



InDiMedia

Center for Interactive Digital Media & Experience Design



AALBORG UNIVERSITY
DENMARK

USER-DRIVEN CREATIVE academy

BUILDING THE

CORE DESIGN



Claus Rosenstand

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Peter Vistisen

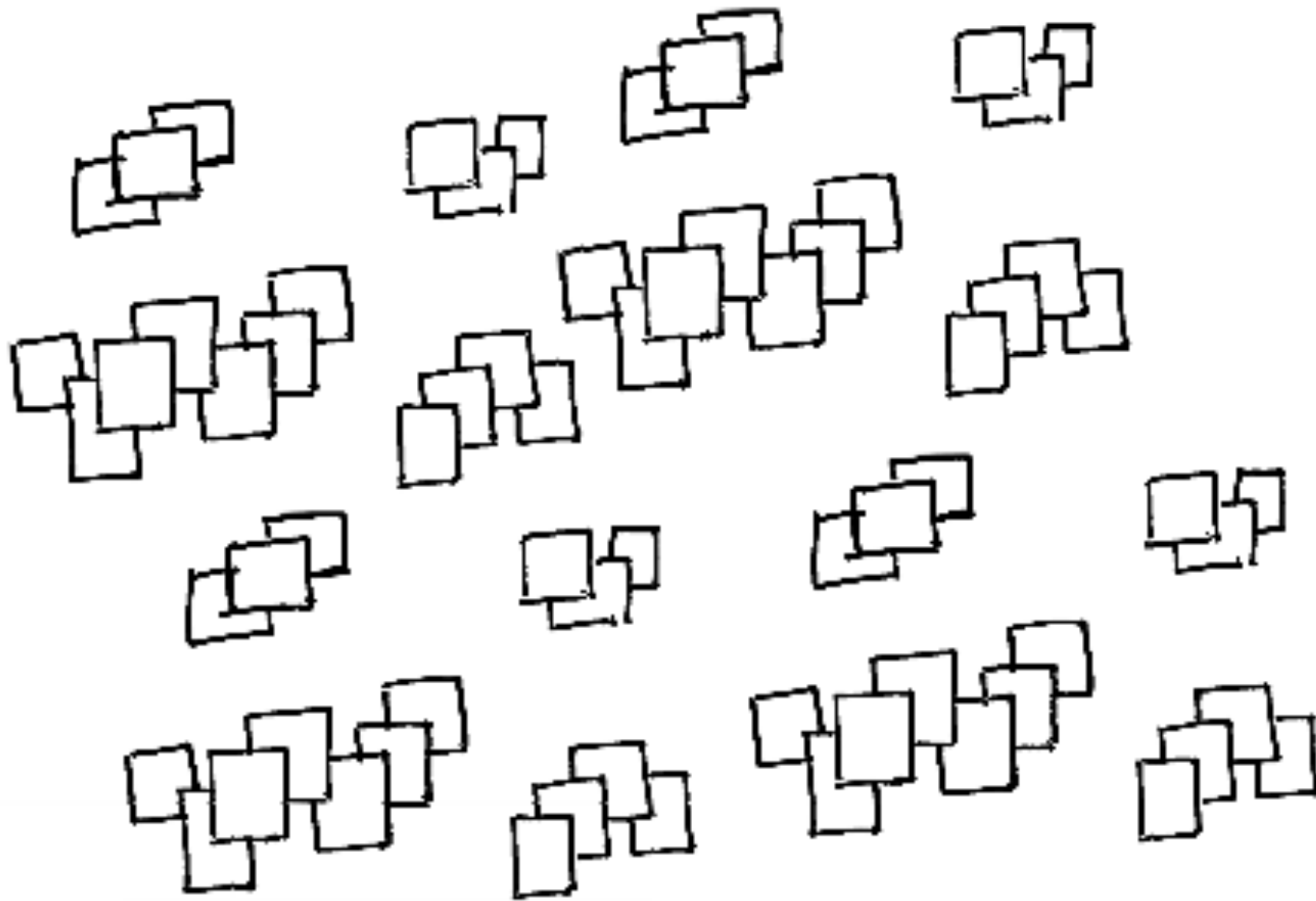
Assistant Professor, PhD, nice guy
Say hi: vistisen@hum.aau.dk

TODAY...

9:15 - 11:00'ish: Core Design lecture

11:15'ish - Monday: Defining innovation tracks

STATUS...



DESIGN CYCLE **FUZZY!**

U-CrAc

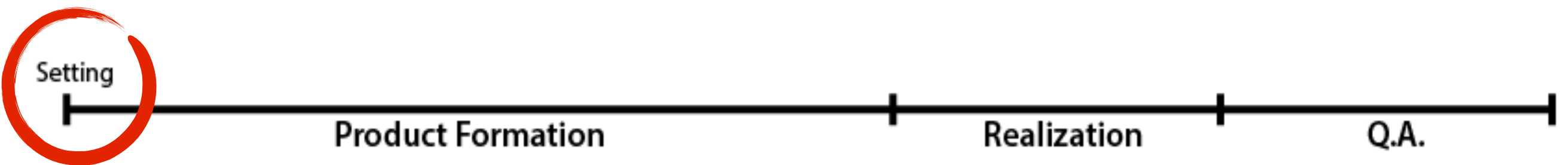
Setting

Product Formation

Realization

Q.A.

DESIGN CYCLE: **SETTING**



*The Design Cycle is **a major iterative movement** from the product **formation**, towards production **realization**, ending in **quality assurance***

NEXT WEEK...

cluster 1

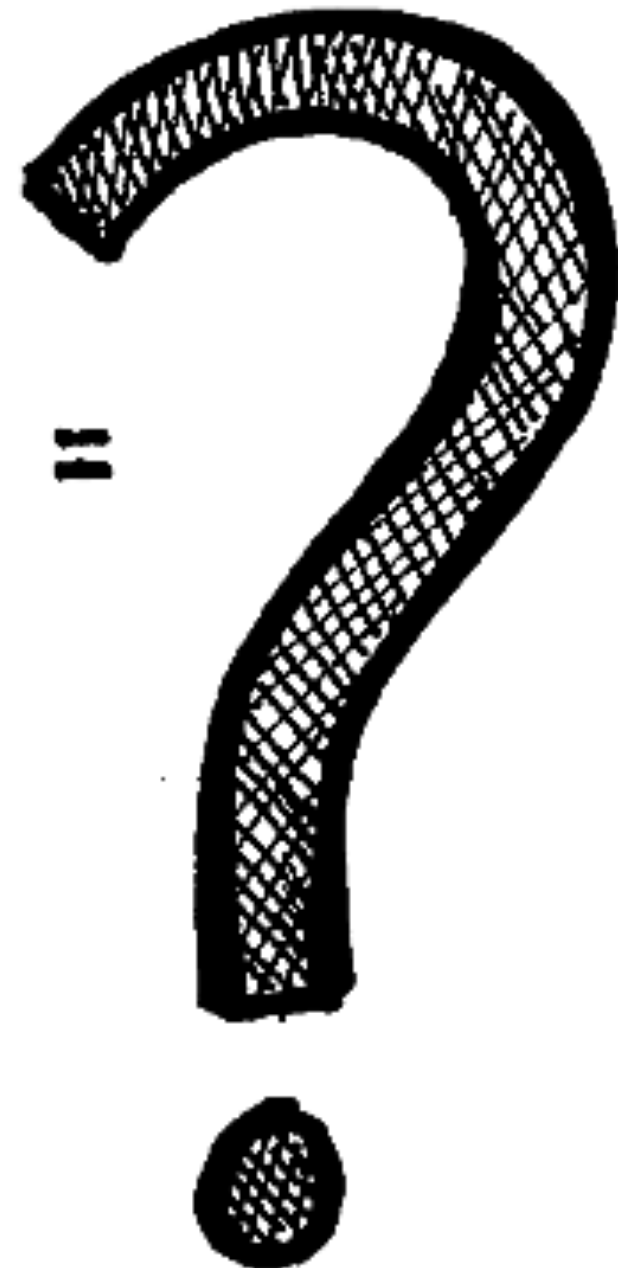


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cluster 2



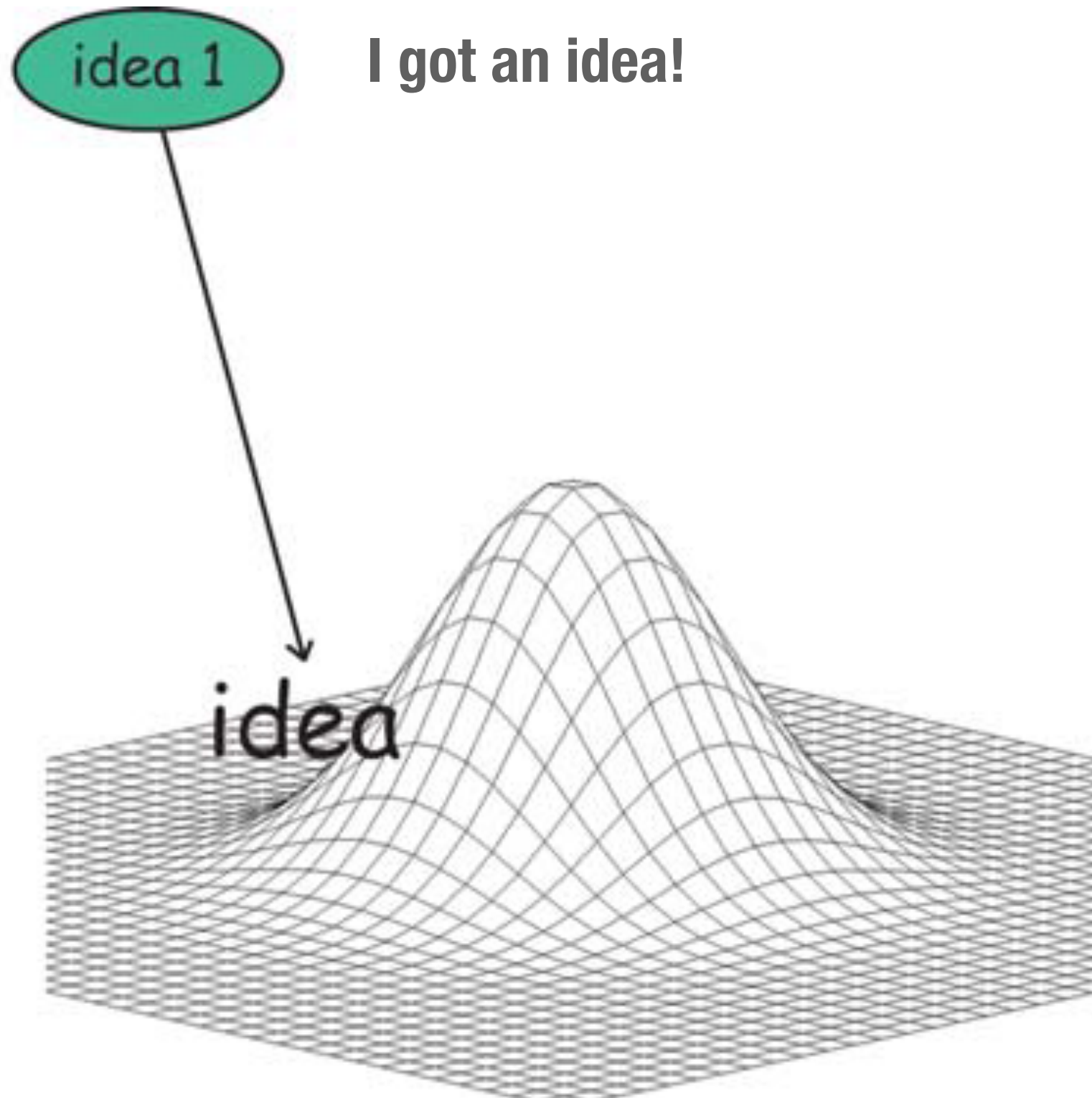
I got it! I know how to solve the problem, and my idea is basically the best idea since both pickled eggs and the iPhone!



...said all design students at some point

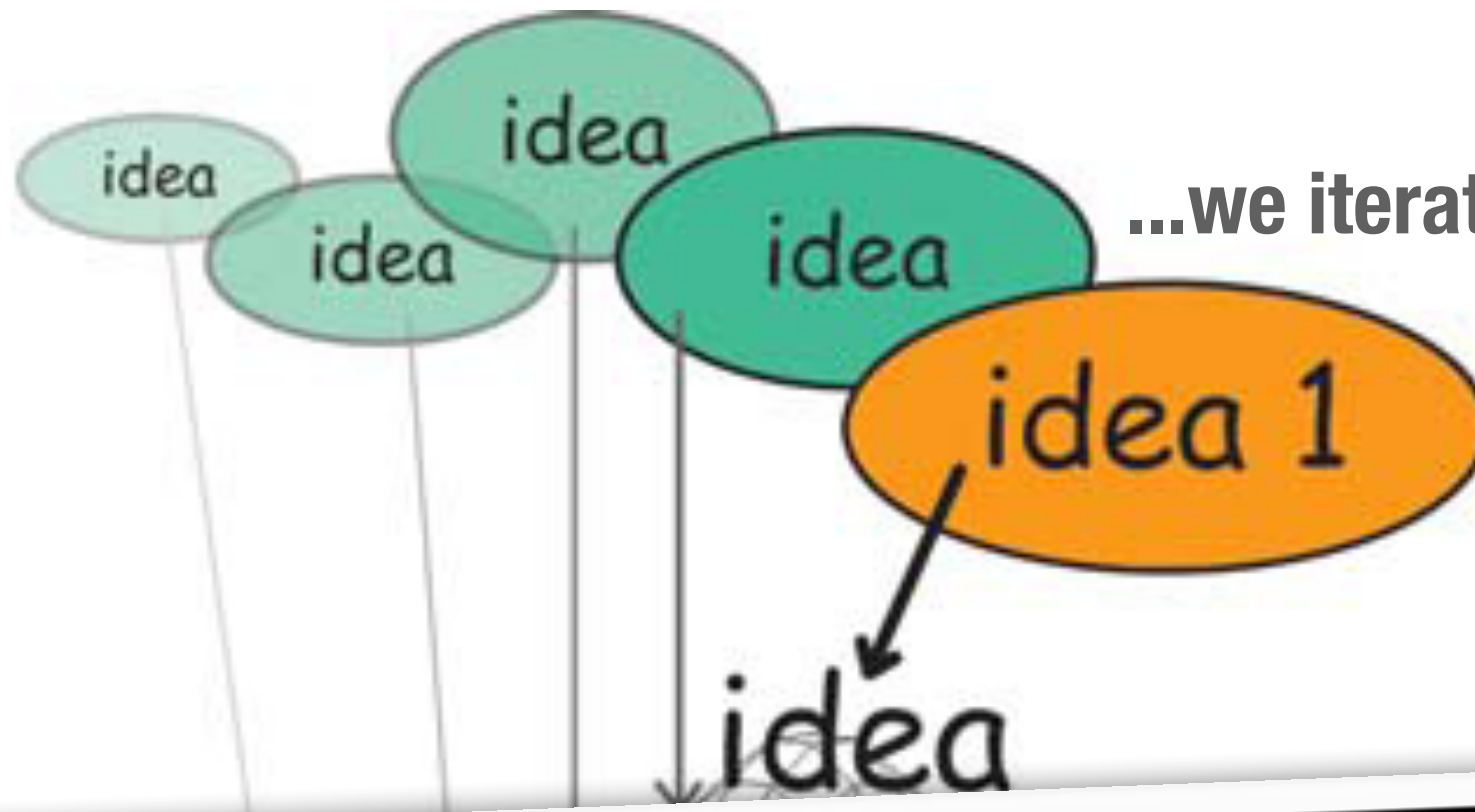
Local hill climbing

The first idea gives us a space to explore...



