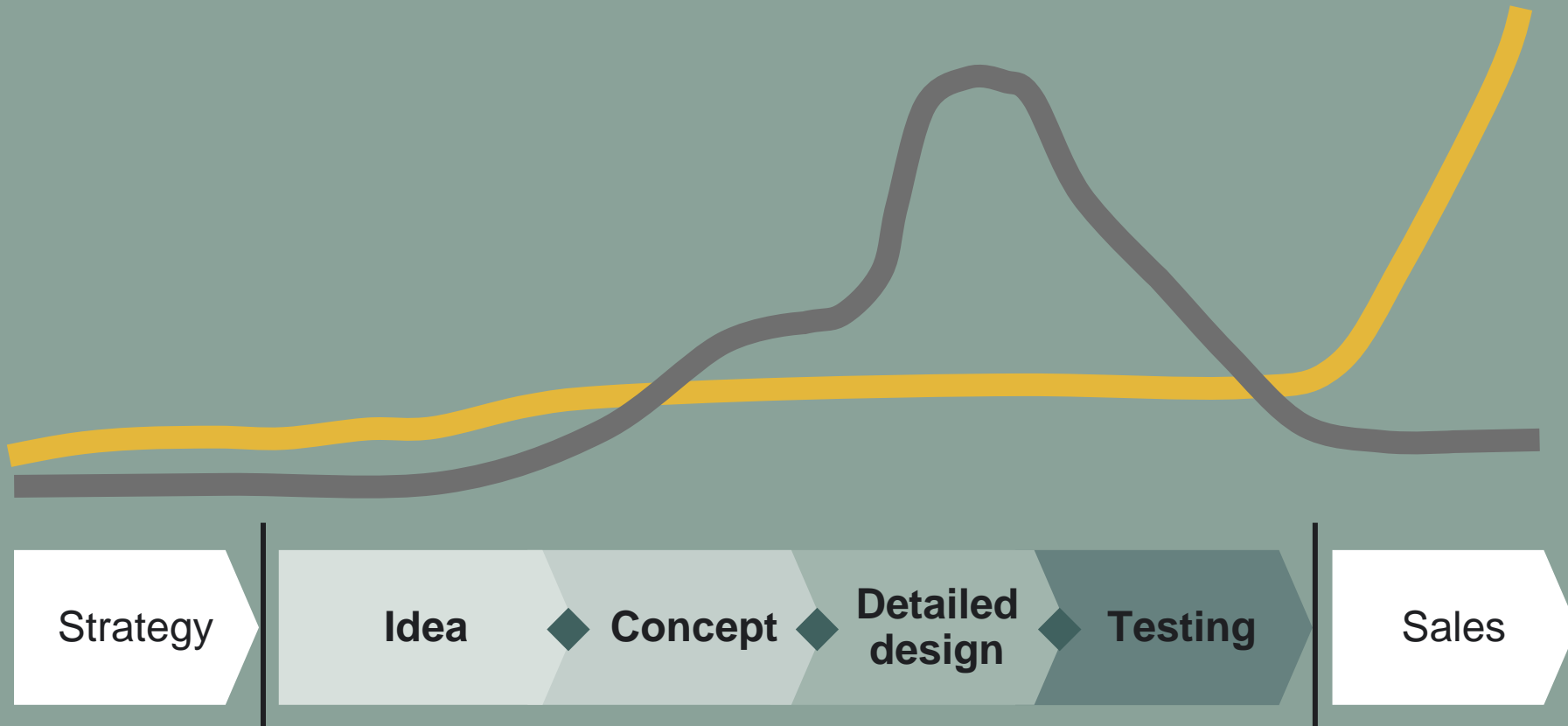
LEARNING:
WHAT
CUSTOMERS
CARE ABOUT

DEVELOPMENT
EFFORT

Strategy	Idea	Concept	Detailed design	Testing	Sales

#3
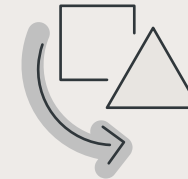# HANDOVER OF RESPONSIBILITY

FRONT-END

(Define the need)

Handover

DEVELOPMENT

(Deliver the solution)

(Think)

(Do)

#4
WE DEAL WITH UNCERTAINTY USING PREDICTION & WEAK EVIDENCE

BUSINESS CASE

BASED ON **PREDICTIONS**

BASED ON **"SAY EVIDENCE"**

#5
INSIDE-OUT
AND
SOLUTION FOCUS

We
can make
money

We can operate
the business

Customers will buy it

Users think it's a good idea

We can build it

We think it's interesting
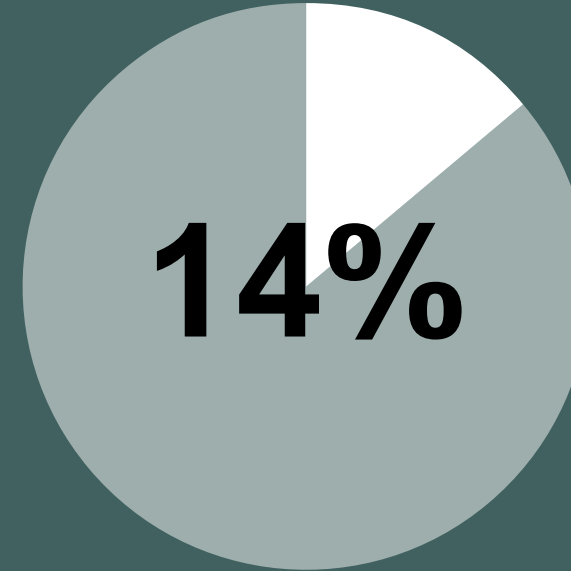
36%
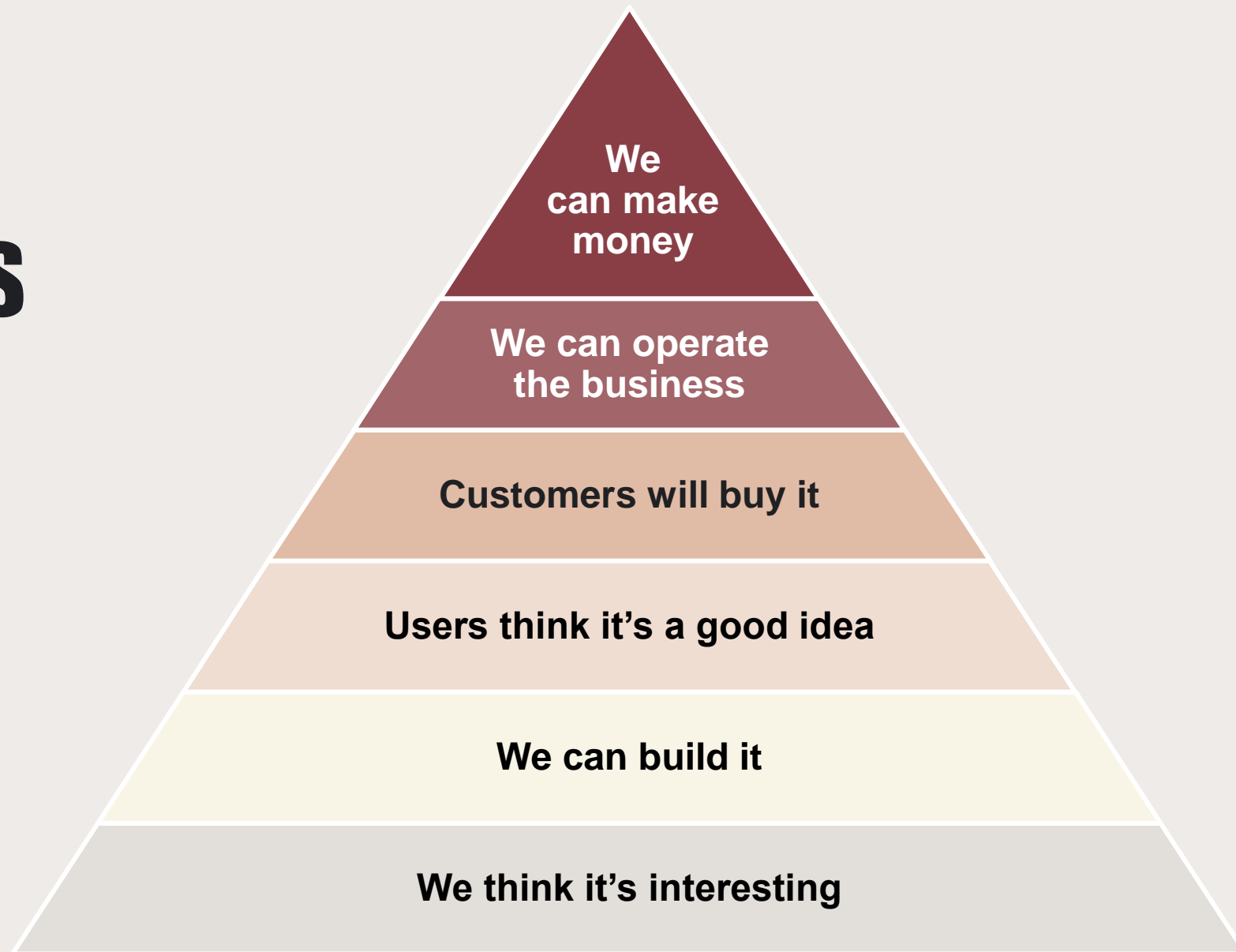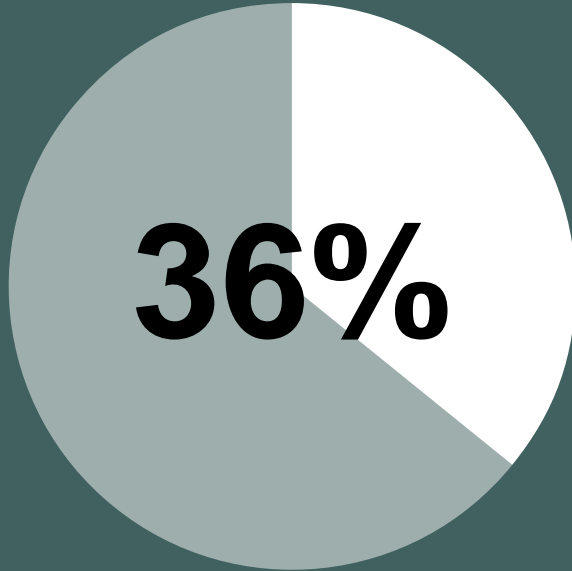
of all projects today are characterized as successful*

