BUILDING BRIDGES FROM PRODUCT VISION TO REQUIREMENTS

Swiss Systems Engineering Day 2024

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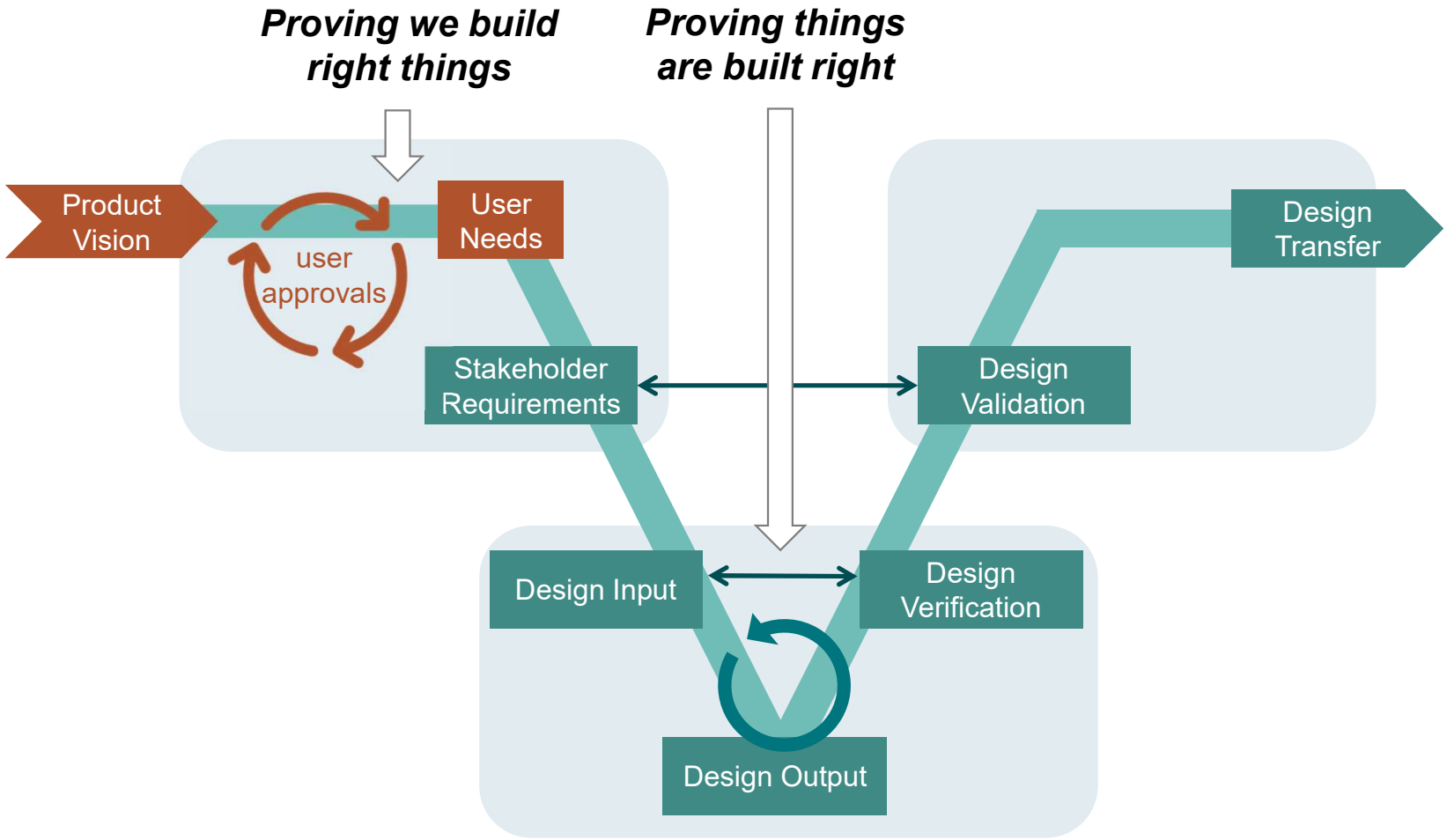
ilkonplan

Vision is Basis…
… Usability is Key
«We surgeons never hold tools in this way…»