Local hill climbing

After some time and work we reach 'the local maxima'

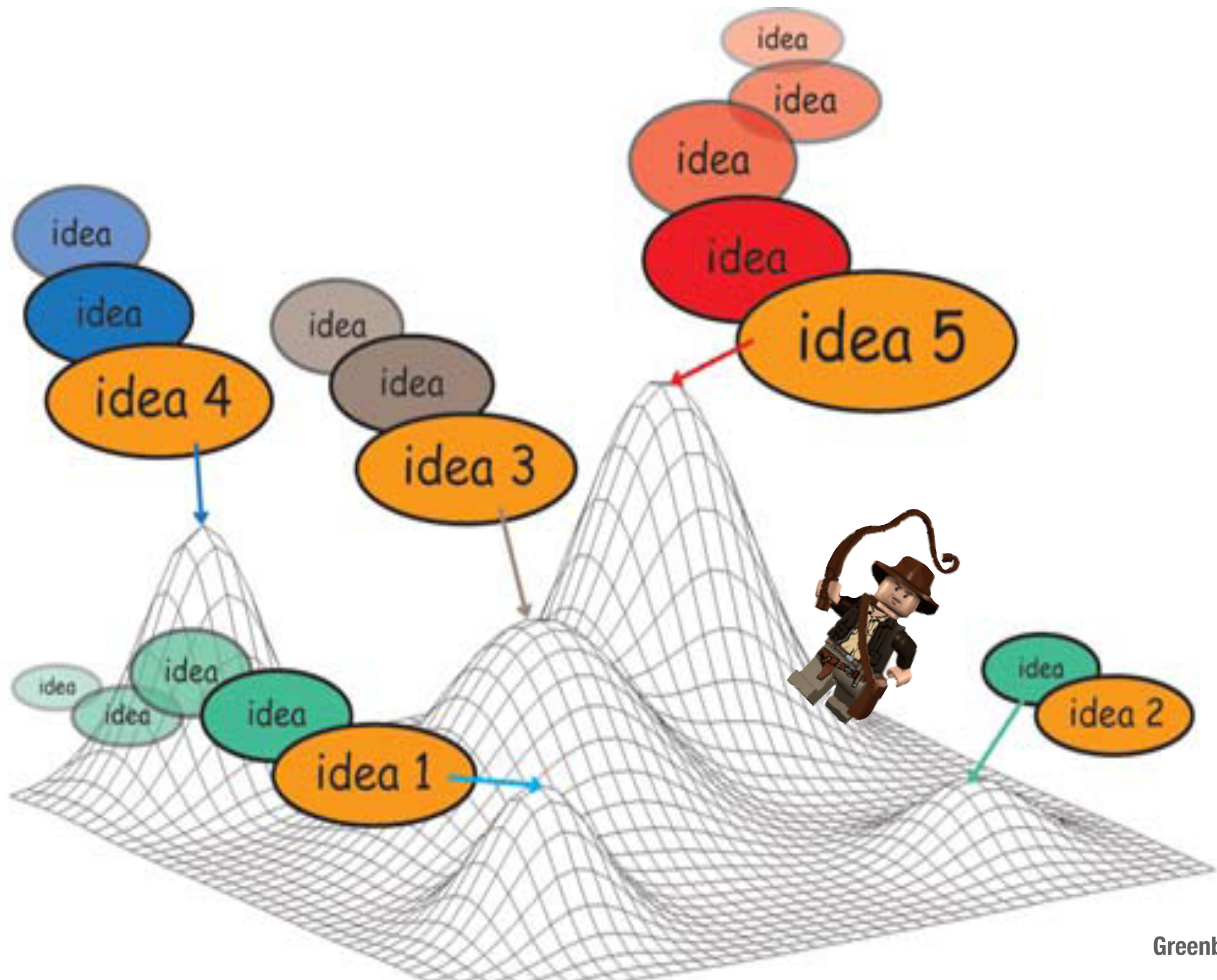


...we iteratively climb the hill

But is it a good idea?

The problem is quite clear

The local maxima is not always equal to the global (optimal) maxima



...history has a lot of examples

So get 'the right design' before working to get 'the design right'



The inertia of innovation

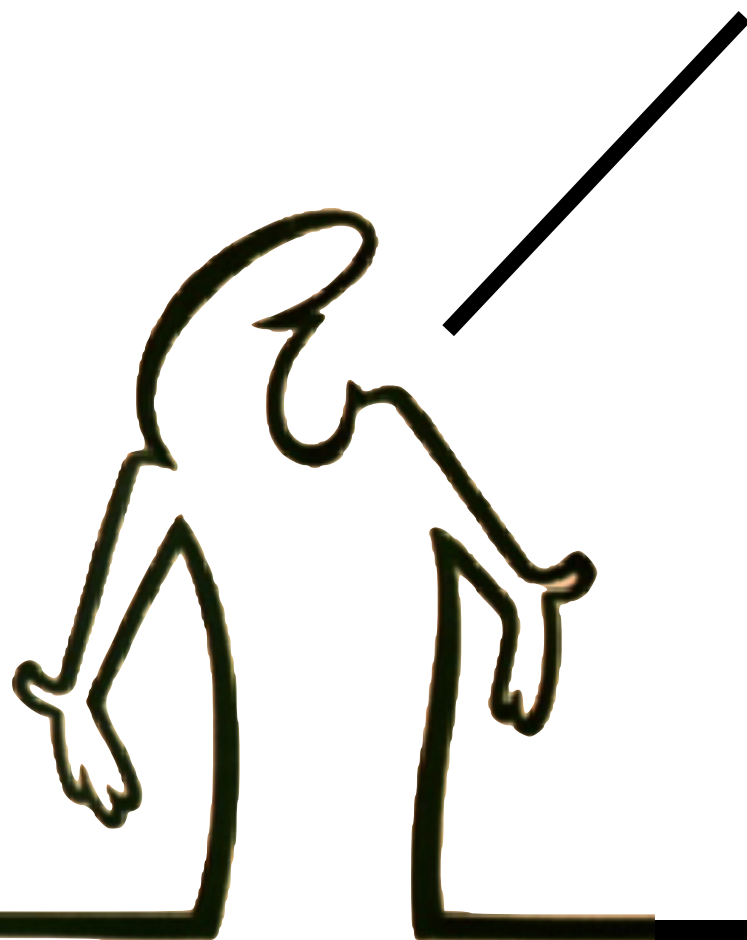
We need tools that allow us to avoid the pit fall of local hills

*“In terms of stifling innovation, **good ideas are more dangerous than bad ones**. They take hold, assume momentum, and therefore result in **intertia**”*

Buxton 2007

...intertia must be avoided

*But how do we identify
what the global maxima is?*



case example

THE NORTH SEA WANTED AN ENGAGING DIGITAL EXPERIENCE

The visitor group of tweens (10-12 years) mostly saw a visit with their family to the Oceanarium as more of duty, rather than a fun experience...

...instead they sat with their phones

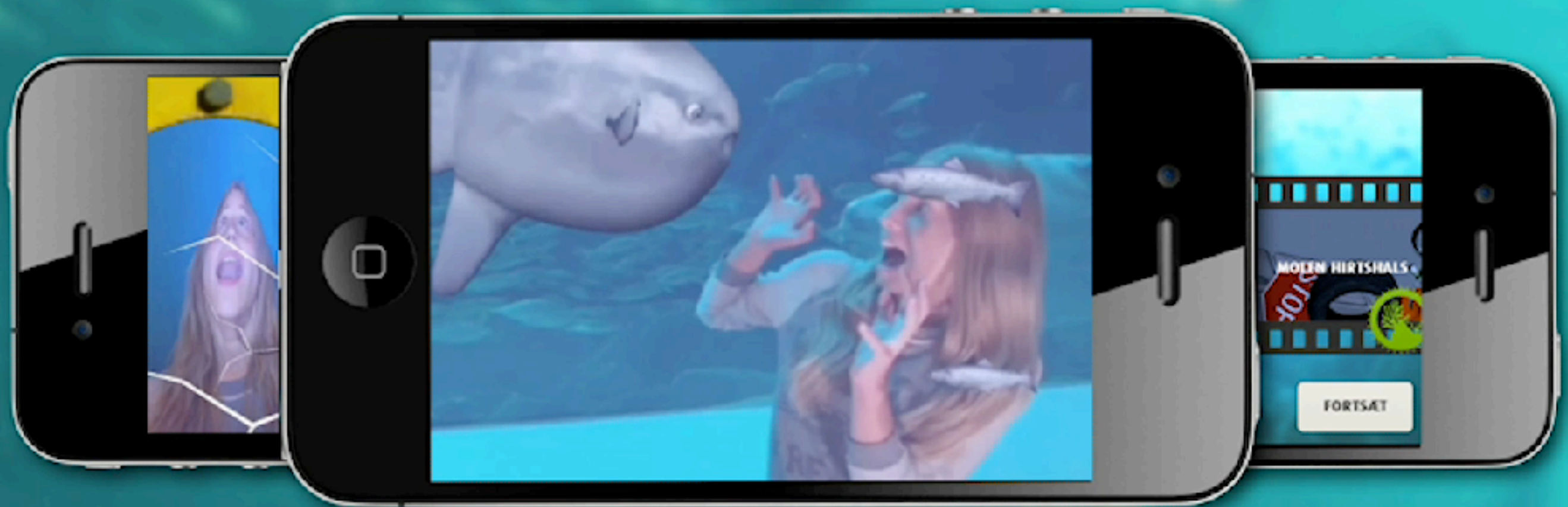


THE movie maker

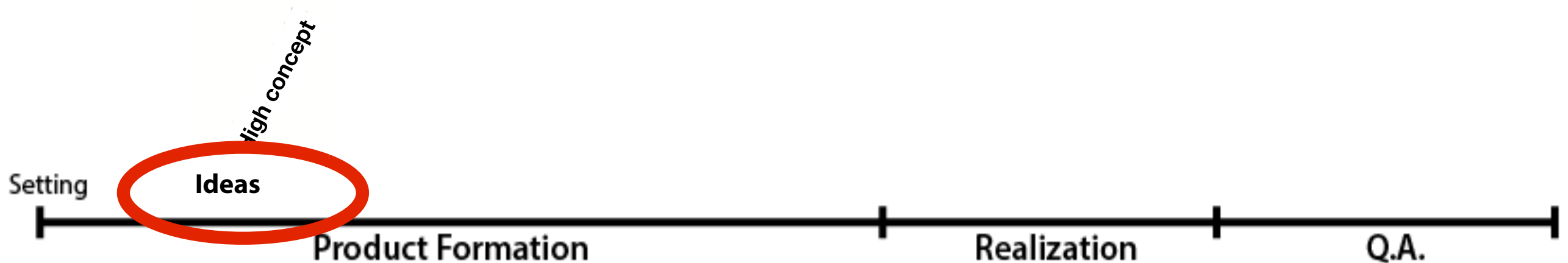
DIRECT a SLAP STICK movie OF YOUR FAMILY'S VISIT

NORDSDEN
MOVIE MAKER

Optag sjove film med
vores gratis iPhone app!