14%

of knowledge workers are fully engaged in their work*

*CHAOS report, Standish Group, 2018 & Gallup, 2020

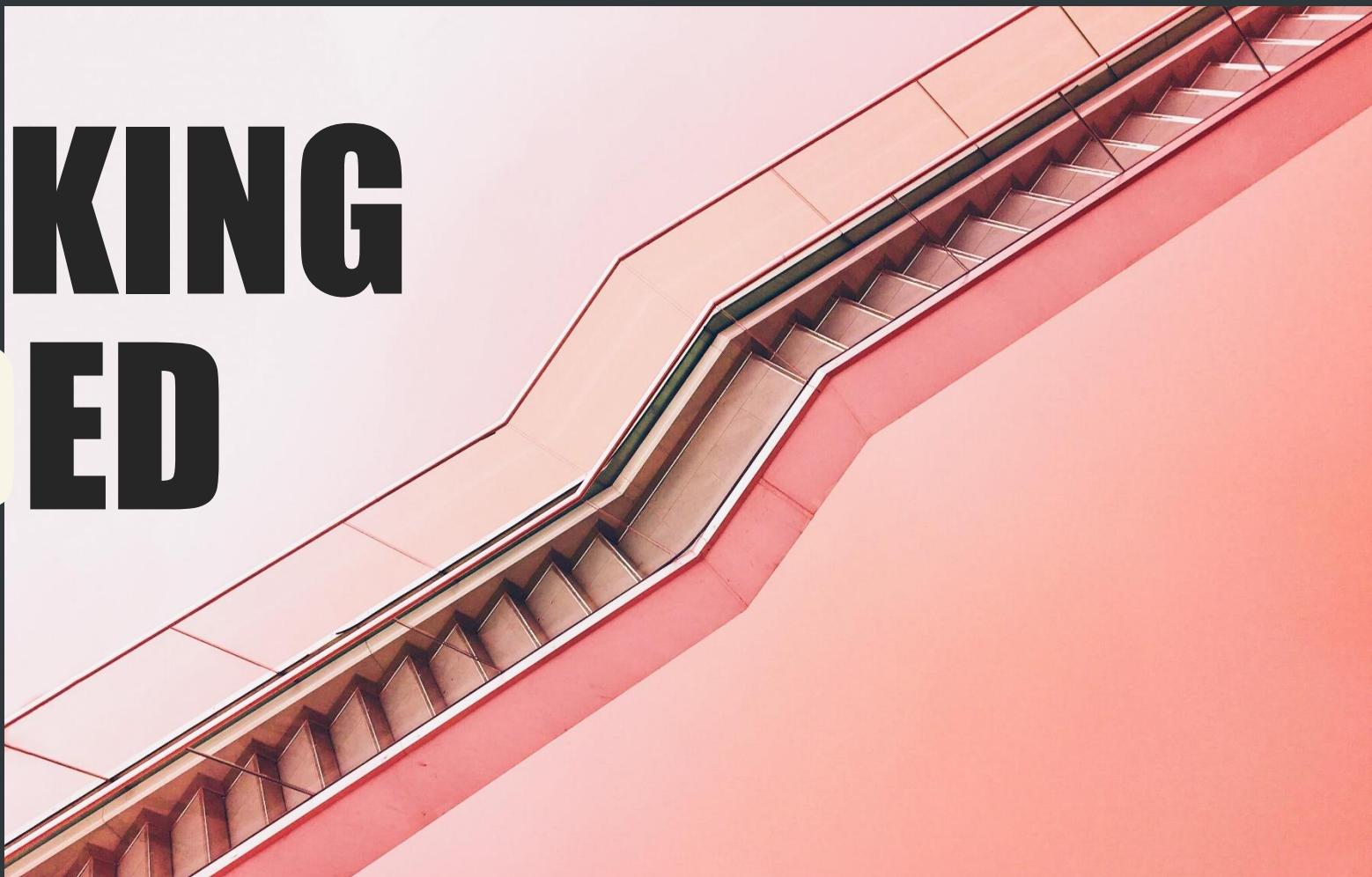# THINK OF YOUR "OBJECTS": UNIT/ AREA OR CHOSEN PROJECT

- Which of the mentioned challenges do you recognize?

- What other opportunities for improvement do you see?

BREAK

NEW THINKING NEEDED

HYBRID AGILE

- Solve user problems with new solutions (not just operational improvement).

- Solution is more than software.

- Create business impact and not just features.

- Firms with existing development setup and process (& physical supply chain)

Scaled agile

Stage gate/ linearity

Scrum

HYBRID AGILE

Lean start-up

Design Thinking
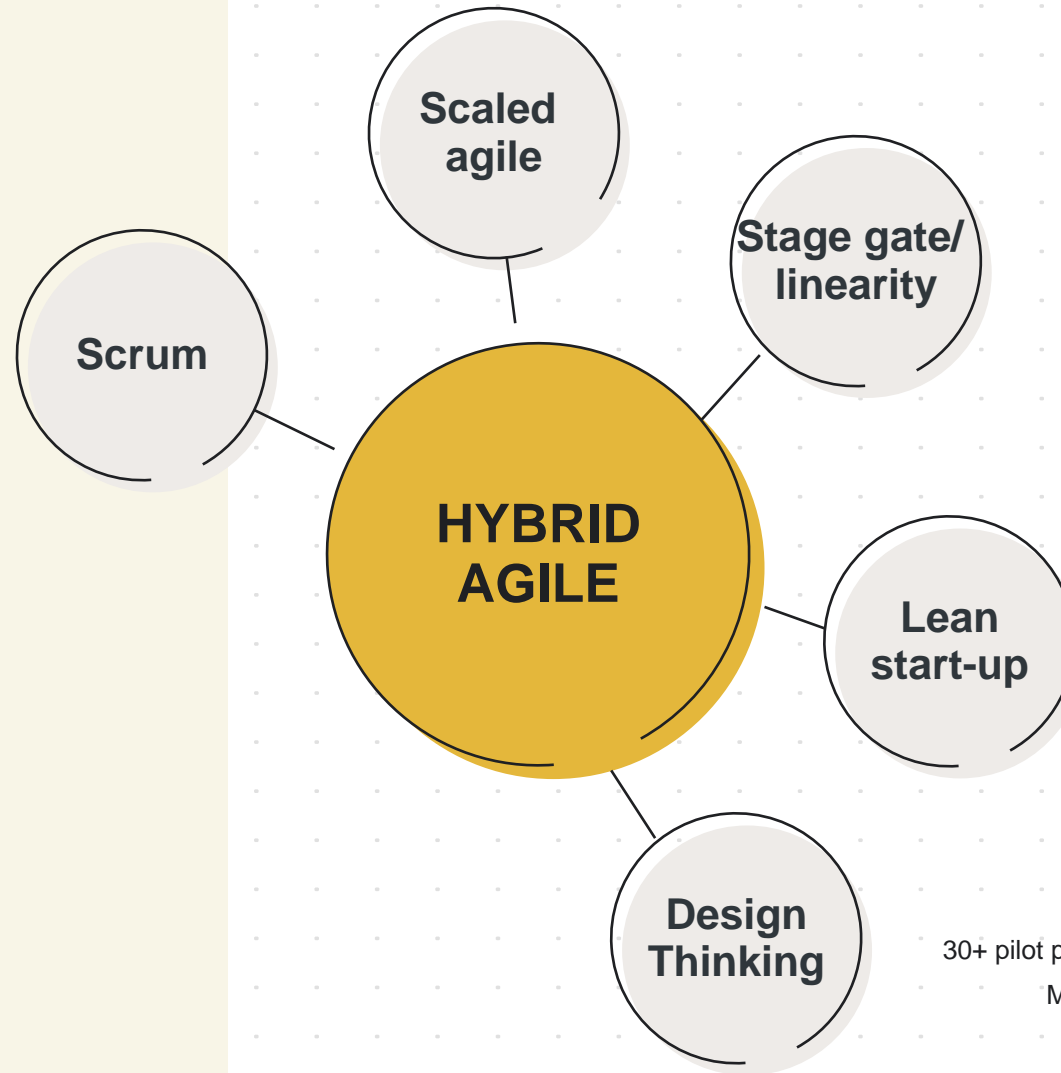
Half Double Community of 2,500+ PMO/PM professionals

30+ pilot projects conducted across industries

Method impact validated by research (3 universities)