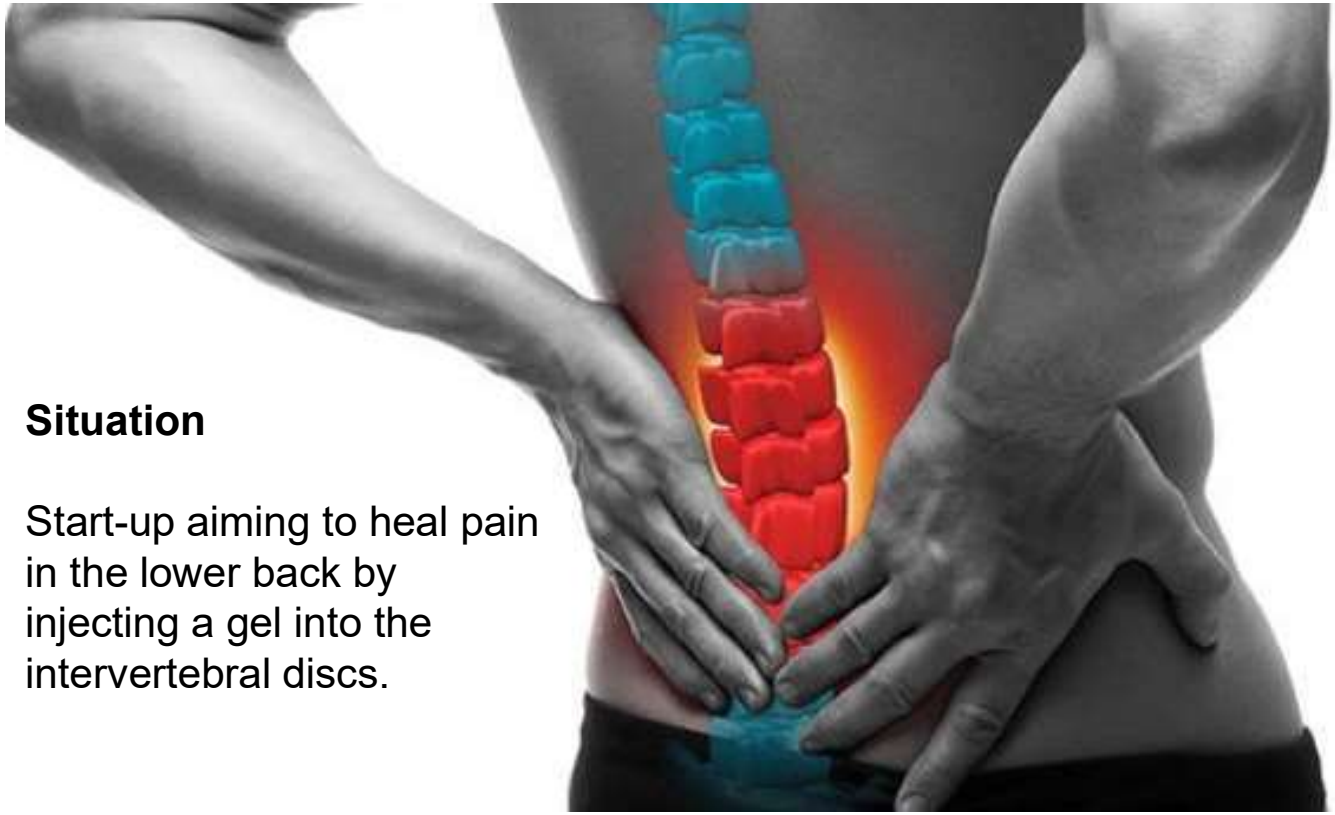
USER NEEDS AS A STAKEHOLDER REQUIREMENT: OFF-CORE APPROVALS



HOW TO SUCCESSFULLY CONDUCT USER APPROVALS WITHIN EARLY STAGE OF DEVELOPMENT?

A POTENTIAL APPROACH OUT OF KONPLAN`S RECENT PROJECTS.

INITIAL SITUATION & VISION



Situation

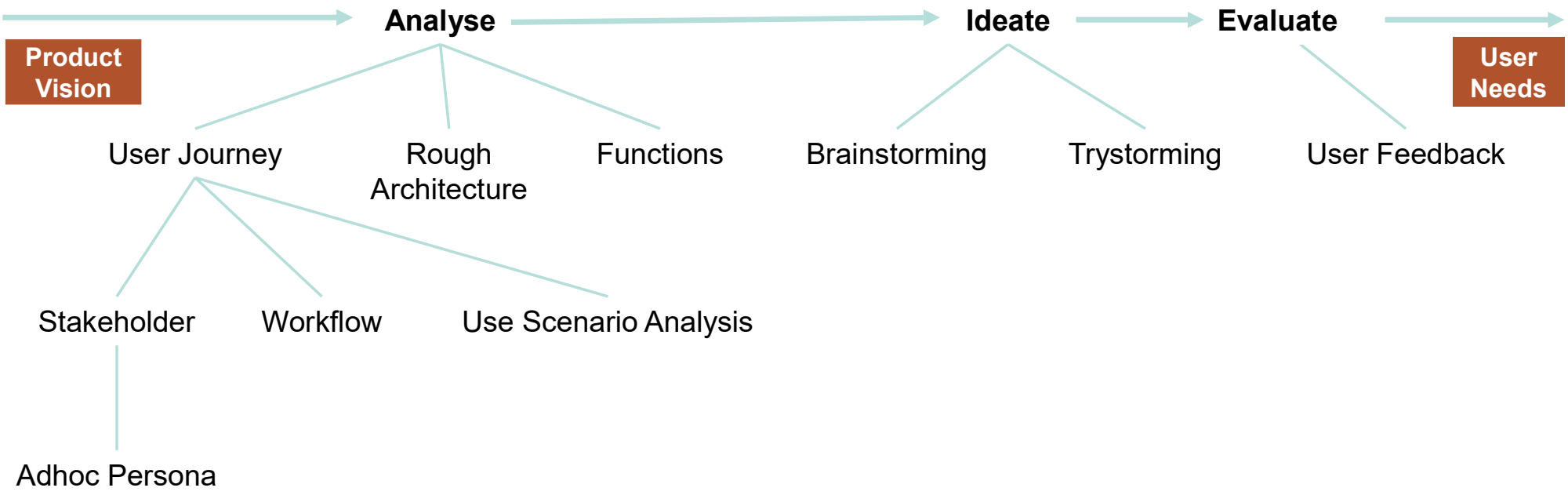
Start-up aiming to heal pain in the lower back by injecting a gel into the intervertebral discs.