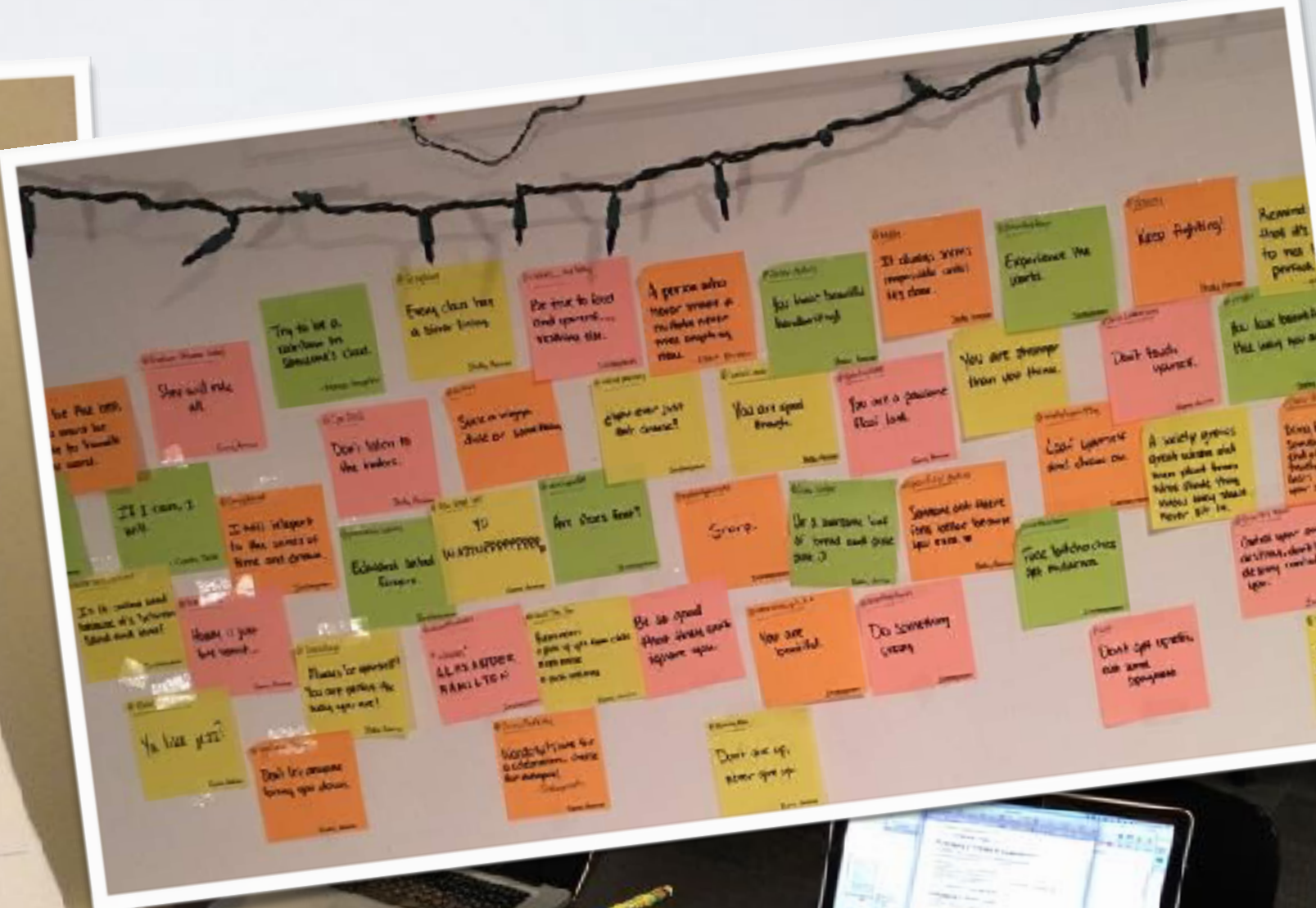
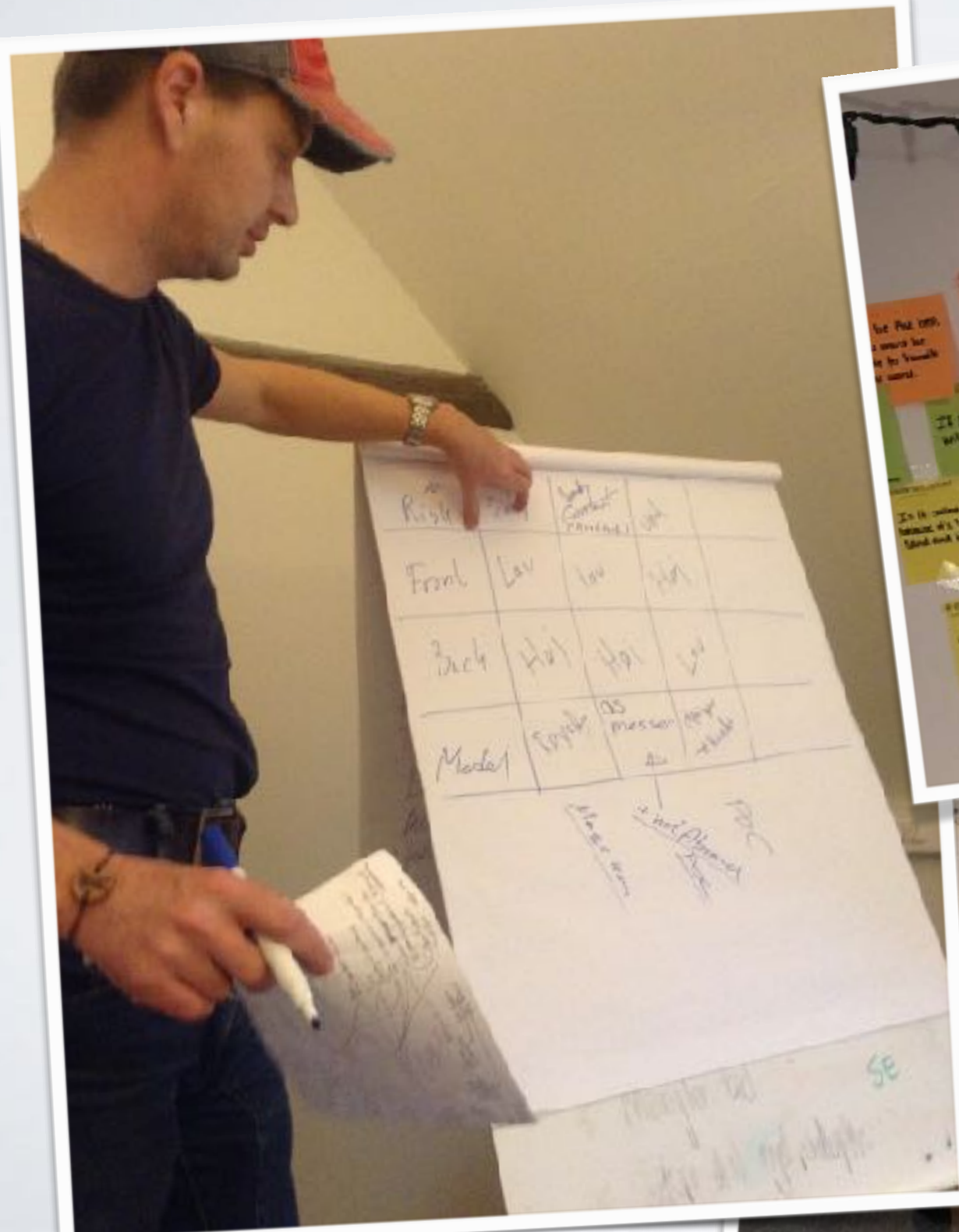


DESIGN CYCLE: IDEAS

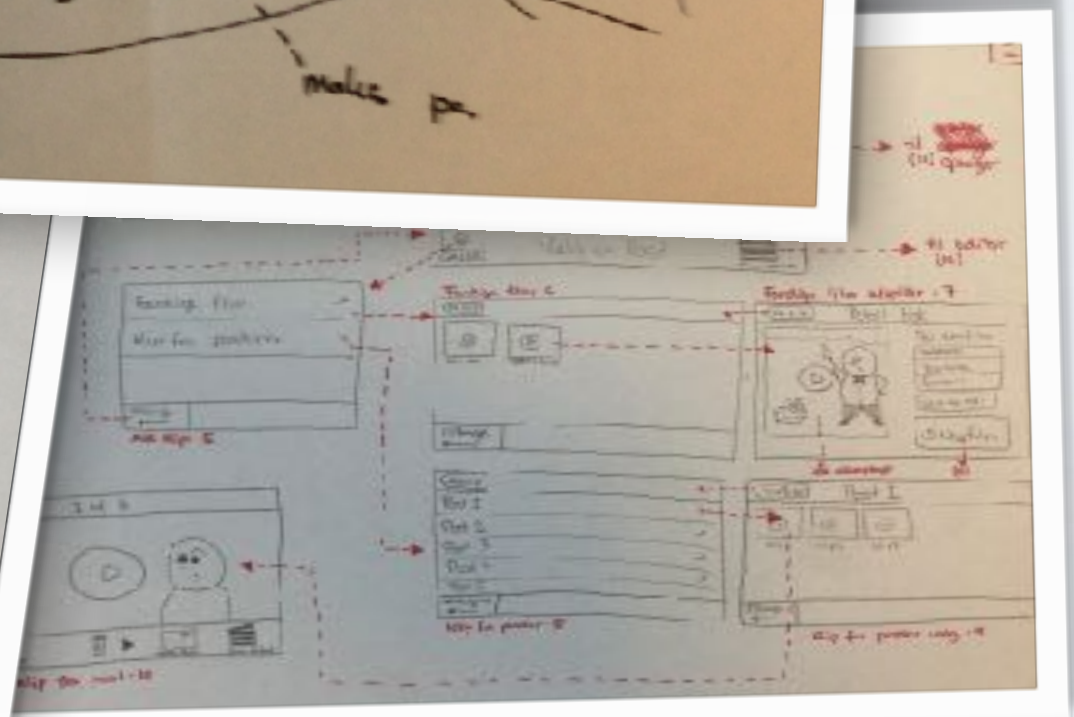
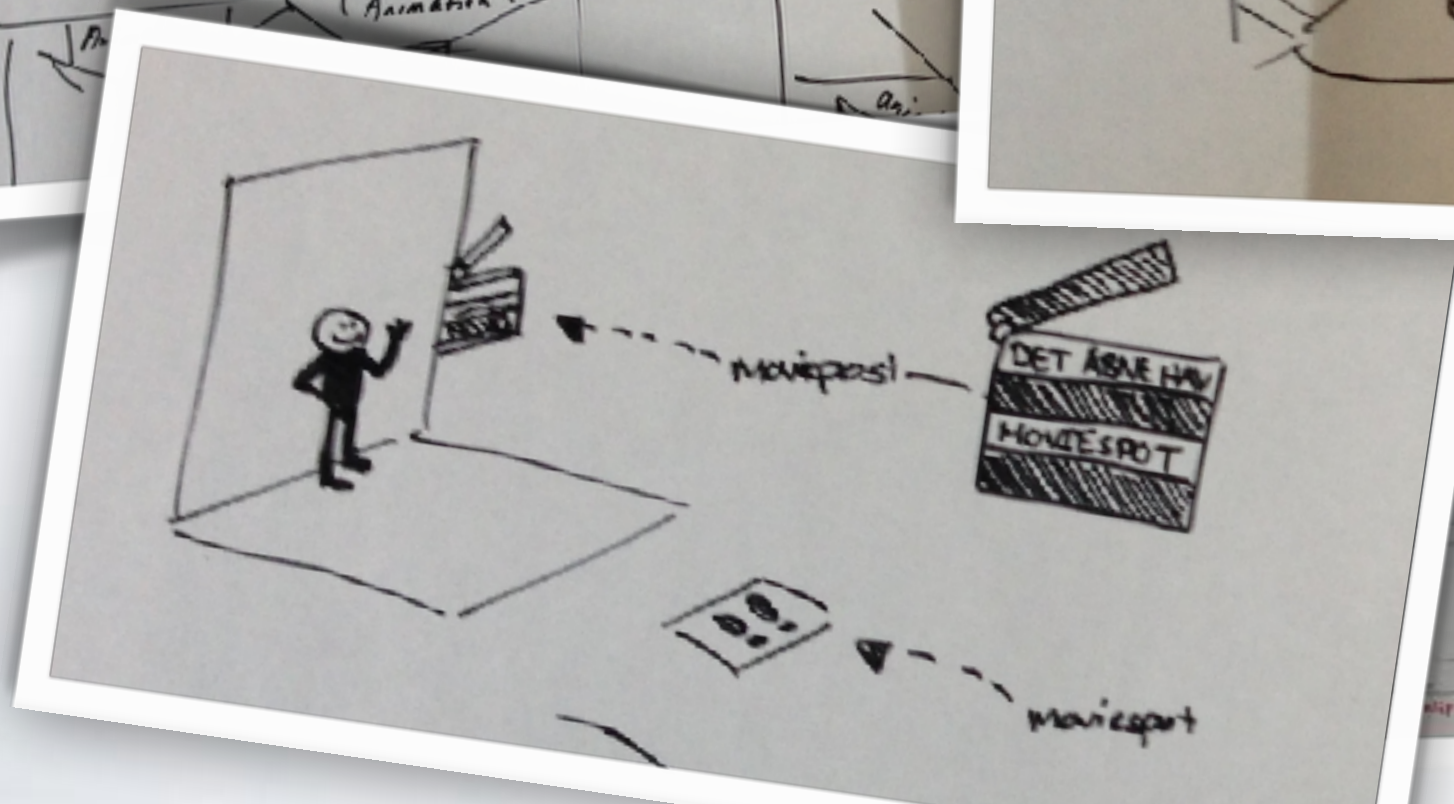
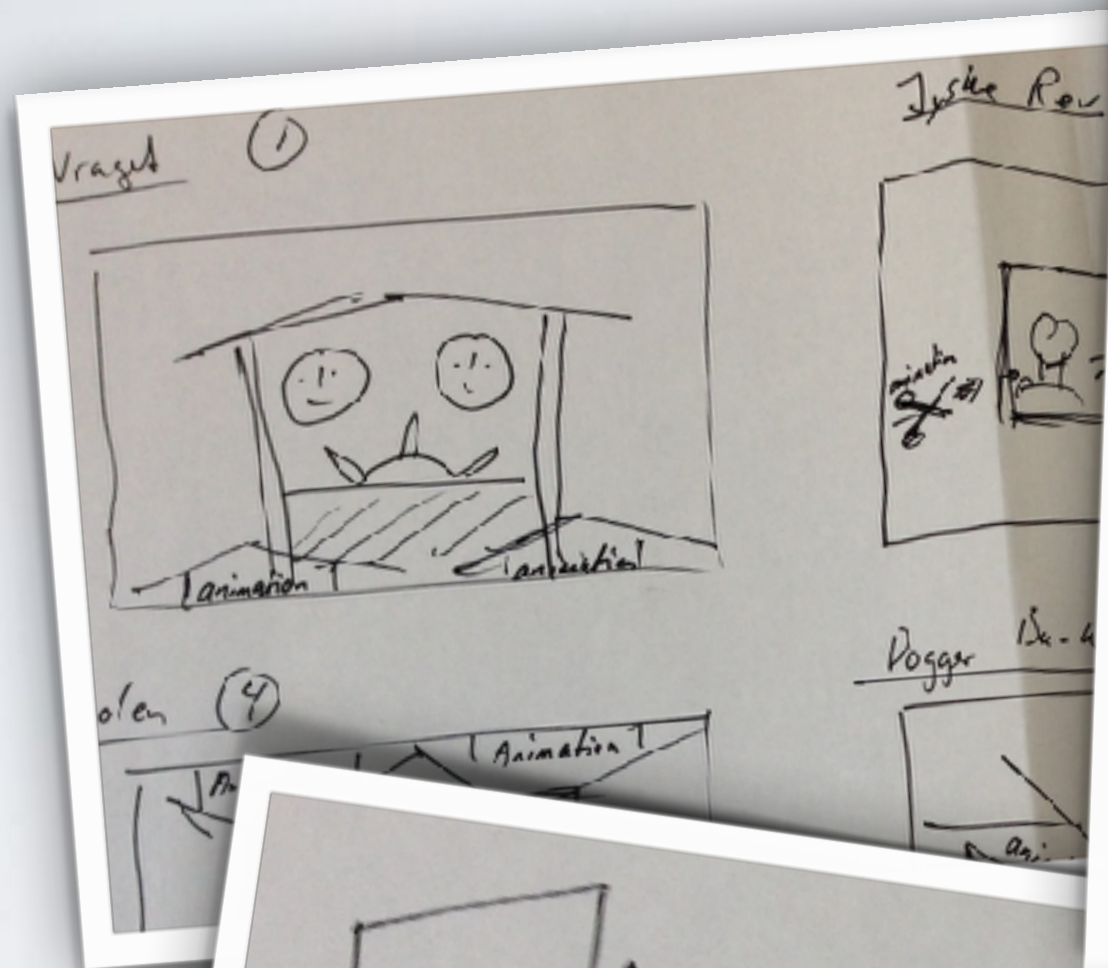