Certifications by APMG

HYBRID AGILE IS HERE TO STAY

Project Management Journal 2020

- Study of 477 cross industry projects

- Andrew Gemino, Blaize Horner Reich, and Pedro M. Serrador

Key findings

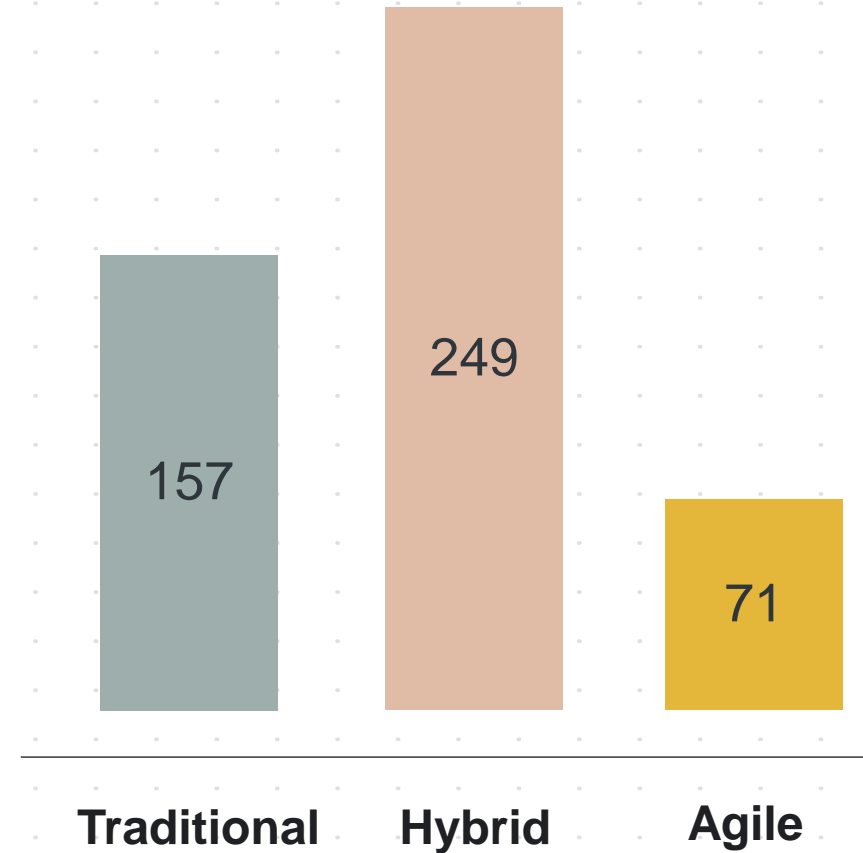- Hybrid is the most widespread method

- Agile outperforms Traditional in terms of stakeholder success

- More surprisingly, Hybrid outperforms Agile in terms of stakeholder success

157
249
71

Traditional   **Hybrid**   **Agile**

We believe that three principles should be at the core of all development projects

IMPACT

Focus more on impact than deliverables

All commit to end-to-end value

Frequent value demonstrations

FLOW

Keep the project (the value process) flowing at almost any cost

Cross functional teams co-located to minimise handover loss

Highly allocated (+50%) multi-skilled teams

LEADERSHIP

Leadership and decision authority as close as possible to real insights

Small sponsor teams and frequent touchpoints

Facts & decisions in the open

A fixed cadence has a lot of benefits

FIXED MEETING CADENCE TO CREATE...

Joint vision, strong focus, high engagement, speed and reduced collaboration waste.

Standard agendas help PMs/ scrum masters grow faster in their leader roles.

flow

0 Vision & Initial product backlog

1 Assumption and Sprint Planning

2 Daily stand-up

3 Weekly review and adjustments to plan

4 Biweekly product owner meeting

5 Full demo of builds and tests

6 Refine requirements/ product backlog

7 Sprint execution review and retrospective

SEVEN
Fixed sprint events (1 month)
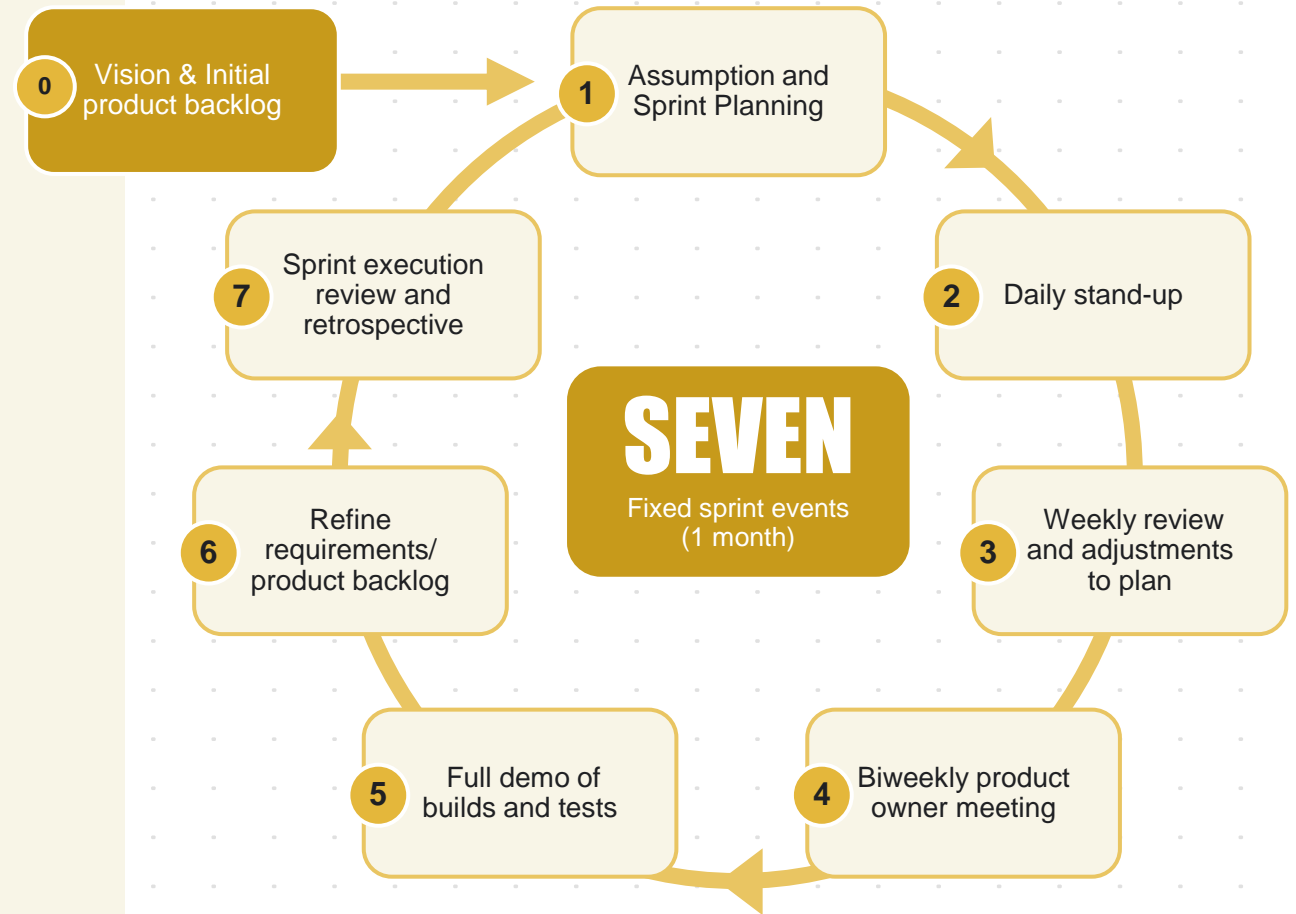
COLOCATION SETUP TO FUEL COLLABORATION

DIY: The team creates, builds and owns the room

All plans are visual, printed on posters and visible at all times. Deliverables are documented and updated on post-its

The placement and the order of the visual plans mirrors the flow in the fixed project takt.
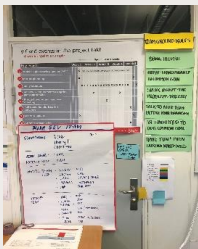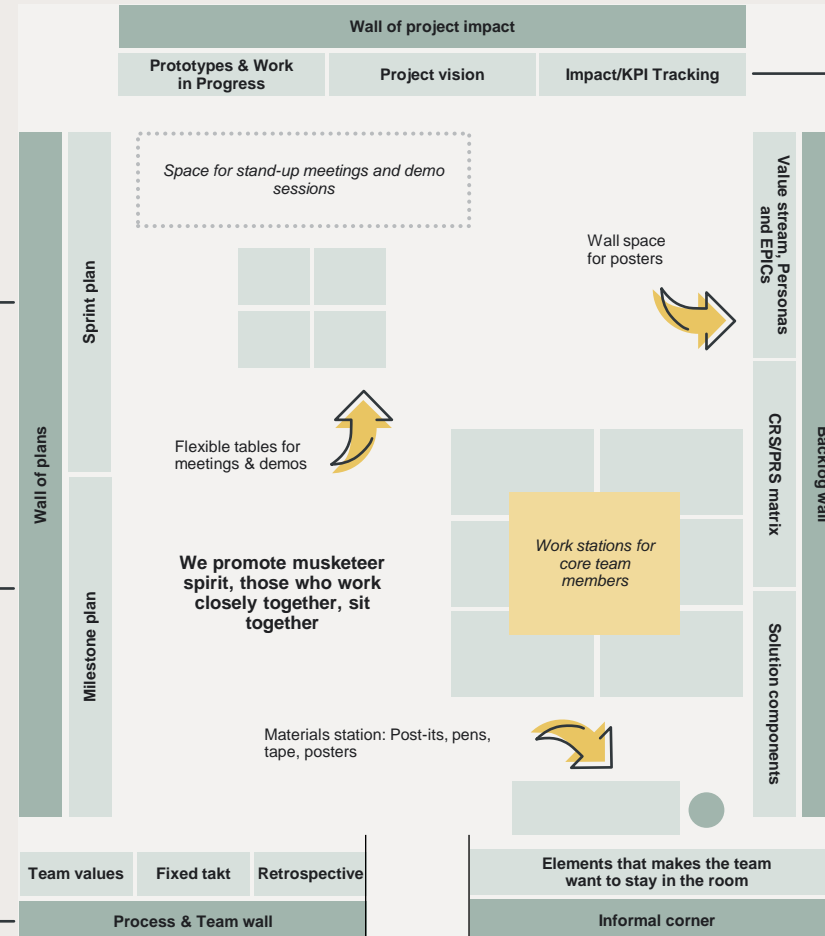

Team rules, retrospective, the fixed takt and other process related elements are gathered in one area