*The idea is generated as **the basis for a project vision**, which might be formulated and illustrated in different ways.*

mapping insights



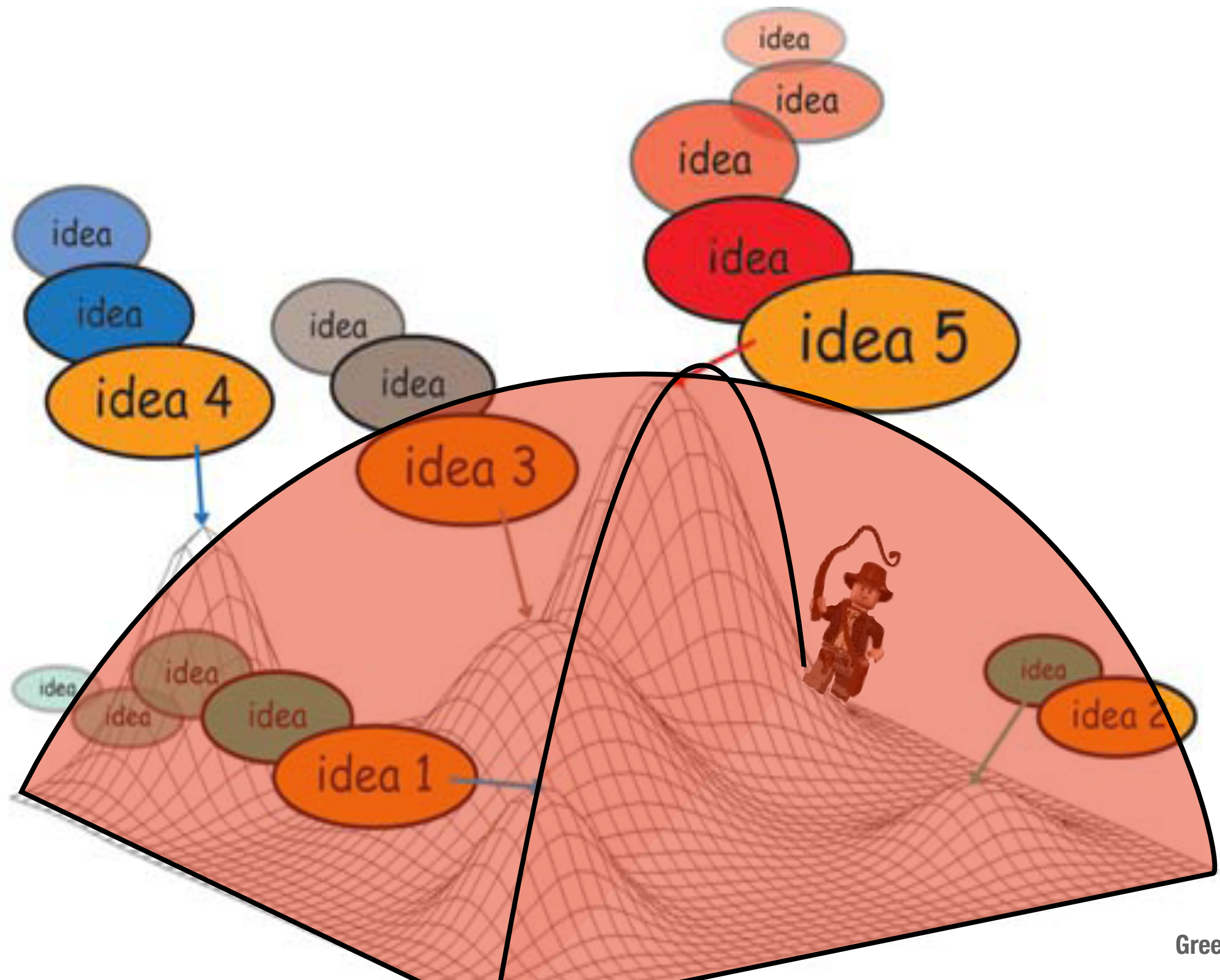
SKETCHING IDEAS



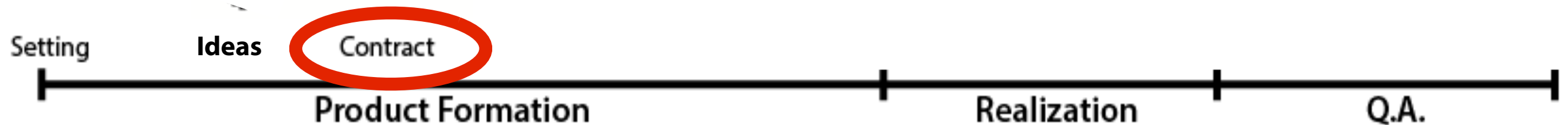
HIGH CONCEPTS



exploring the spectrum is crucial!



DESIGN CYCLE: **CONTRACT**



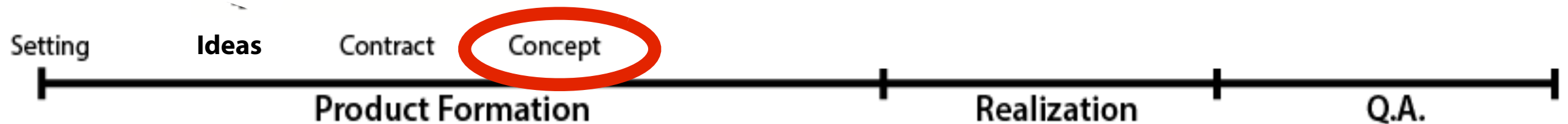
Rosenstand & Kyed 2013 + Vistisen & Rosenstand 2016

Time (e.g. launch in week 42)

Cost (e.g. 250.000,-)

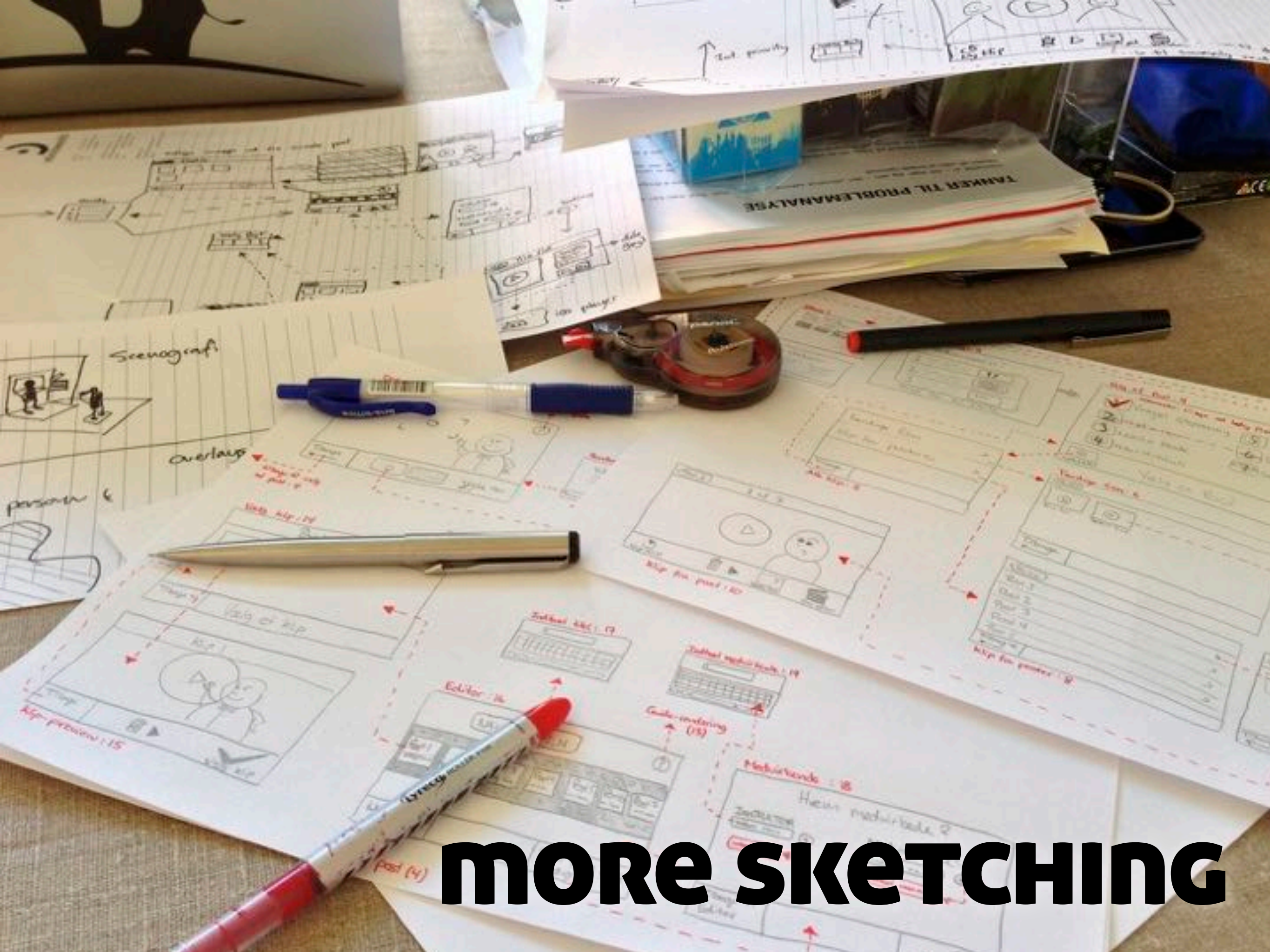
Quality criterias (e.g. smartphone platforms, user experience goals)

DESIGN CYCLE: **concept**



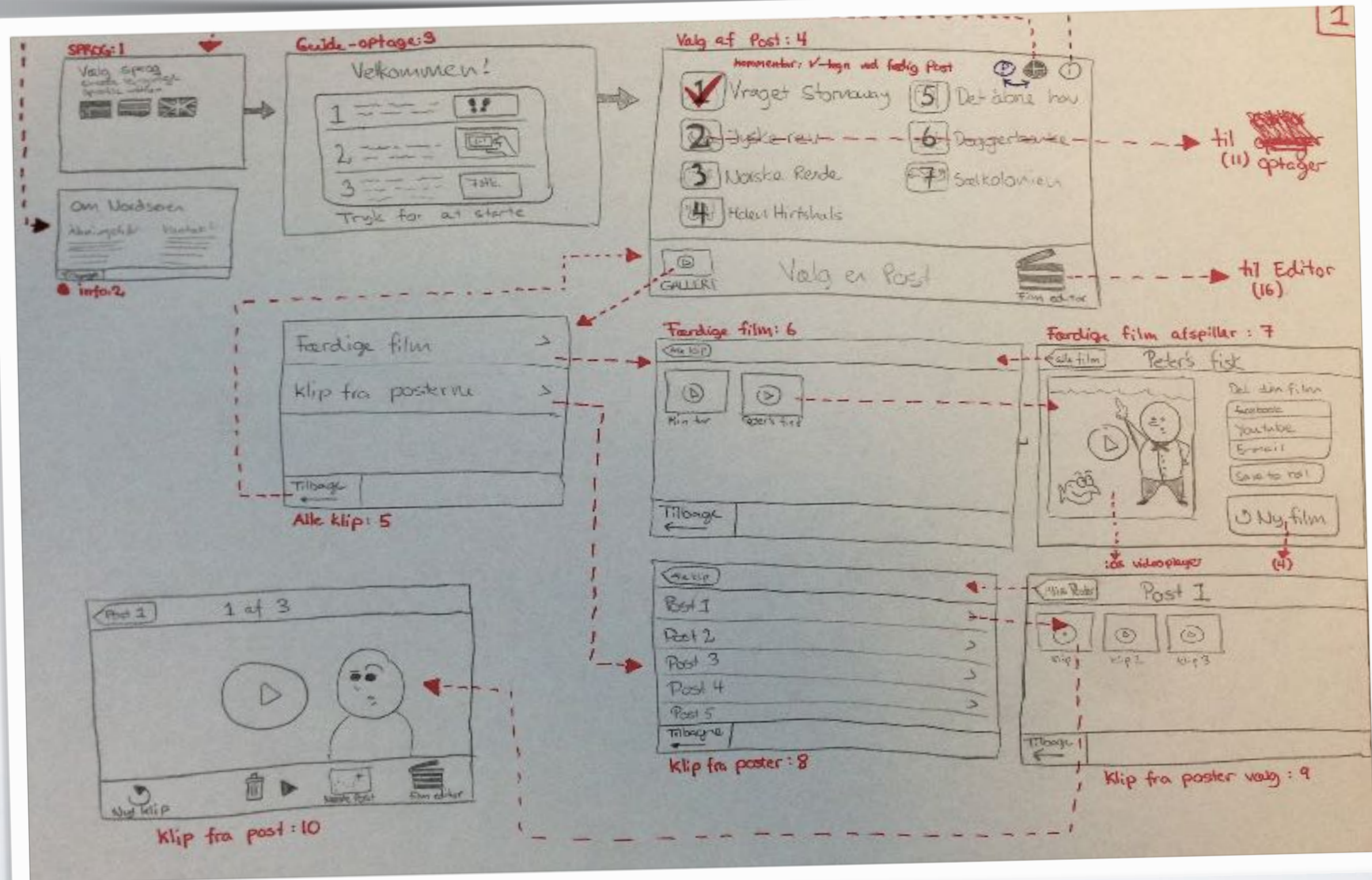
Rosenstand & Kyed 2013 + Vistisen & Rosenstand 2016

*Concepts converge towards **mixing features and content***



more SKETCHING

IT BECAME RATHER COMPLEX



**and THEN we can DO THIS
and THIS and THIS and
THIS and THIS and THIS
and THIS and THEN THIS
and THIS and THIS and
THIS and THIS and THIS**

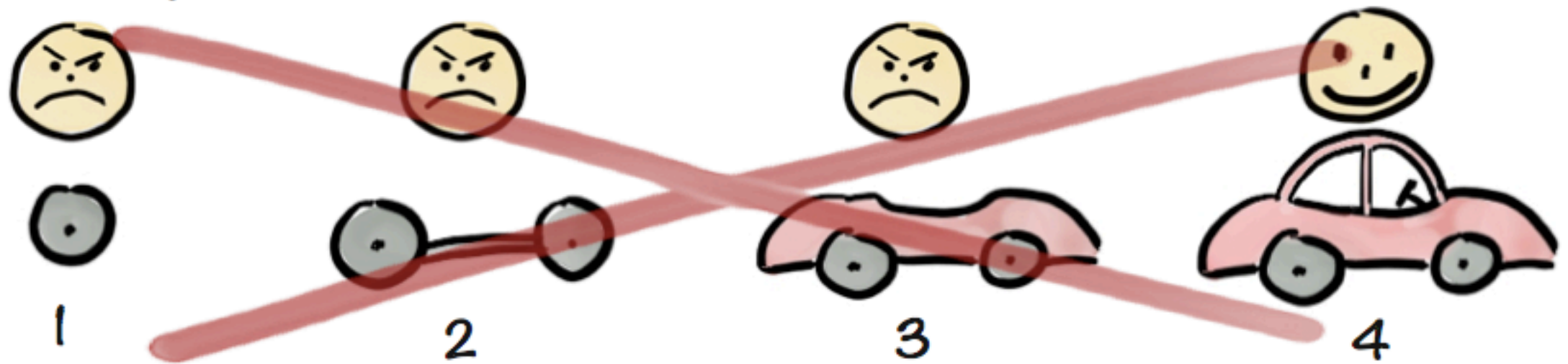


STOP

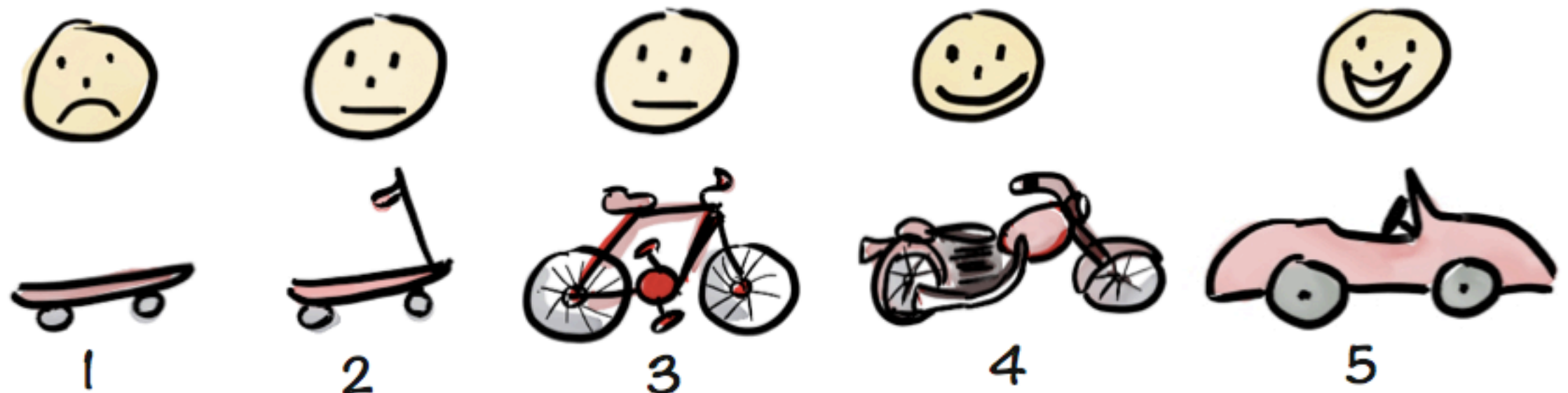
THE PROBLEM WITH MVP'S

MINIMUM VIABLE PRODUCTS ARE OFTE TO FEATURE-FOCUSED

Not like this....



Like this!



THE MINIMUM VIABLE PRODUCT

HOW DO WE START SMALL IN ORDER TO SCALE BIG?

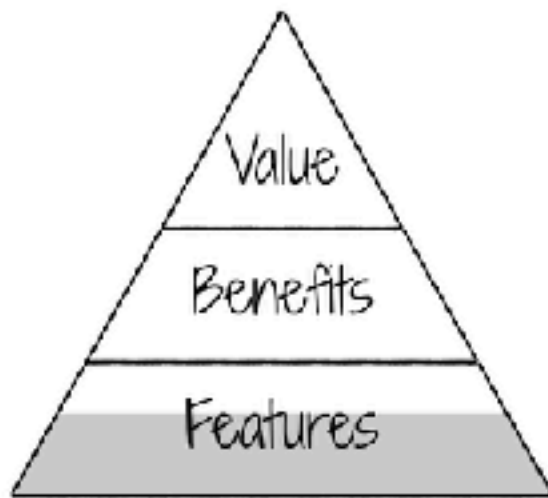
*"The minimum viable product is that **version of a new product** which allows a team to collect the maximum amount of **validated learning about customers** with the least effort."*

Eric Ries (2009)

THE PROBLEM WITH MVP'S

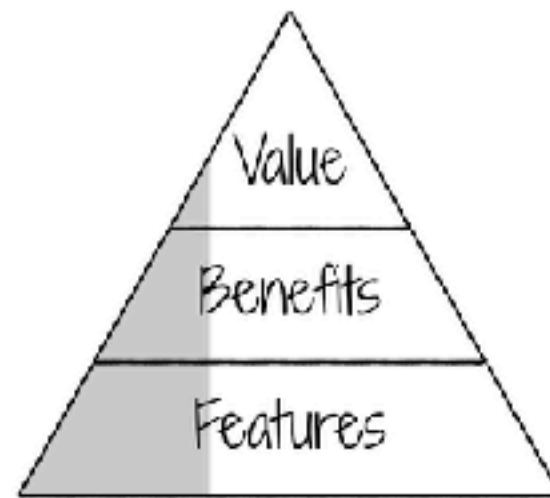
MINIMUM VIABLE PRODUCTS ARE OFTE TO FEATURE-FOCUSED

Terrible



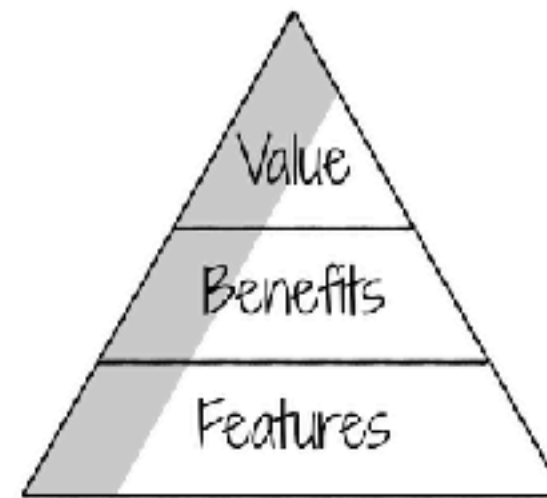
When you ask yourself
"which features can I build"

Bad



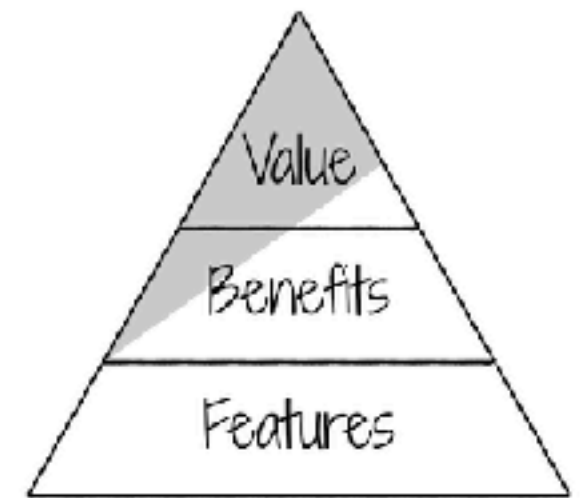
When you ask yourself
"what are the minimum
features to provide at least
some value"

Ok



When you ask yourself
"what version of my product
can I build, that captures most
of the value?"

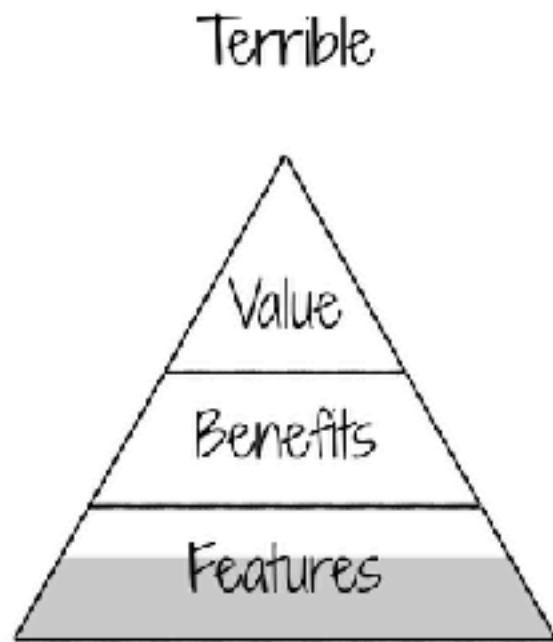
Real MVP



When you ask yourself
"how can I validate my value
proposition"

THE PROBLEM WITH MVP'S

MINIMUM VIABLE PRODUCTS ARE OFTE TO FEATURE-FOCUSED



When you ask yourself
"which features can I build"

DESIGN CYCLE: **CORE DESIGN**

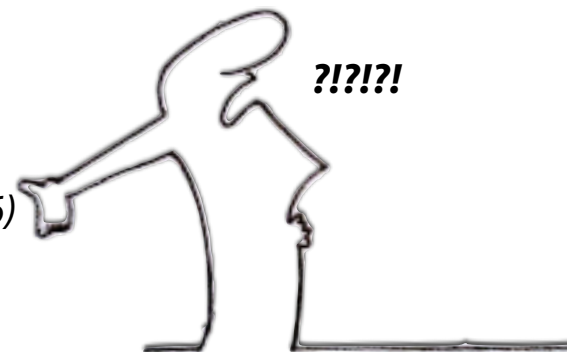
*Talk about desired **core qualities**
before finalized **complex ideas***

DESIGN CYCLE: CORE DESIGN

*The basic idea of Core Design is to **focus on the core of the future system**, make that work with as few features and assets as possible, check it again, and be sure it actually works; and then **create the full system around the core**.*

*Behind any complex system, there is **a simple core system**.*

Rosenstand (2014) + Vistisen & Rosenstand (2016)



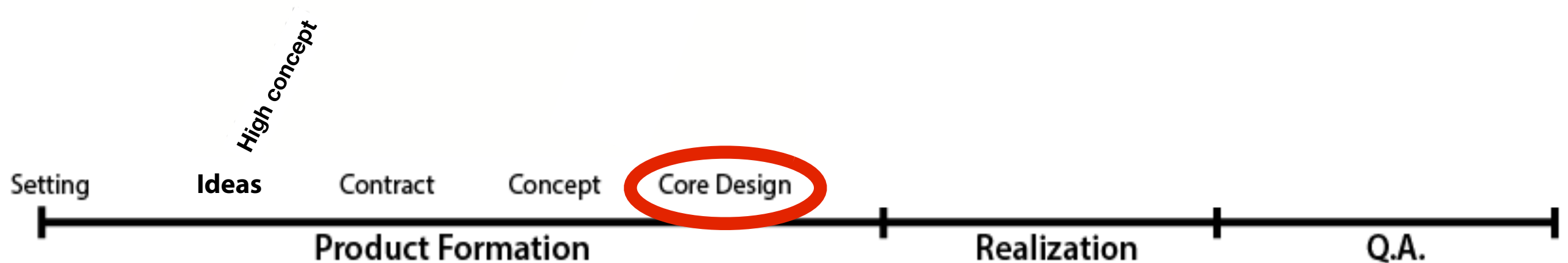
**IT IS a BIT aBSTRaCT WITH
aLL THE cOREs aND BIG
SHITS aND aLL...**