Wall of project impact

| Prototypes & Work in Progress | Project vision | Impact/KPI Tracking |

Space for stand-up meetings and demo sessions

Wall space for posters

Value stream, Personas and EPICs

Flexible tables for meetings & demos

Sprint plan

Wall of plans

We promote musketeer spirit, those who work closely together, sit together

CRS/PRS matrix

Backlog wall

Work stations for core team members

Milestone plan

Solution components

Materials station: Post-its, pens, tape, posters

| Team values | Fixed takt | Retrospective |

Elements that makes the team want to stay in the room

Process & Team wall

Informal corner

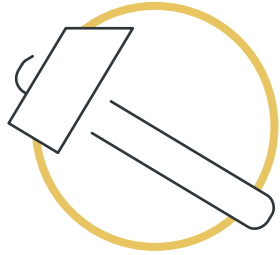Physical solution elements are present together with the project vision and effect targets so that everyone – including external visitors – understand what this project is about at a glance
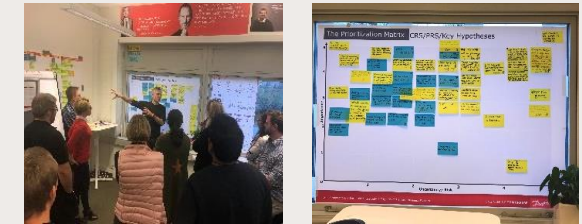
We prioritize to sit in the room – when working with project tasks *and* other tasks. Remember to include elements that create the wish to spend time in the project room, such as a coffee machine, candy and team pictures

Some joint operating principles are needed to guarantee high performance in the project team

Build & demo each sprint

At the end of each sprint, we present physical solution elements to simulate the value chain to key stakeholders

Prioritise Co-location

We prioritise to show up and work from the project room to enable faster decision making and better collaboration
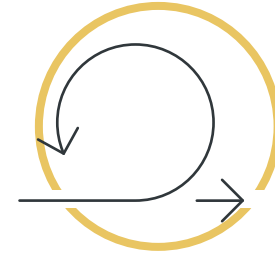
Get fast insights from the real world

We interact with our customers, establish fast learning loops and work iteratively to maximise product value to our customers

Just do it!

We have the knowledge and autonomy within the team to ACT

Stick to the takt

We never depart from the 7 fixed events

… But

It is quite a big continuous effort to really achieve this.

DANGER!

Great engagement & efficient development of products, that nobody wants.

MISSING LINK

**Methods & mindset to
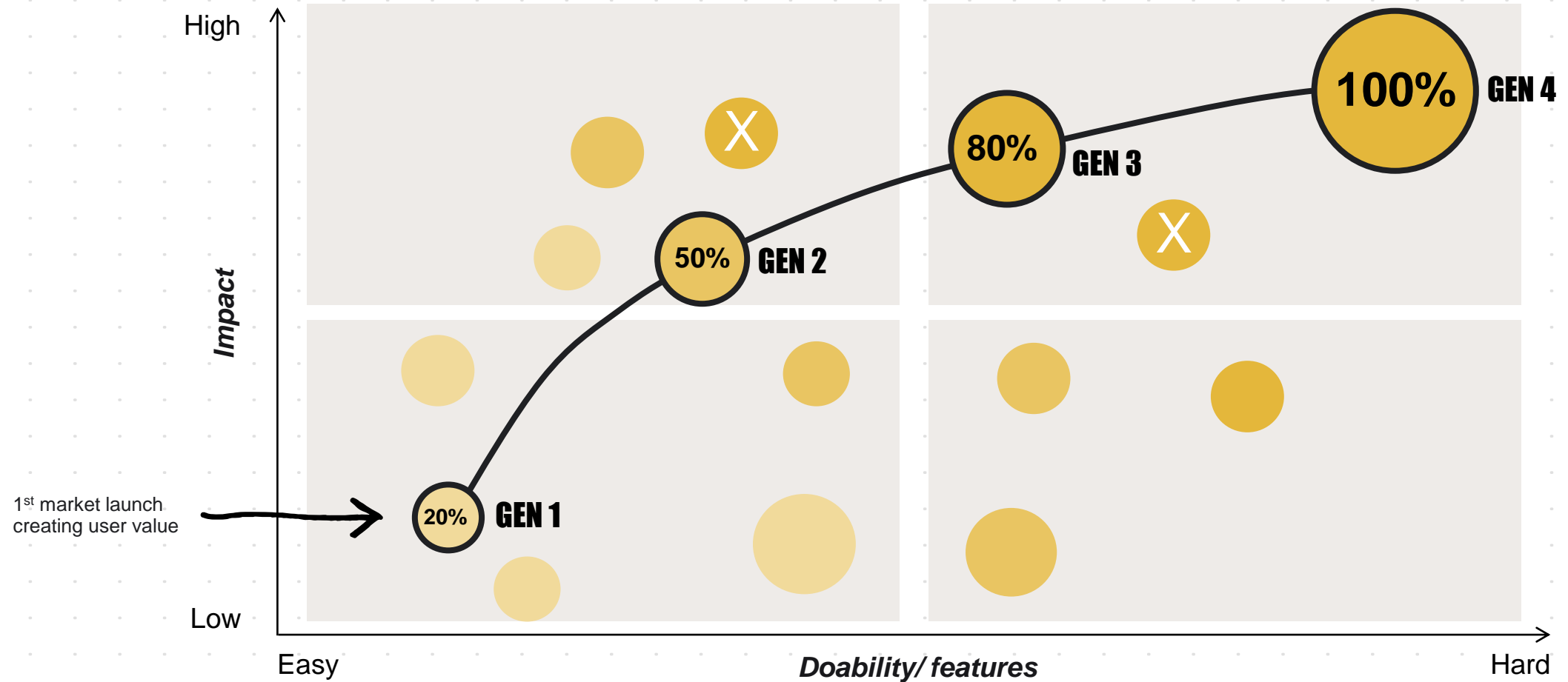validate & de-risk investment**

Generate the "end-game vision", the paths towards it, and then get moving on the first version

High

Impact

100% GEN 4

X

80% GEN 3

X

50% GEN 2

20% GEN 1

1st market launch creating user value

Low

Easy

Doability/ features

Hard

2 New solutions are uncertain by design, therefore validation process must be firm to not loose orientation - or money

IM_

Envision
Value Proposition & use case

Extract assumptions

Kill

Adjust

Decide

Accelerate

Execute experiment

BUILD

LEARN   MEASURE

Focus effort on leap-of-faith assumptions

Assumption ●
Design ●
Metrics ●
Success ●
criteria

Design experiment to generate valid results

Assumptions based process

Traditional forms of development apply to little rigor to "Desirability validation" – often building solutions that work, but creates too little value for the users

Desirability

Does anyone want it?

Can we build it?

Feasibility

Should we build it?

Viability

3
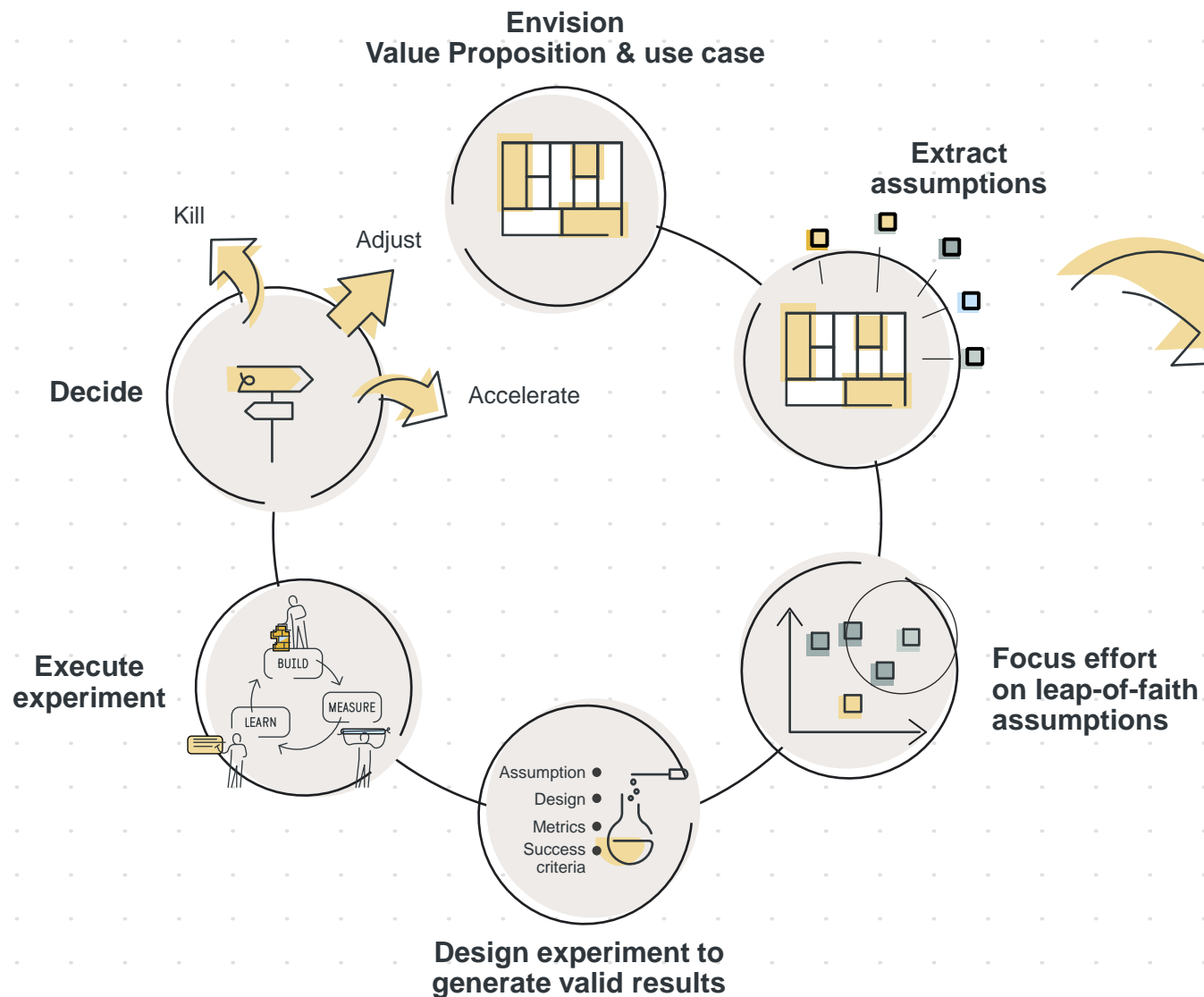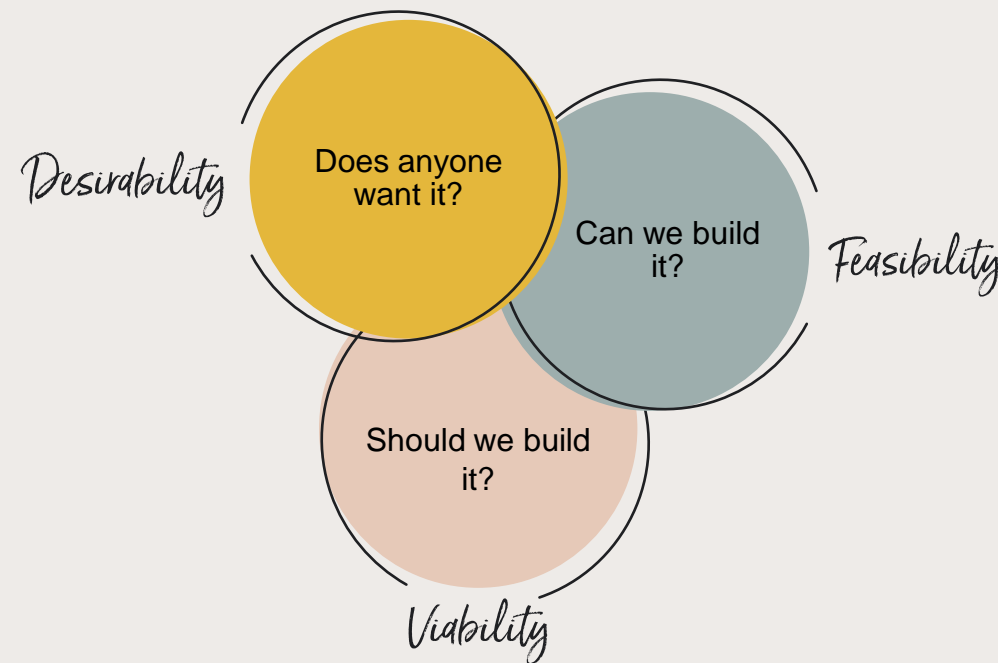
A change from "entitlement" funding to "metered" funding is often needed