***Behind any complex system,
there is a simple core system.***

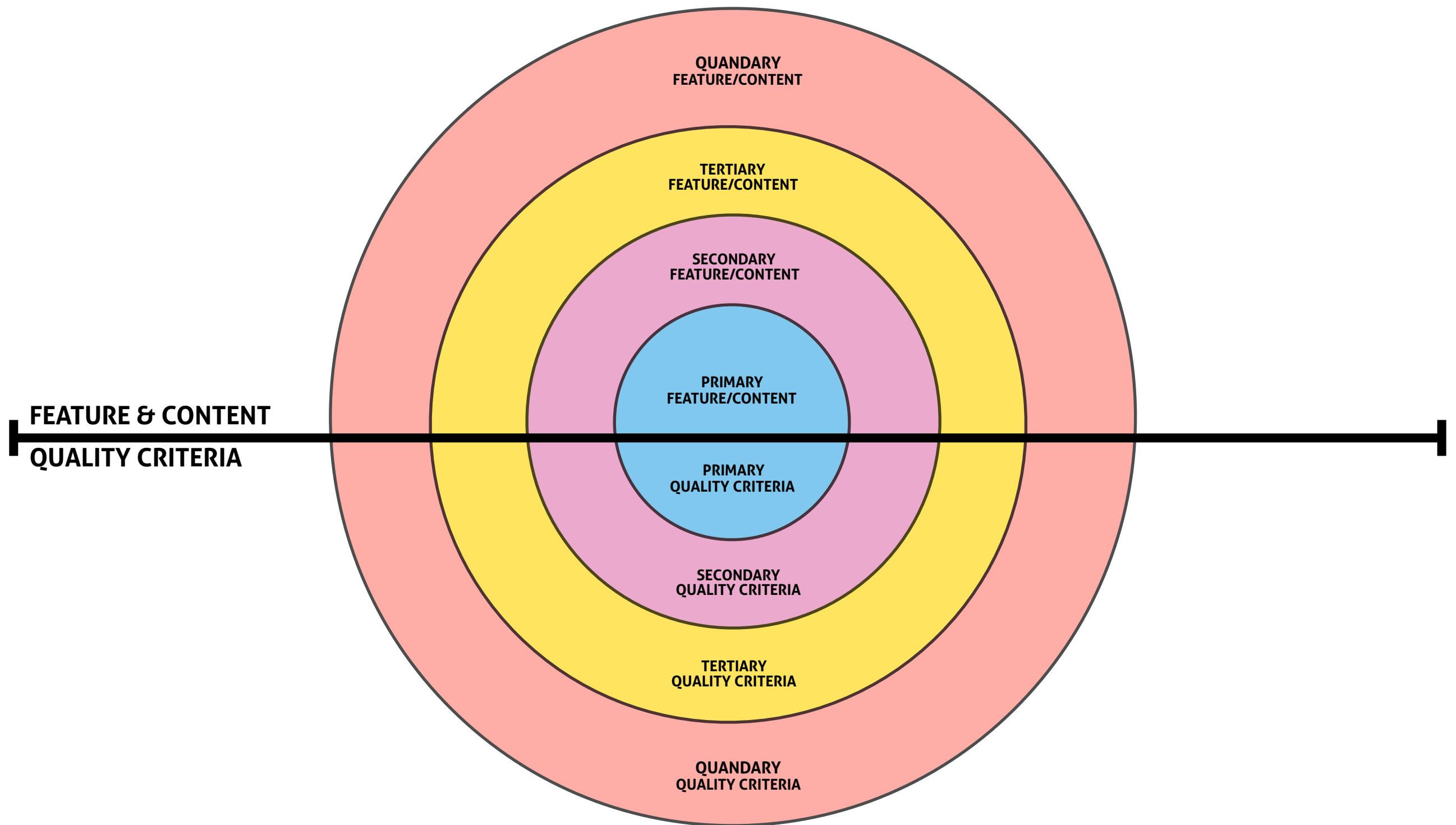


DESIGN CYCLE: CORE DESIGN



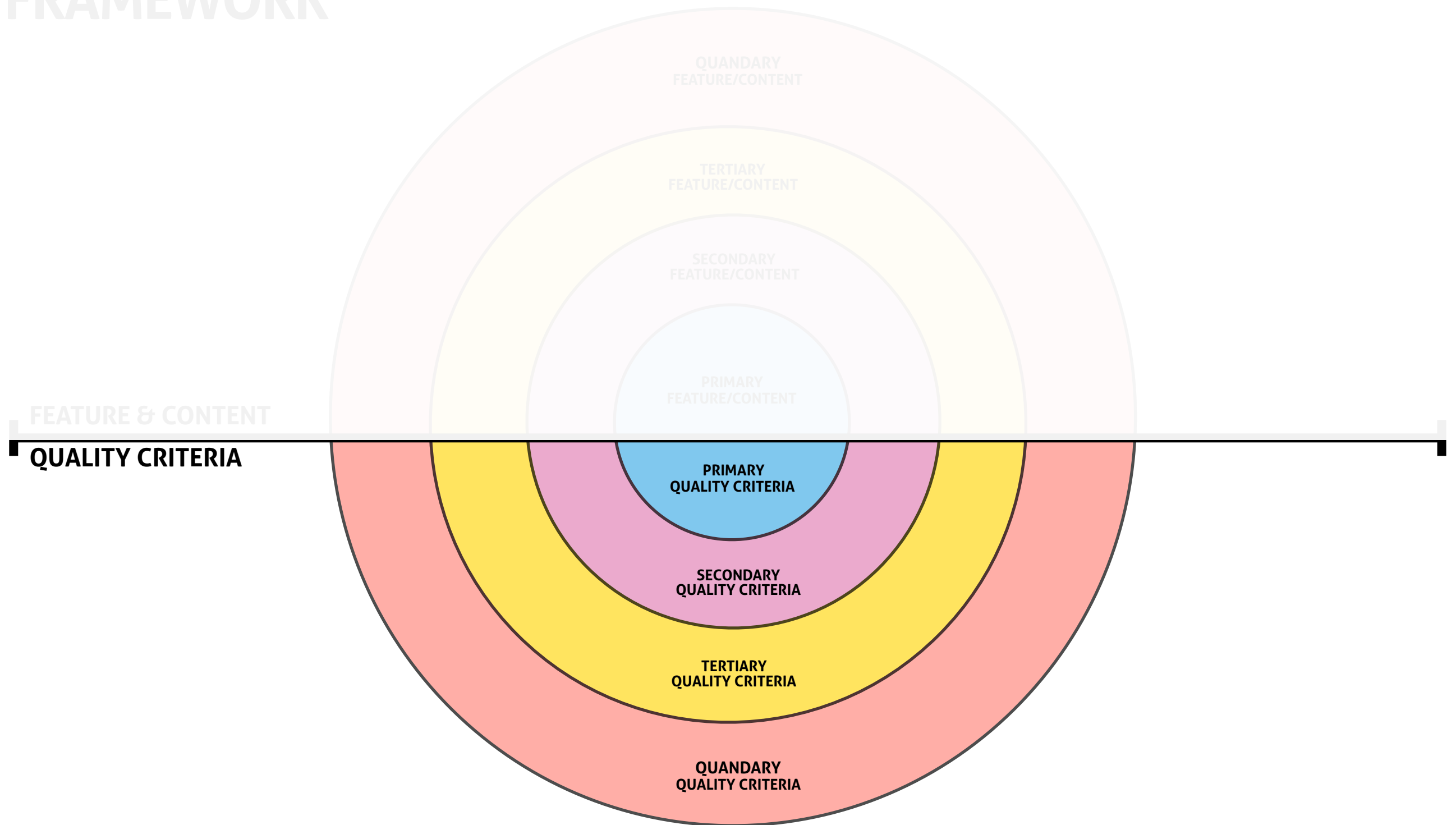
Rosenstand & Kyed 2013 + Vistisen & Rosenstand 2016

The core design manifests the quality criterias as the minimum viable feature and content...

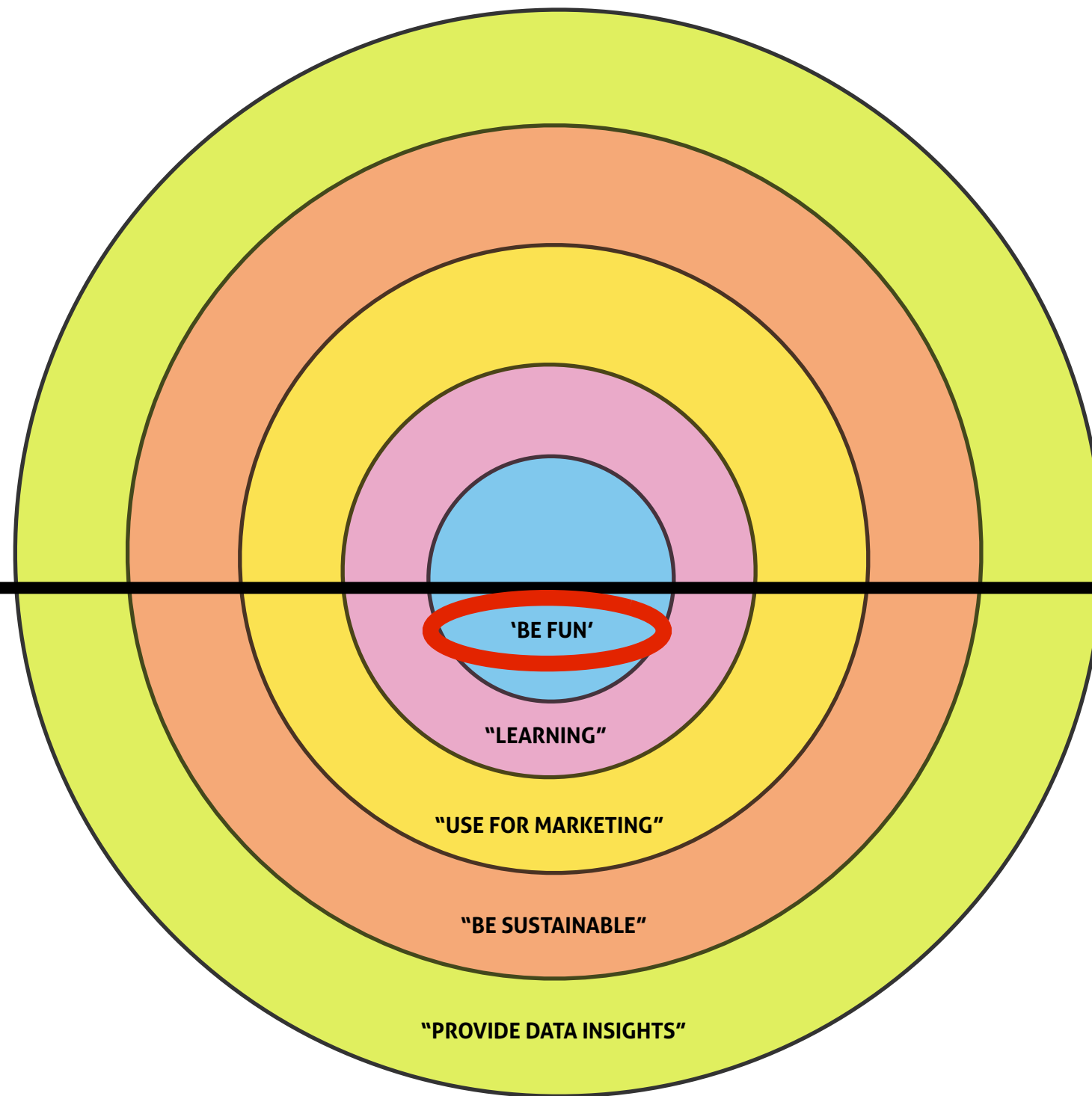


Rosenstand & Vistisen (2017)

CORE DESIGN FRAMEWORK



FEATURE & CONTENT
QUALITY CRITERIA



**NORDSØEN
MOVIE MAKER**



AALBORG UNIVERSITET

CORE DESIGNING THE app

SKETCHING FROM STATIC TO animation-Based

STATIC SKETCH

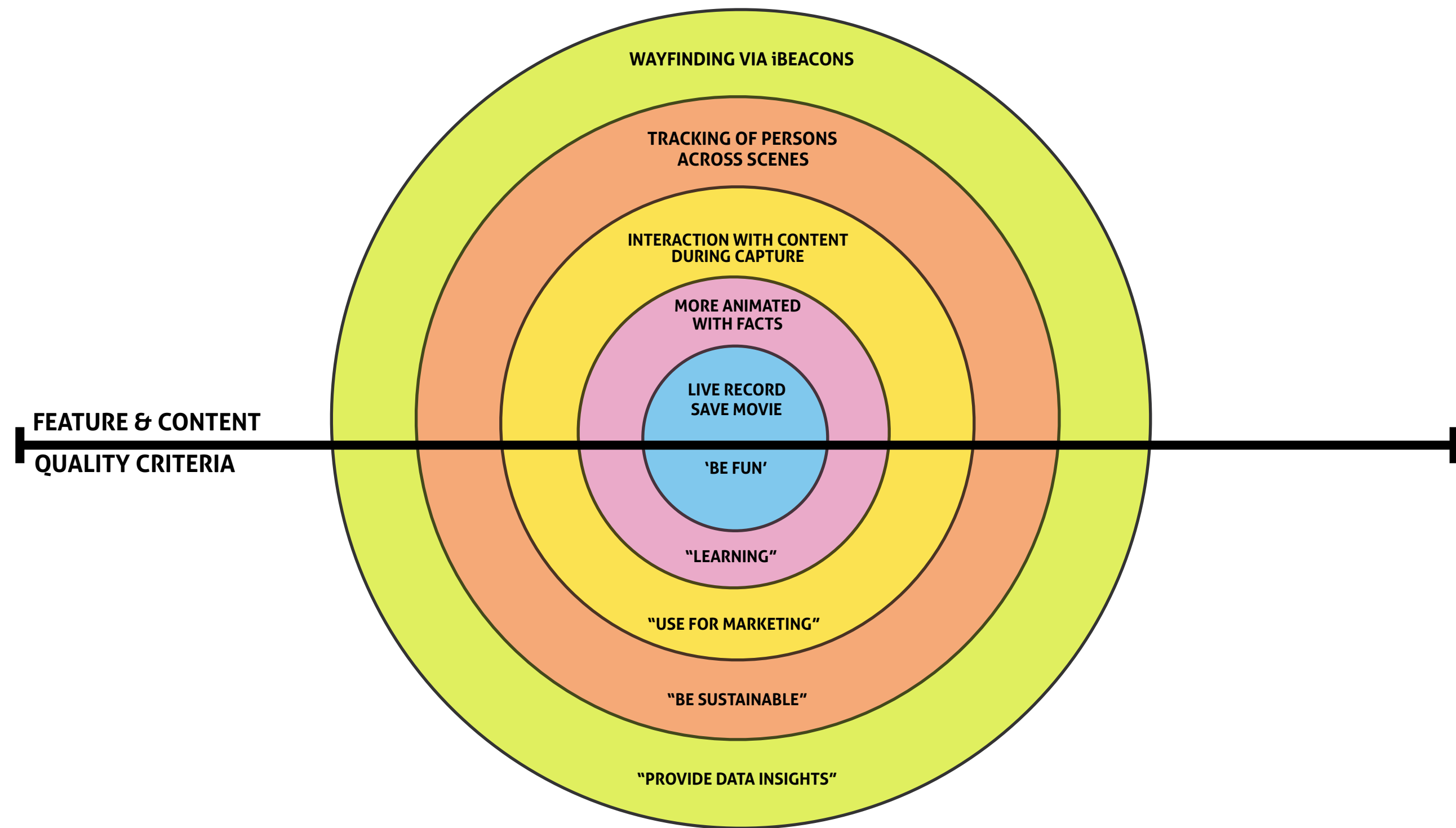


CLICKABLE MOCKUP



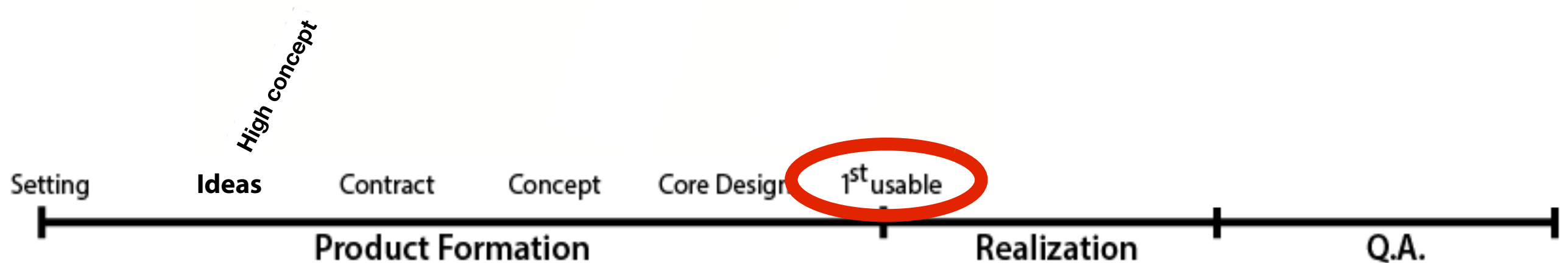
10 SECOND ANIMATION





**NORDSØEN
MOVIE MAKER**

DESIGN CYCLE: 1ST USABLE



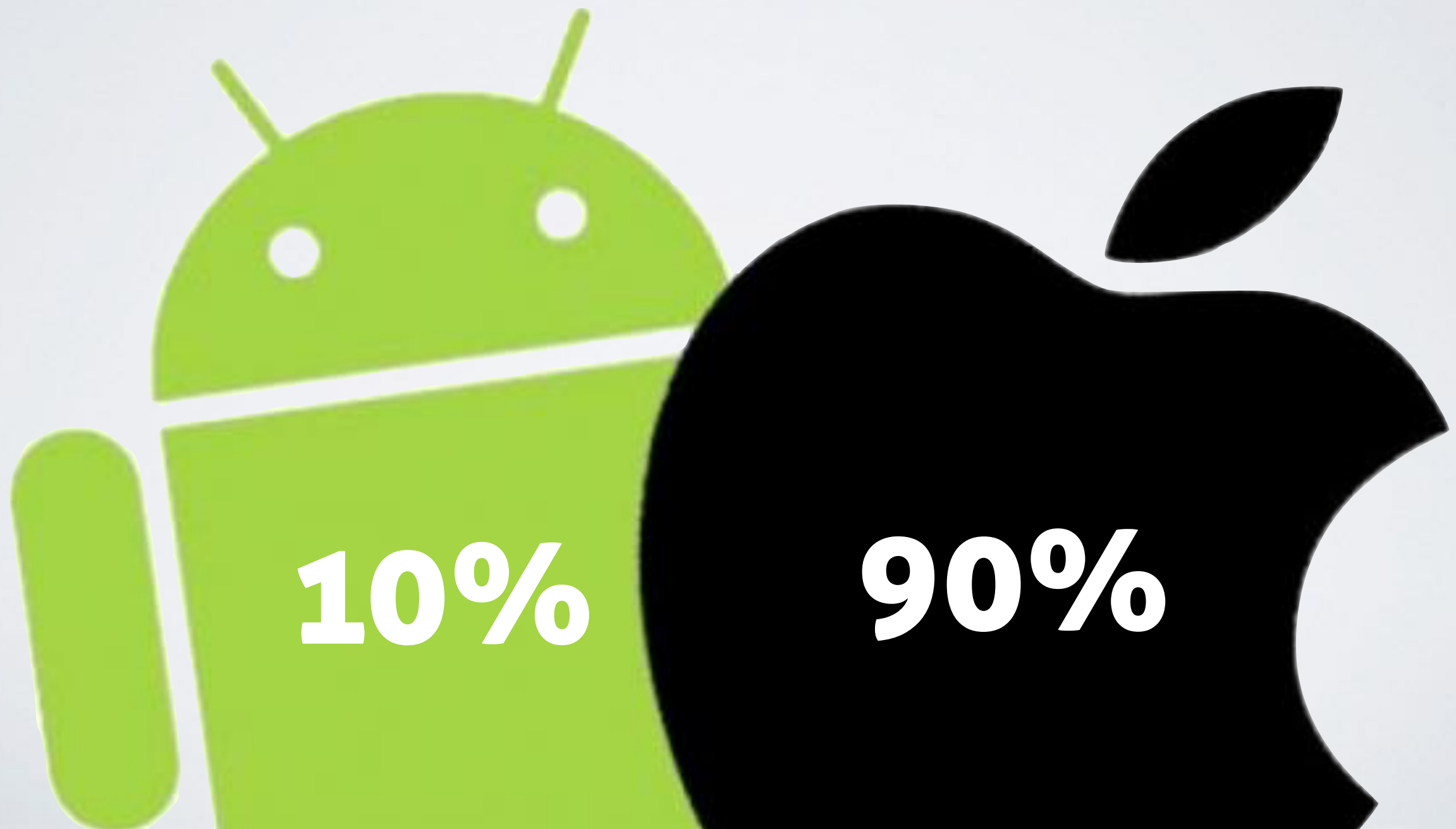
Rosenstand & Kyed 2013 + Vistisen & Rosenstand 2016

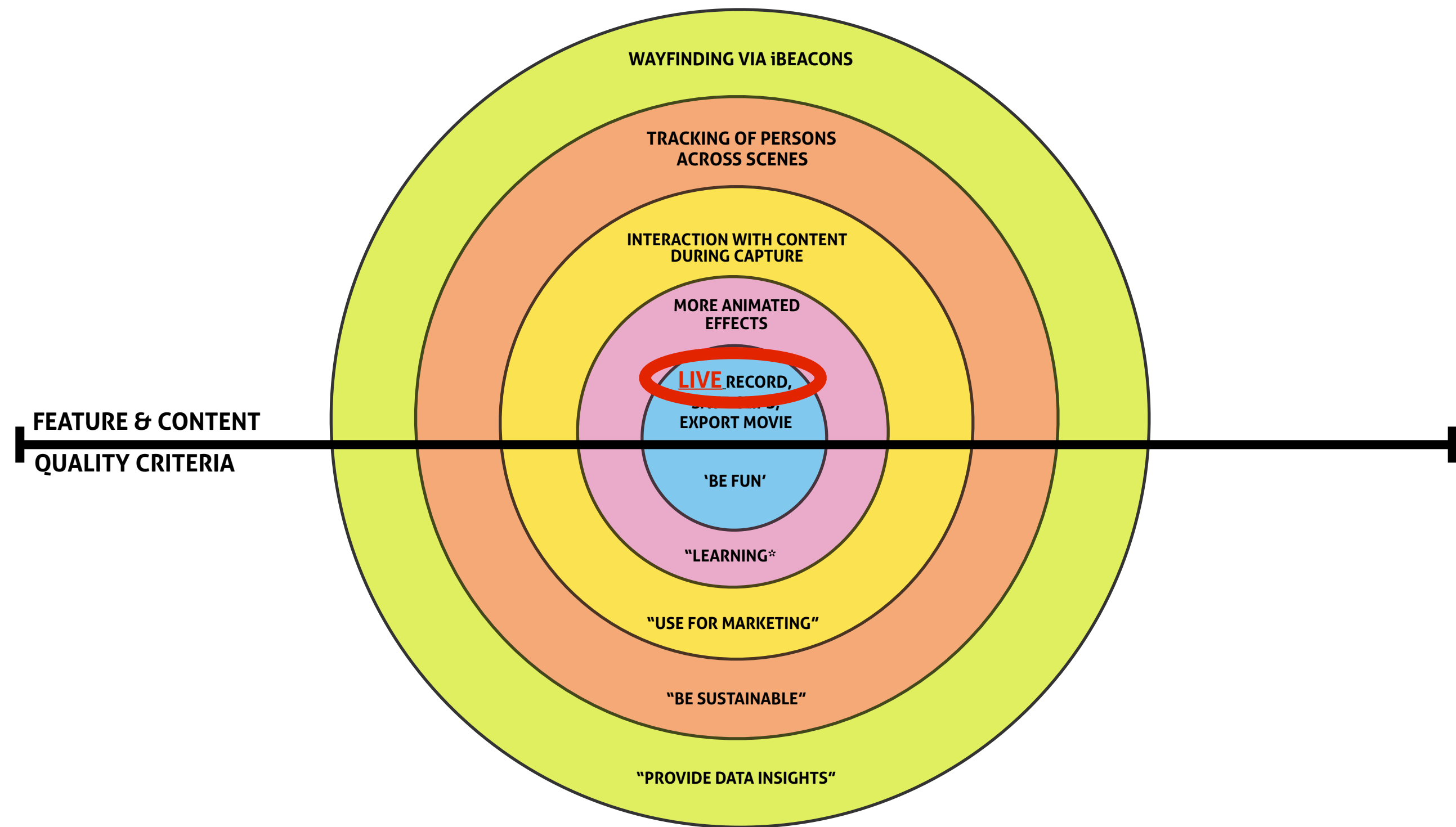
This is where U-CrAc has stopped - your core design should be able to specify what to build in the 1st usable (the MVP)

1ST USABLE IN ACTION



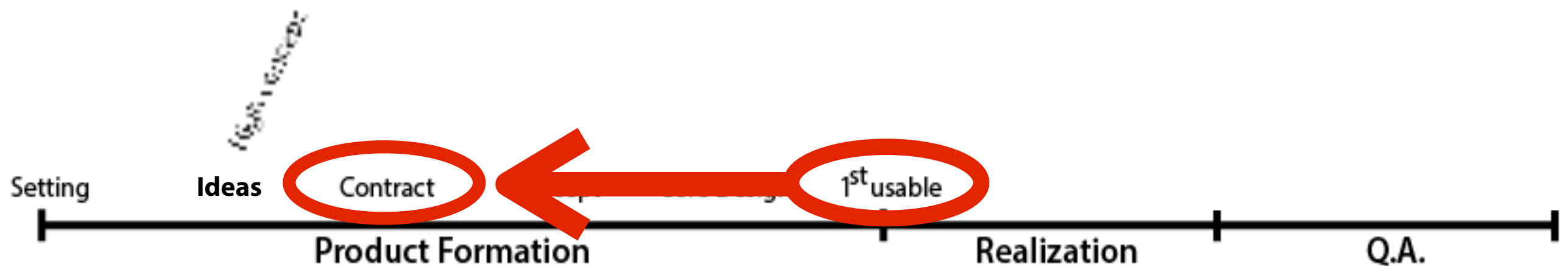
new INSIGHTS!





**NORDSØEN
MOVIE MAKER**

DESIGN CYCLE: BACKWARDS?

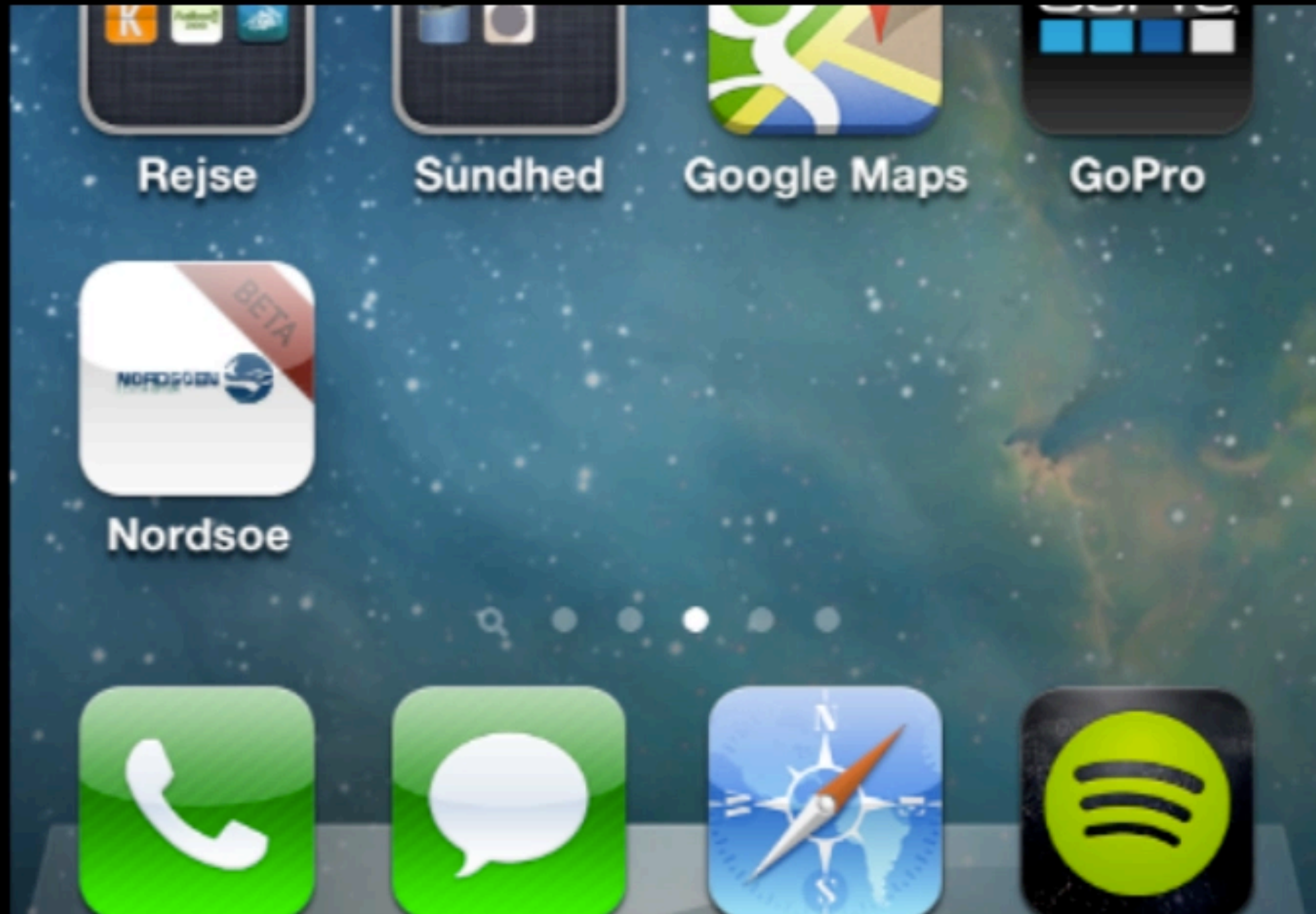


Rosenstand & Kyed 2013 + Vistisen & Rosenstand 2016

The contract is decided, and should be realized through the 1st usable - how do we respond to new insights?