IM_

If we say YES, we say YES to

- The specific contract for next timebox
  - Target metrics & deliverables
  - Investment: People, services & equipment
- Further exploring the vision & path towards it

D F V

Metered funding for next timebox only.

And only if positive and real-world validation of

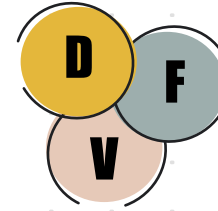- Desirability, Feasibility & Viability

Low uncertainty	Idea	Concept	Detailed design	Testing	
	Idea/concept	1st release Critical needs	2nd release 80% needs	3rd release +100%	**Vision**
High uncertainty	Build and sell 1	Refine and sell 10	Refine and sell 100	Refine and sell 1,000	

De-risking

4
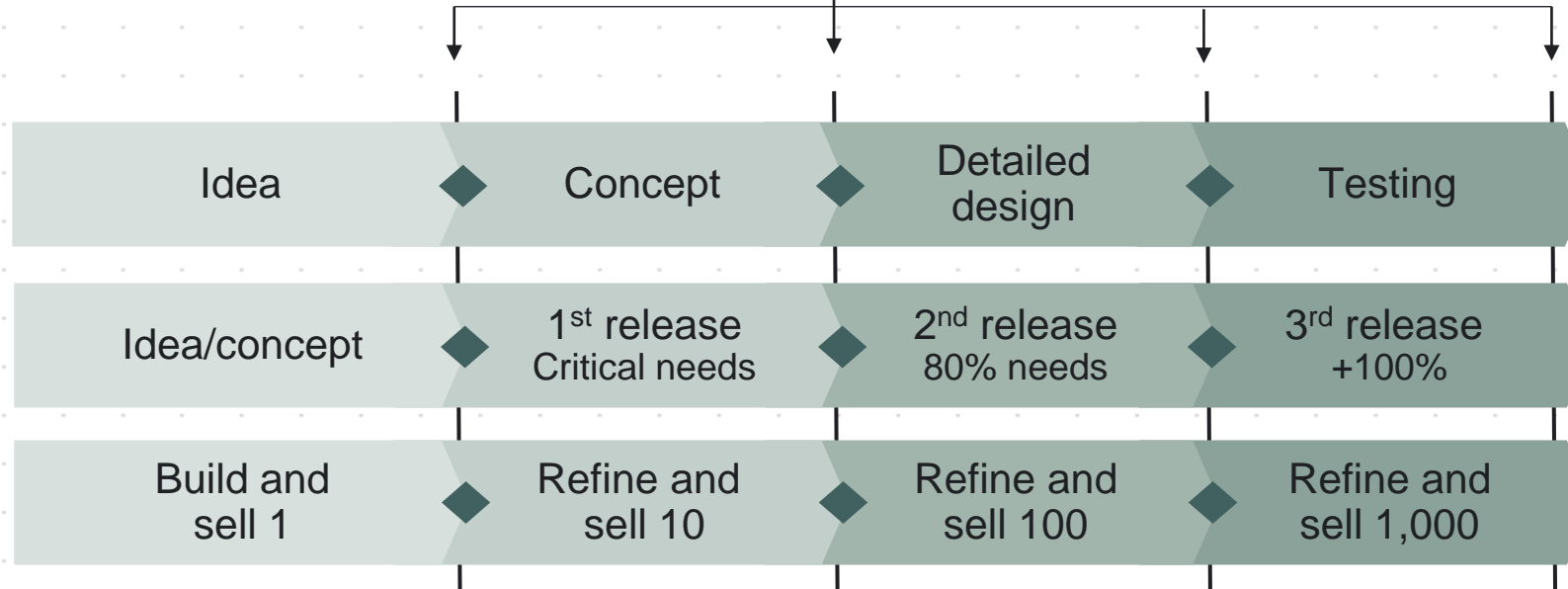
Great people before great ideas – cause the team must take a lot of "beating" & keep driving hard - with a smile on their face

At all levels

Curiosity & knowledge about user & system friction

Freedom & accountability to move fast

Courage and passion to think big and beyond

End-2-end & cross-functional mindset

Hard working & structured

Business mindset & investment thinking

THINK OF YOUR "OBJECTS": UNIT/ AREA OR CHOSEN PROJECT

Where to you see the biggest improvement potential?

- MVP Roadmap with steppingstones

- Validation loop – Desirability, Feasibility & Viability

- Metered funding based on real evidence

- High performance teams

DE-RISKING #2

Assumption based testing

(The science of experimentation)

2

New solutions are uncertain by design, therefore validation process must be firm to not loose orientation - or money

IM_

Envision
Value Proposition & use case

Kill

Adjust

Extract
assumptions

Decide

Accelerate

Execute
experiment

BUILD

LEARN

MEASURE

Assumption ●
Design ●
Metrics ●
Success ●
criteria

Focus effort
on leap-of-faith
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Design experiment to
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Desirability

Does anyone want it?

Can we build it?

Feasibility

Should we build it?

Viability

34

WHO ARE YOUR CUSTOMERS?

AND WHAT IS THEIR CURRENT EXPERIENCE?