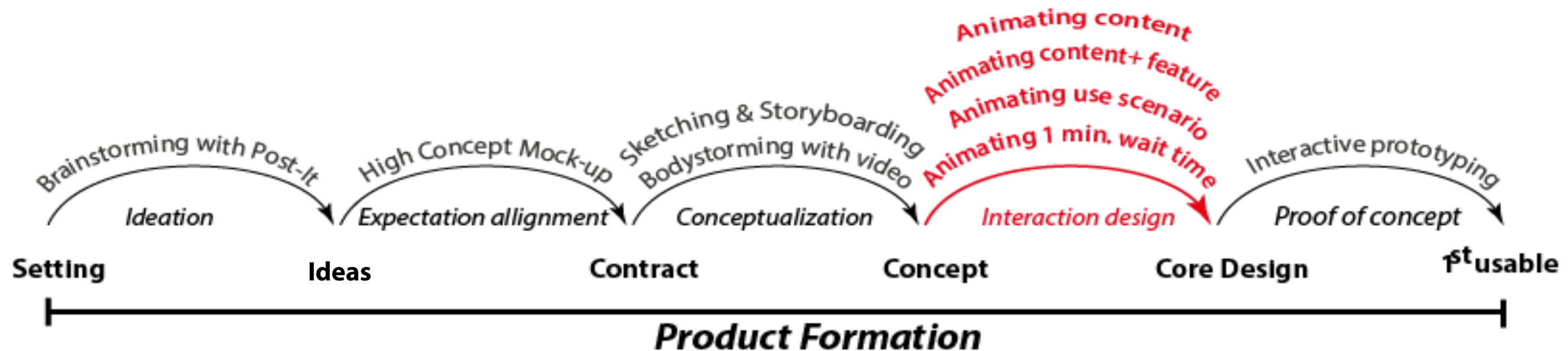
TECHNOLOGY CONSTRAINTS

WHAT IF CANNOT EXPLAIN TECHNICAL CONSTRAINTS WITH WORDS



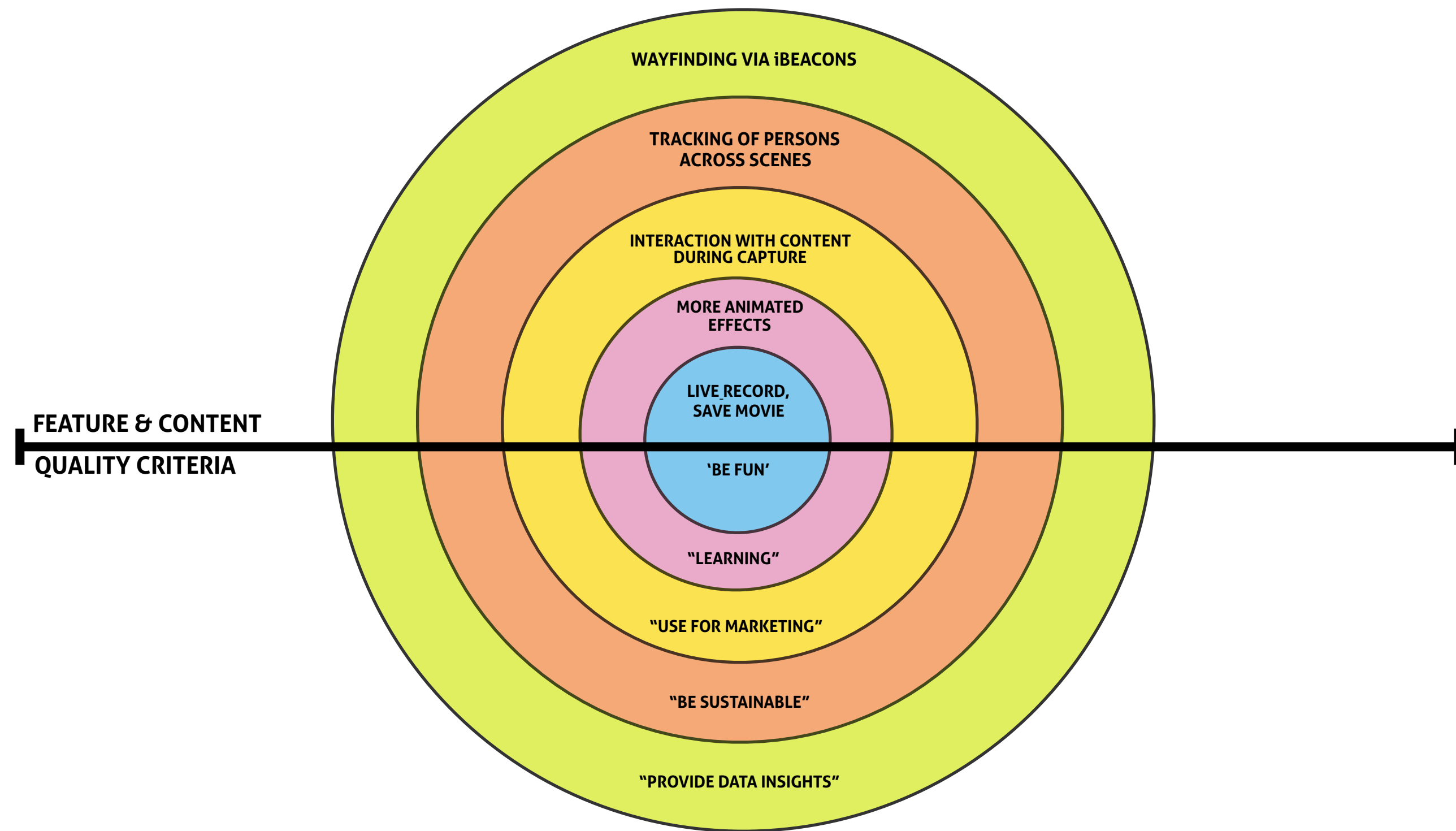
TRANGRESSIONS

WE USE DESIGN TOOLS TO TRANGRESS THE STEPS IN THE CYCLE



Vistisen & Rosenstand 2016

A transgression is forward moving, but should allow for backwards feedback loops if it affects prior decisions

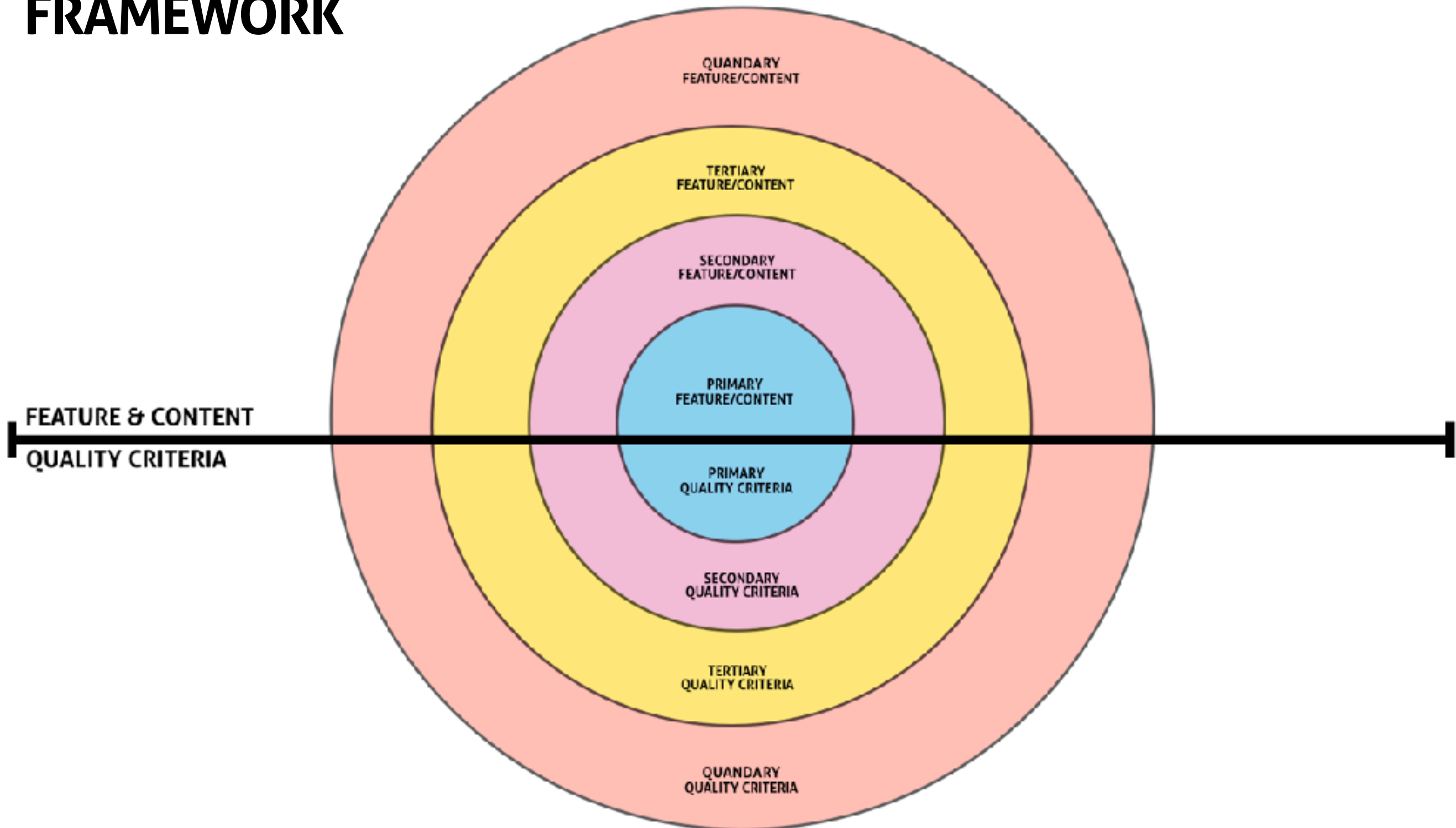


**NORDSØEN
MOVIE MAKER**

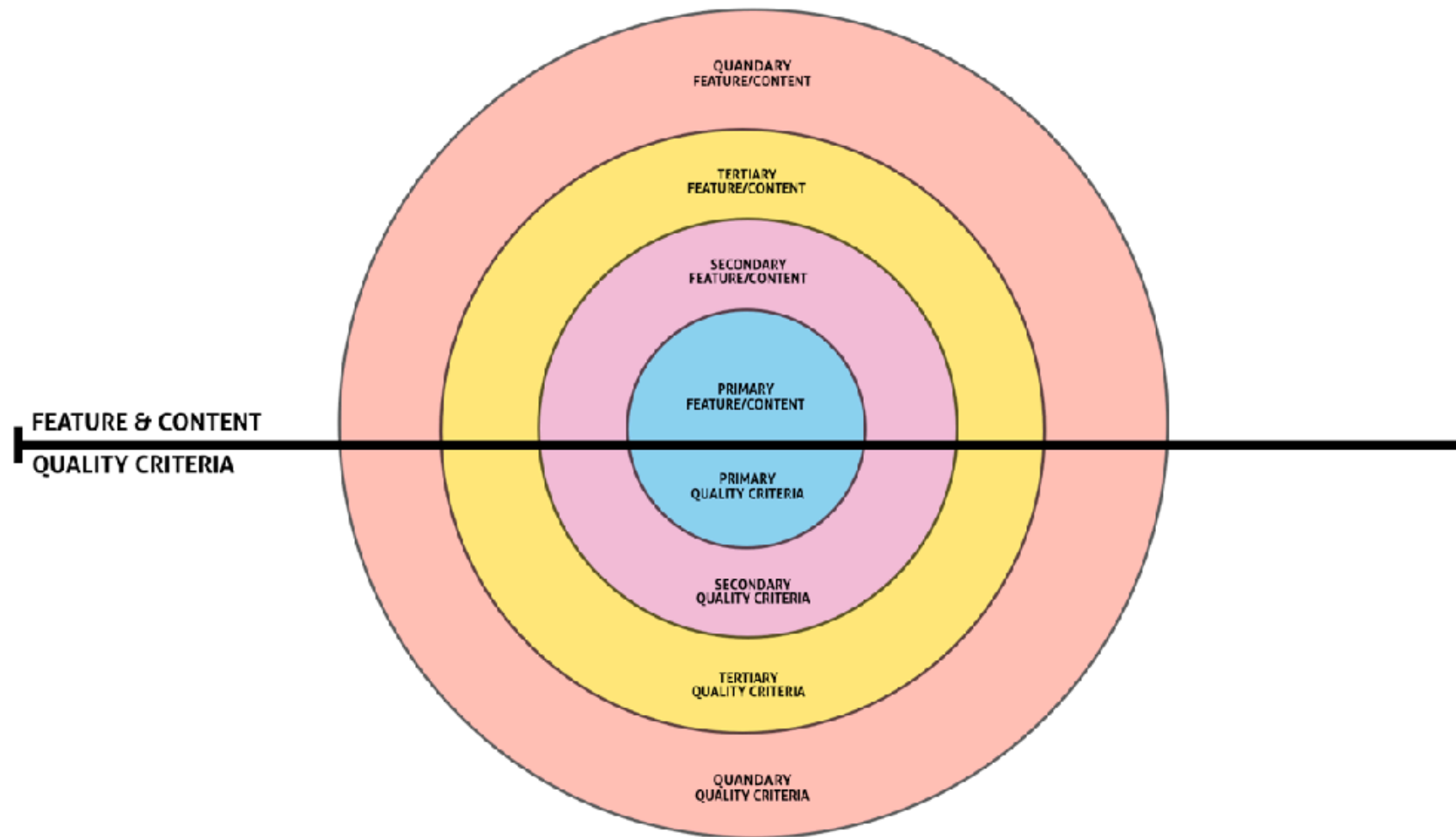


AALBORG UNIVERSITET

CORE DESIGN FRAMEWORK



**WHAT are YOUR
QUALITY CRITERIA?**



- 1.** What are your key insights from your research?
- 2.** Translate insights into quality criteria
- 3.** Map the insights from the core criteria and out to the outer circles
- 4.** Make different configurations and ideate feature/content based on quality criteria

MONDAY...

case PARTNER meeting no. 2

- 1.** *Each group presents their key findings for case partners individually*
- 2.** *You should present 5 innovation tracks for your possible concepts*
- 3.** *Negotiate which (converged) direction to follow in the concept development*
- 4.** *A successful meeting ends with a 'contract' on prioritized quality criteria(s)*
- 5.** *Write a short summary on ucrac.dk which formulates the quality criteria(s)*
(send your case partner an e-mail with a link to the summary after the meeting monday afternoon)

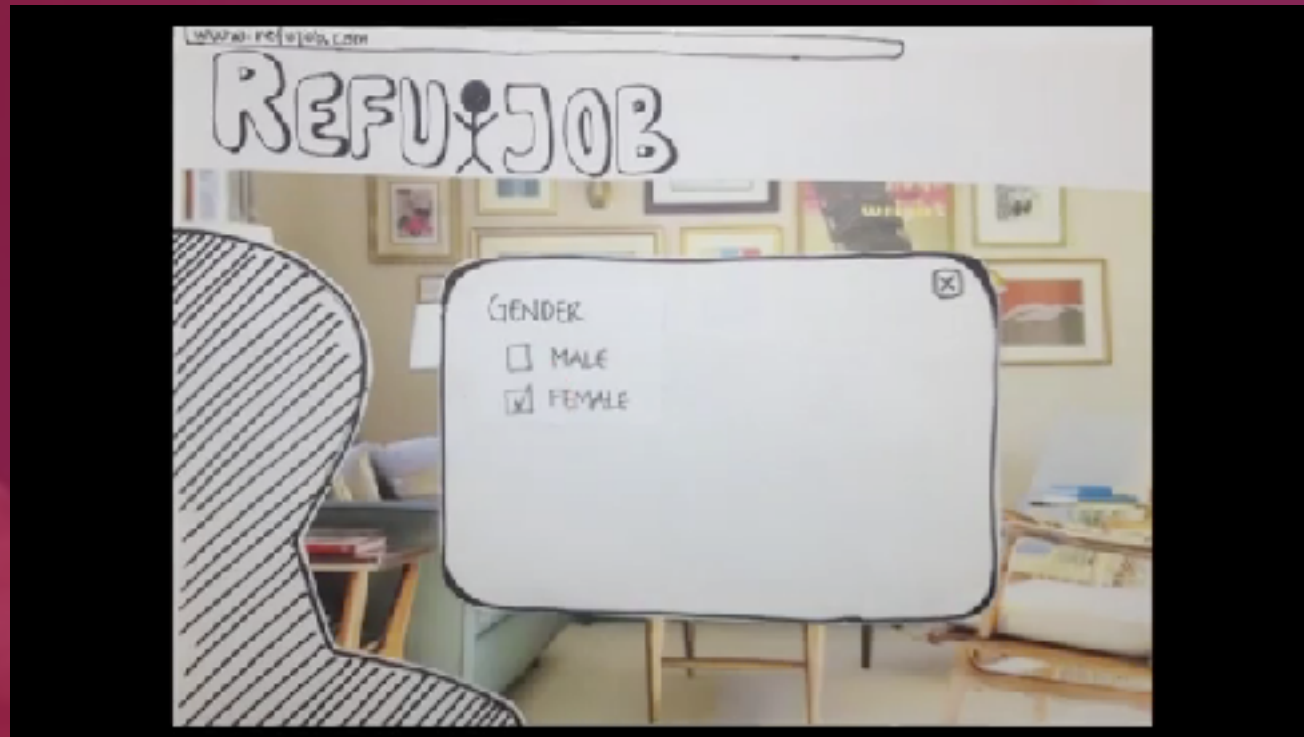


QUESTIONS?

case example 2

A group of design students were tasked to come up with concepts^x for how to better introduce immigrants and fugitives to the danish labour market, and integrate them in the working culture of Denmark

case example 2



case example 2



case example 2



Informed a design move towards creating the 1st usable interactive prototype of the product...

Thus, the information was functional in moving the design process forward.