R&D teams

CXO Operator

Service crew

Commercial organization

Shareholders

Quality/ Supply Chain

Daily operations manager

Production

Installation team
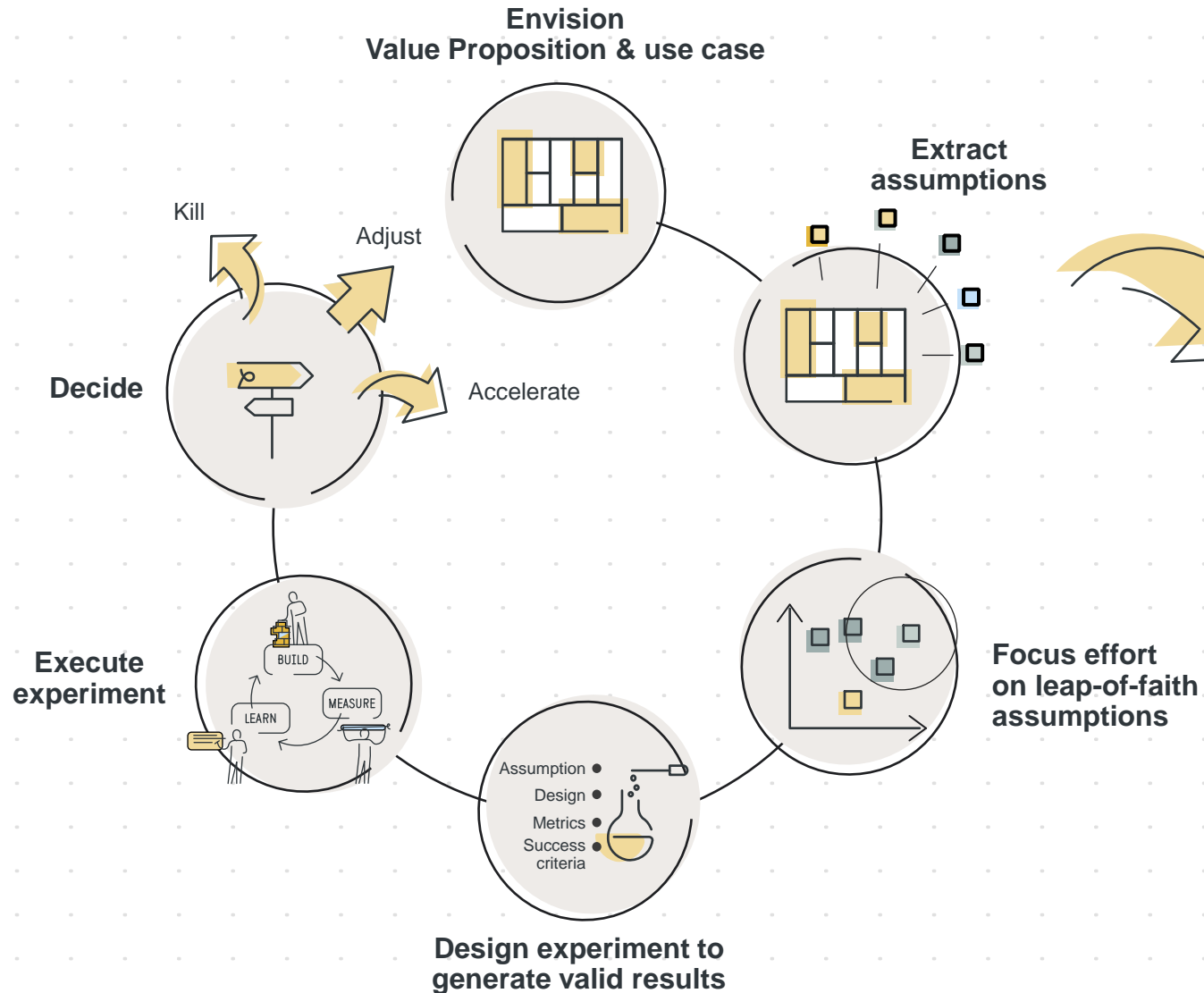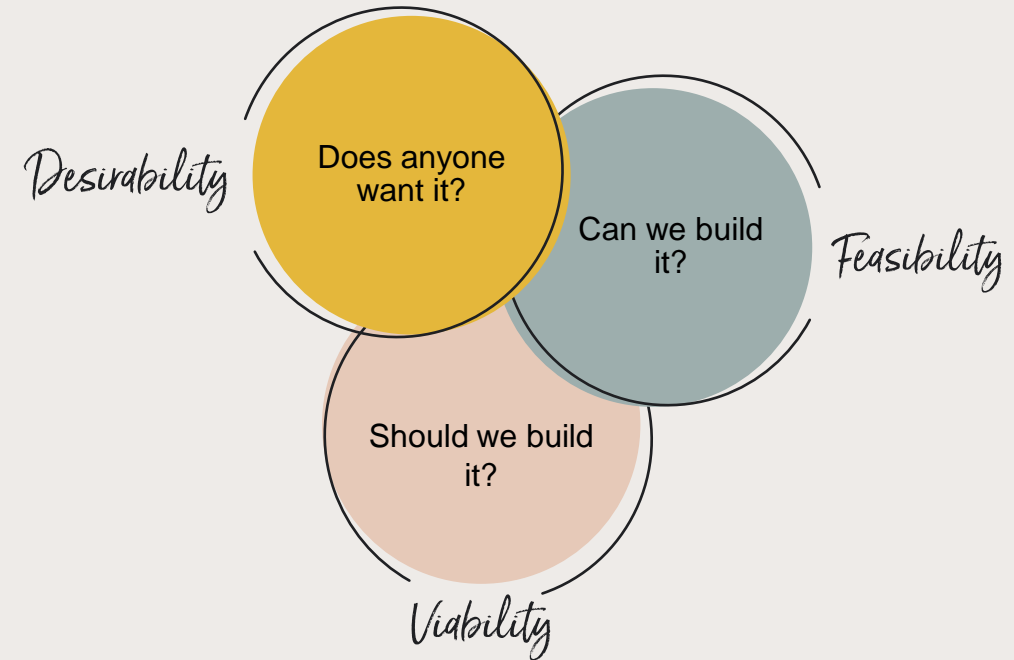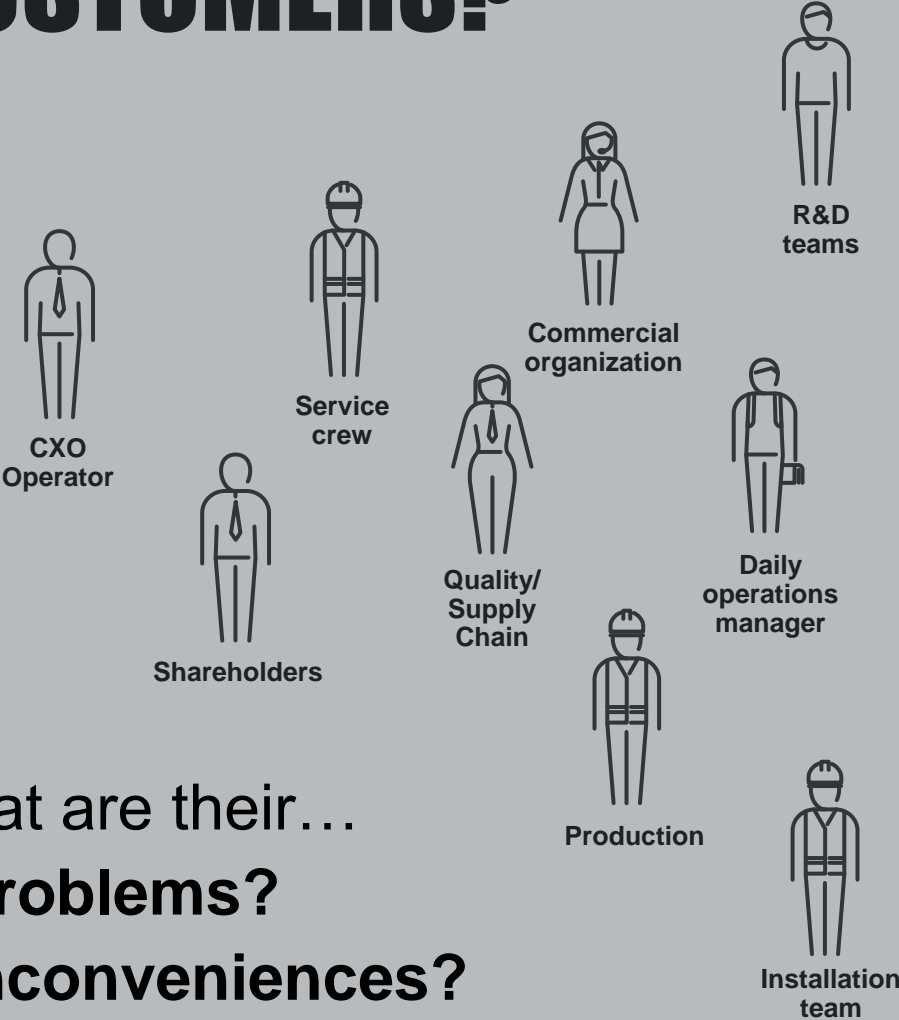
What are their…

- **Problems?**
- **Inconveniences?**
- **Unrealized potential?**

Journey step	Identify need	Consider options	Evaluate products	Buy product	Install	Operate
Job 2 be done						
Pains						
Gains						
Ideas						

Use the value proposition canvas to **illustrate problem solution fit**
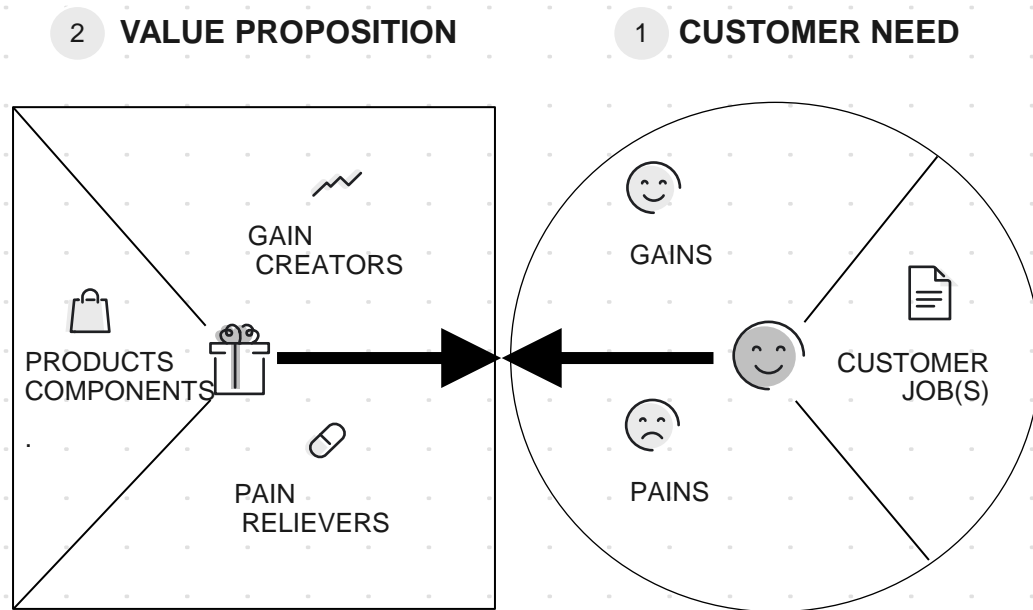
But a product is a small business, so **generate assumption** with the BMC

Generate assumptions for each quadrant in the BMC by asking "What needs to be true about X for this to be a great business?"

2 VALUE PROPOSITION

GAIN CREATORS

PRODUCTS COMPONENTS.

PAIN RELIEVERS

1 CUSTOMER NEED

GAINS

CUSTOMER JOB(S)

PAINS

Key partners

Key activities

Resources

Feasibility

Value proposition

Customer relationships

Channels

Desirability

Customer segments

Cost structure   *Viability*

Revenue streams
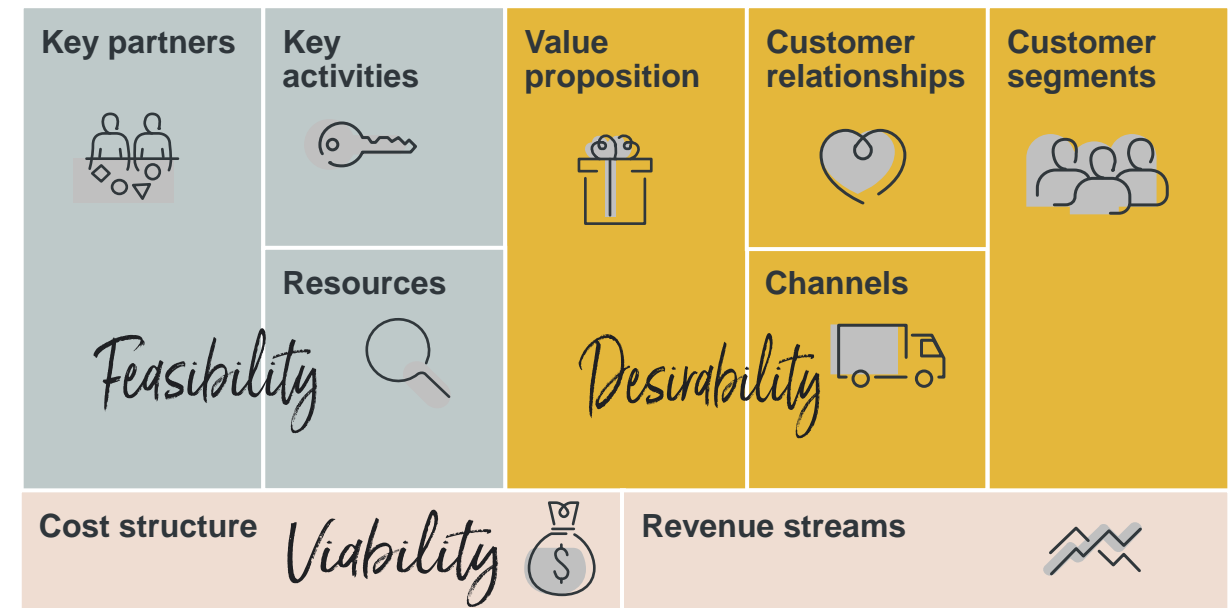
Map assumptions in 2 by 2
– start testing in the hot end

High

Consider testing

Test Now

Customers will pay extra 20 EUR for take-back service

Importance

How critical is it to our success, that it is true?

Low

Do not test

Consider testing

Low

Uncertainty

High

How uncertain are we, that the assumption is true?
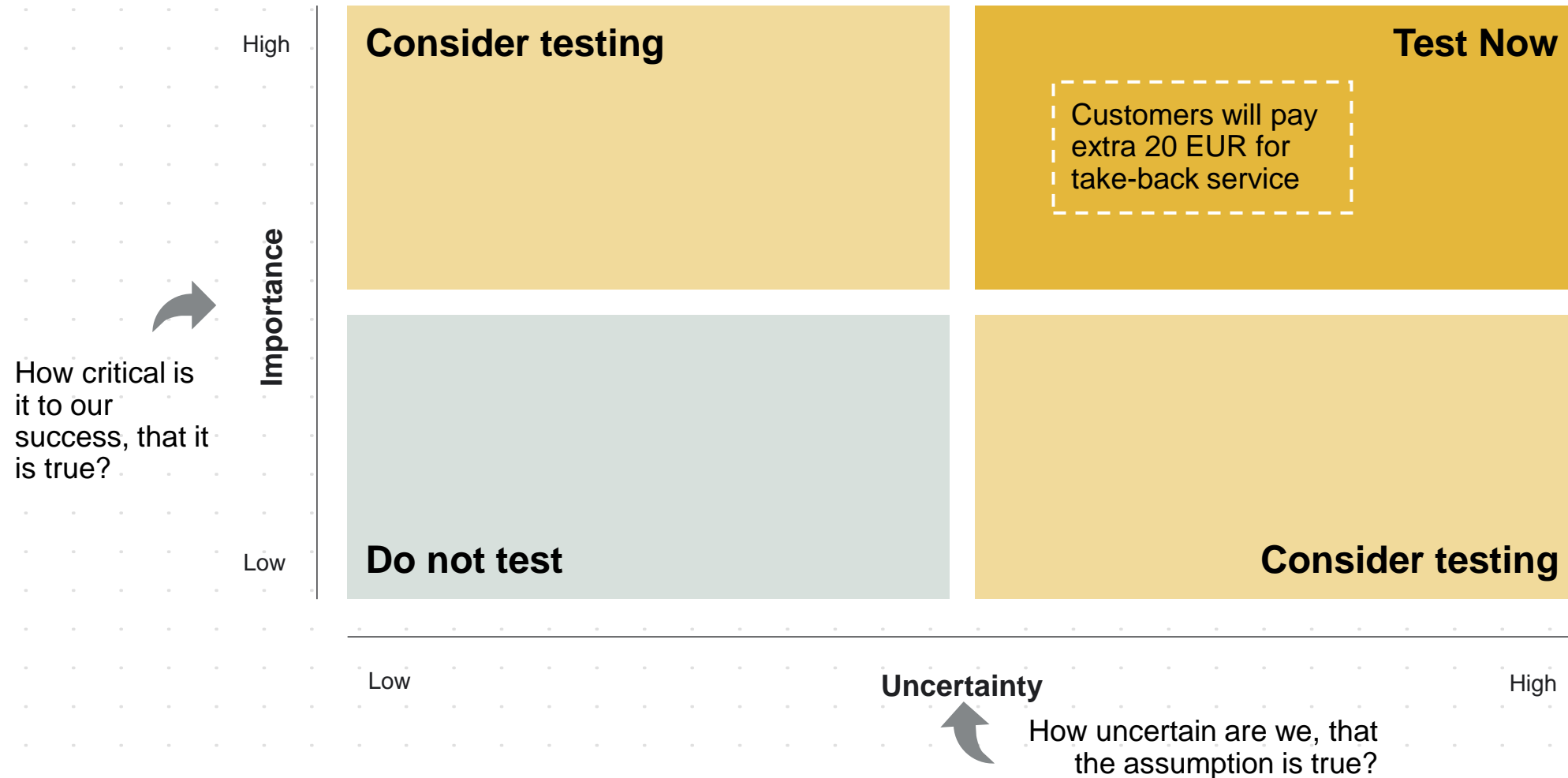
BAD TESTING

Making a survey asking people how often the go to their dentist – to assess if the market is big enough for a new "dentist chain"

Asking a skilled technician at our customers whether they would be interested if we develop this new product

Real decisions requires real evidence

Examples of perspectives to consider when designing tests

example

Weak Evidence	Strong(er) Evidence
OPINIONS (BELIEF)	**FACTS (EVENTS)**
When people say things like "I would…," "I think _____ is important," "I believe…," or "I like…"	When people say things like "Last week I ____," "In that situation I usually ____," or "I spent ____ on."
WHAT PEOPLE SAY	**WHAT PEOPLE DO**
What people say in an interview or survey is not necessarily what they do in real life or will do in the future.	Observable behaviour is generally a good predictor of how people act and what people might do in the future.
LAB SETTINGS	**REAL WORLD SETTINGS**
When people are aware that you are testing something, they may behave differently than in a real world setting.	The most reliable predictor of future behaviour is observing people when they are not aware they are being tested.
SMALL INVESTMENT	**LARGE INVESTMENTS**
Signing up to a newsletter is a small investment and relatively weak evidence of interest.	Pre-purchasing a product or putting one's professional reputation on the line is an important investment and strong evidence of real interest.

ESTABLISH STRUCTURE & SUCCESS CRITERIA TO STEER TESTING

TEST

Date:

Responsible:

The following needs to be true…
Clearly state the assumption you want to test

To verify that we will…
Clearly describe the test design – imagine you're filming it

We are right if…
Clearly state what you need to see in order to validate the assumption

LEARNING

What we observed was…
Clearly describe the outcome of your test
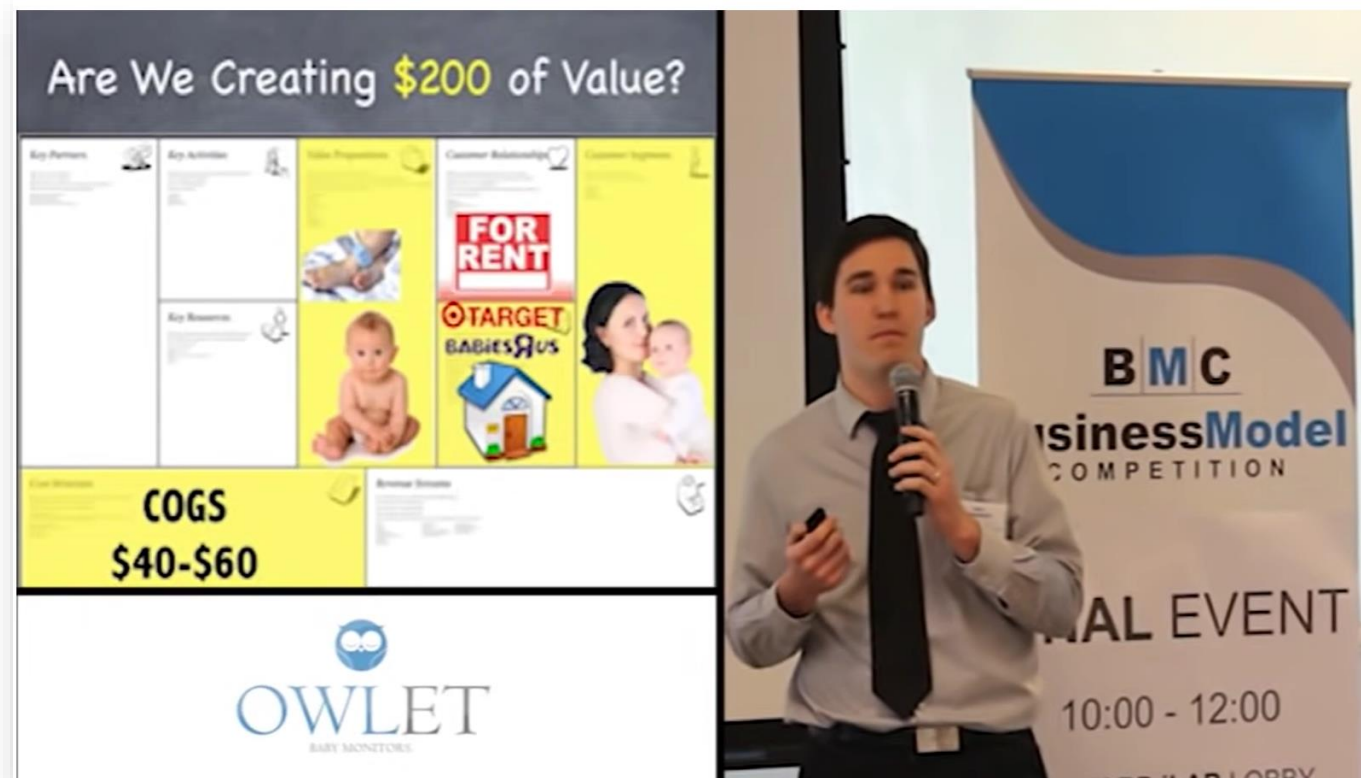
Based on this result, we recommend…
Clearly describe what you learned and what actions you need to take next

CHEAP TESTING VIA BUSINESS MODEL CANVAS

10 min, or first 5 min

THINK OF YOUR "OBJECTS": UNIT/ AREA OR CHOSEN PROJECT

- Which methods/ ideas discussed today could generate further value?

- What other thoughts & ideas did todays discussion trigger?

LAS VEGAS

DEAR ME

BY END OF
MAY 2023...

Challenges in my unit/ key projects that I addressed:

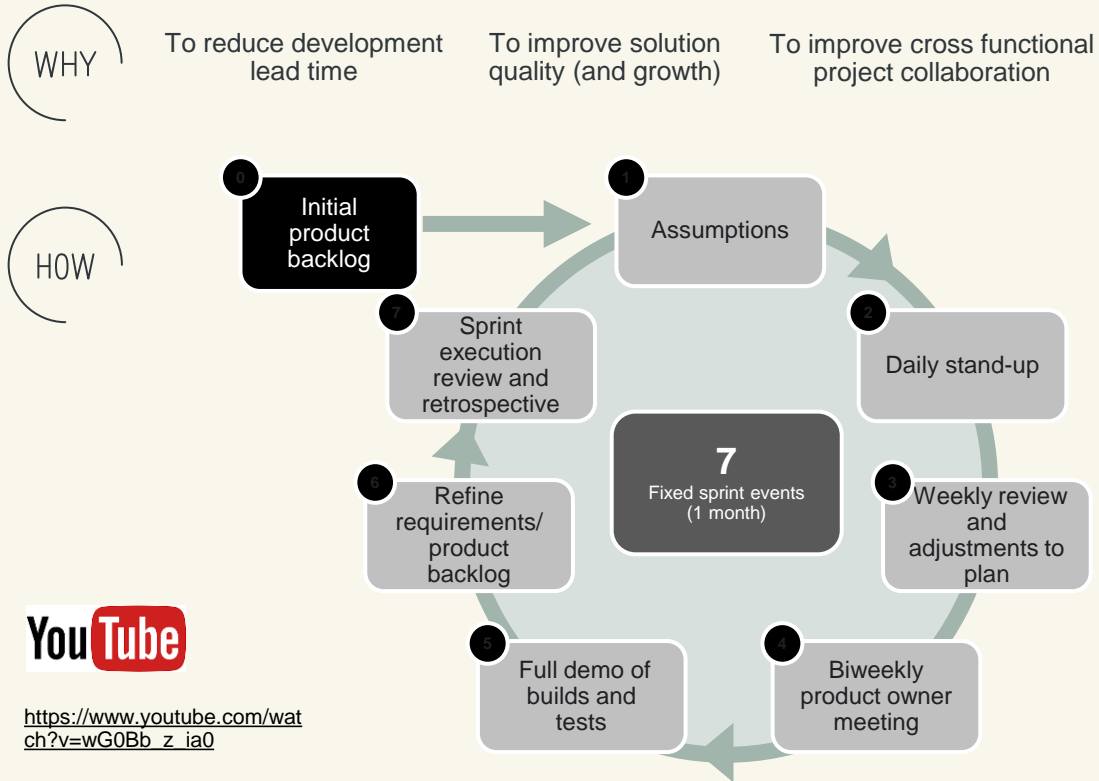**How I did it & whom I talked to:**

What specifically did I do to help teams learn faster:

Other things I decided to do:

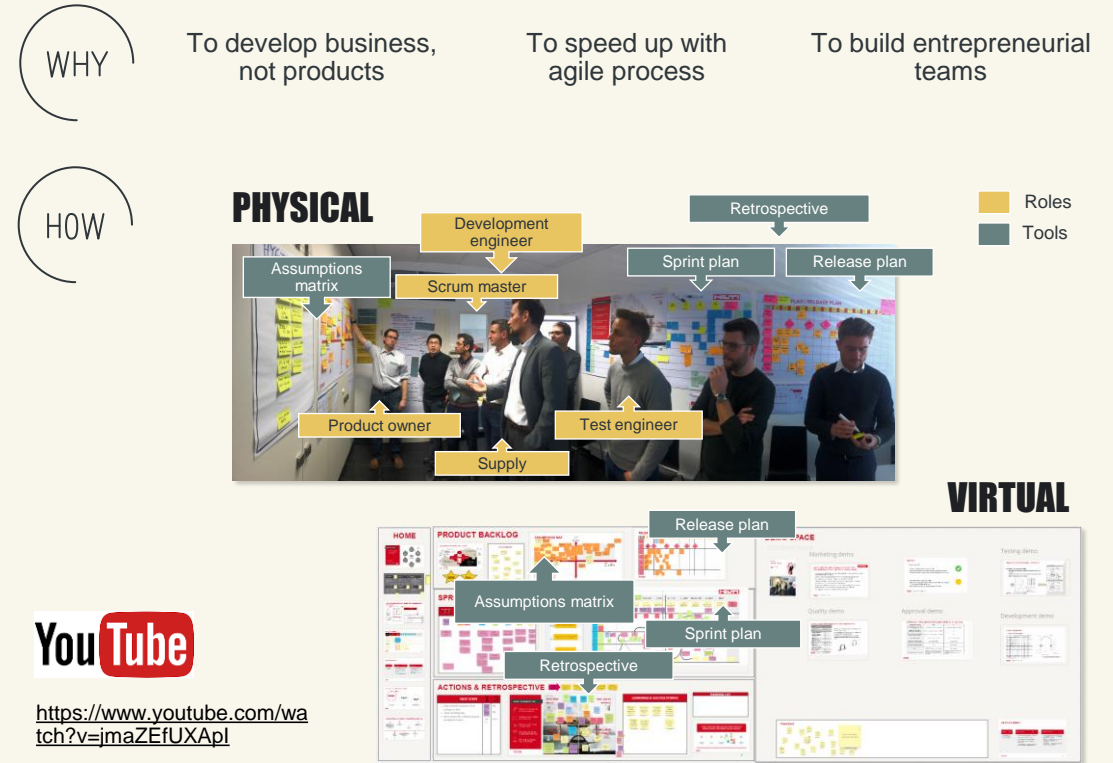# 2 examples of companies doing Hybrid Agile with integrated assumptions based testing

PRODUCT DEVELOPMENT GOES AGILE

WHY

To reduce development lead time

To improve solution quality (and growth)

To improve cross functional project collaboration

HOW

- 0 — Initial product backlog
- 1 — Assumptions
- 2 — Daily stand-up
- 3 — Weekly review and adjustments to plan
- 4 — Biweekly product owner meeting
- 5 — Full demo of builds and tests
- 6 — Refine requirements/ product backlog
- 7 — Sprint execution review and retrospective

7 Fixed sprint events (1 month)

https://www.youtube.com/watch?v=wG0Bb_z_ia0

IMPACT → Lead time reduced 50% across the portfolio through faster focus on 'what matters' and MVP training

HYBRID AGILE – PD&I

WHY

To develop business, not products

To speed up with agile process

To build entrepreneurial teams

HOW

PHYSICAL

- Assumptions matrix
- Development engineer
- Scrum master
- Retrospective
- Sprint plan
- Release plan
- Product owner
- Test engineer
- Supply

Roles
Tools

VIRTUAL

- Release plan
- Assumptions matrix
- Sprint plan
- Retrospective

https://www.youtube.com/watch?v=jmaZEfUXApI

IMPACT → Reaching the drawing, design and BOM freeze in half the time – while increasing engagement pulse by 30%

Other Hybrid Agile cases include: Siemens, Alsthom, Daimler Benz, Universal Robots, GN Audio, VELUX, Gettinge, Arla, Novozymes

IM_

DON'T DEVELOP
PRODUCTS

DEVELOP
BUSINESS