Vision

- Time between walk-in and walk-out in the range of a few hours
- Simple and safe handling

BK0

THE BRIDGE: APPROACH & METHODS

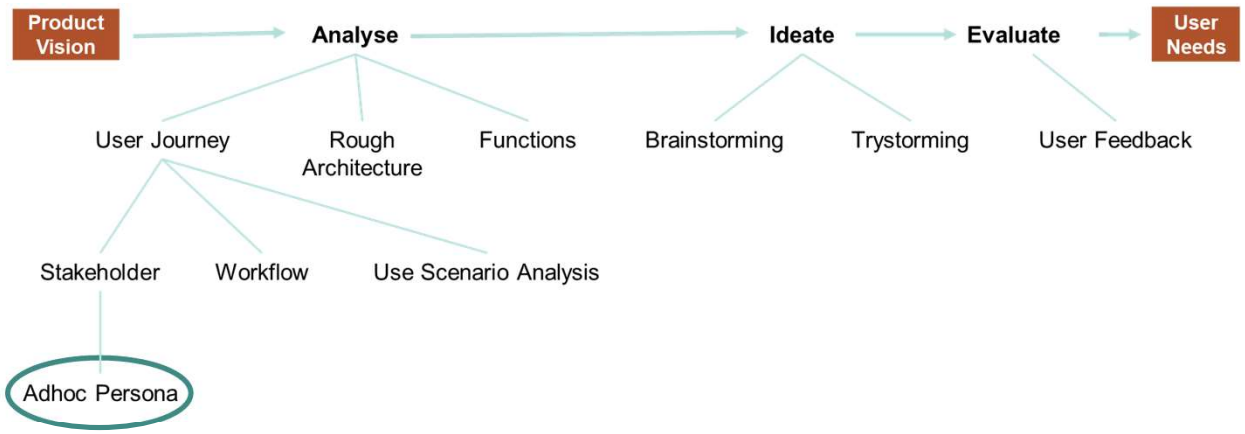


Folie 6

BK0 Bin mir nicht sicher, ob ich das "brückenähnlich" darstellen soll...
Beat Keller; 2024-09-05T15:43:00.440

MM0 0 Oh starke Idee! Das könnte hier in der ersten Übersichtsfolie gut funktionieren. Beim Wiederaufgreifen auf den nächsten Folien benötigt es womöglich zu viel Platz... Mal ausprobieren?
Markus Moser; 2024-09-06T06:06:56.868

METHODS: ADHOC PERSONA



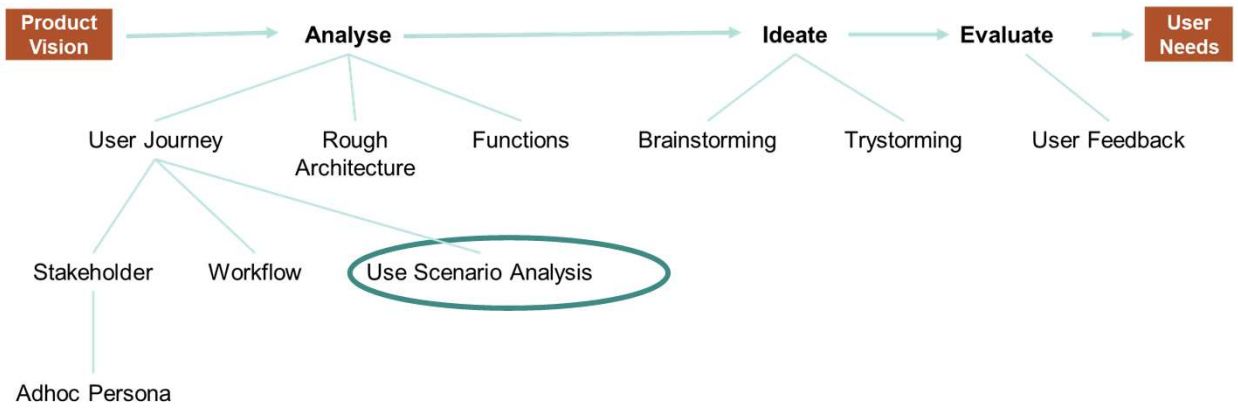
What to do:

- People involved are described as ad hoc personas

Learning:

- Important roles become visible

METHODS: USE SCENARIO ANALYSIS

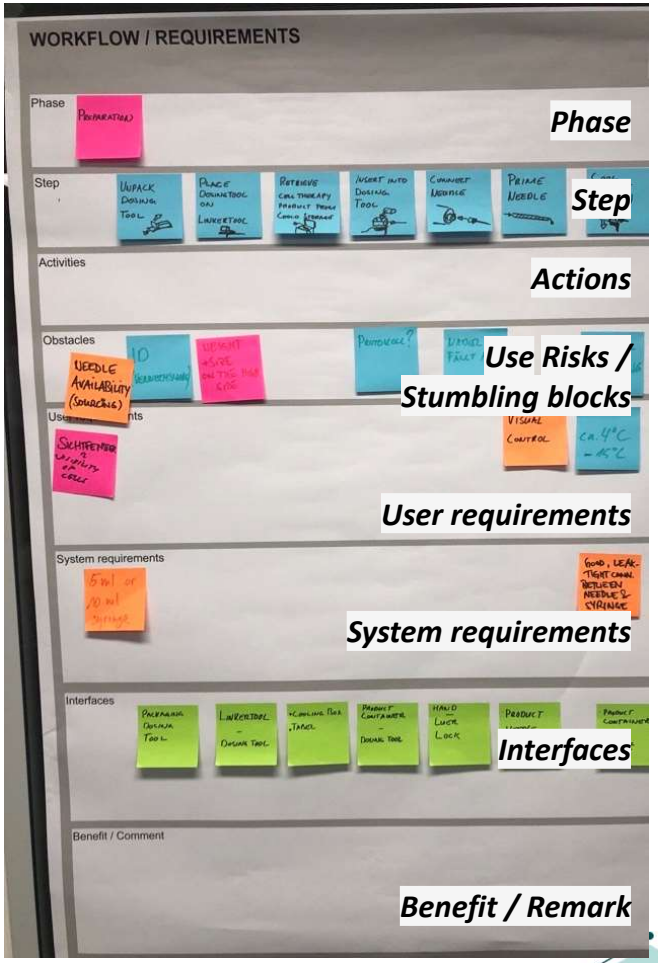


What to do:

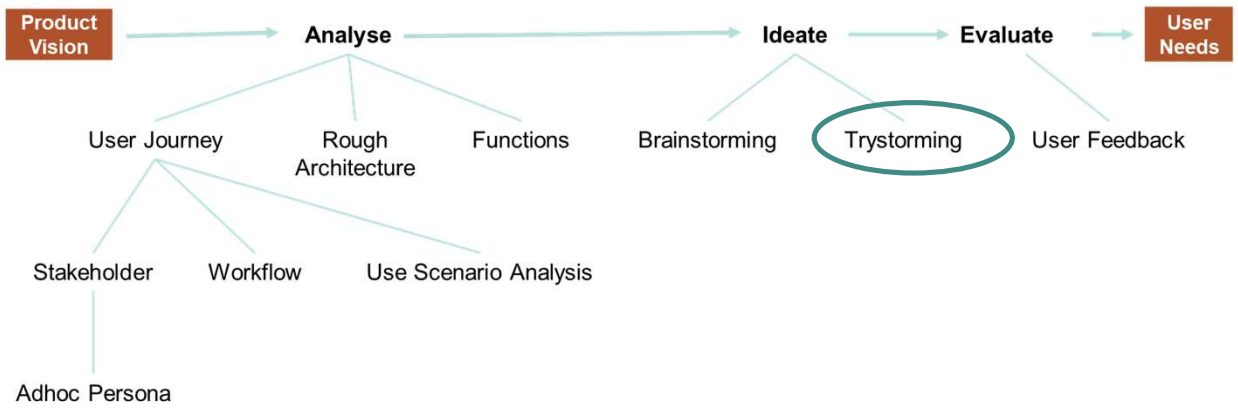
- step by step recording of selected step
- Working out of possible use risks

Learning:

- Discovering of unexpected needs



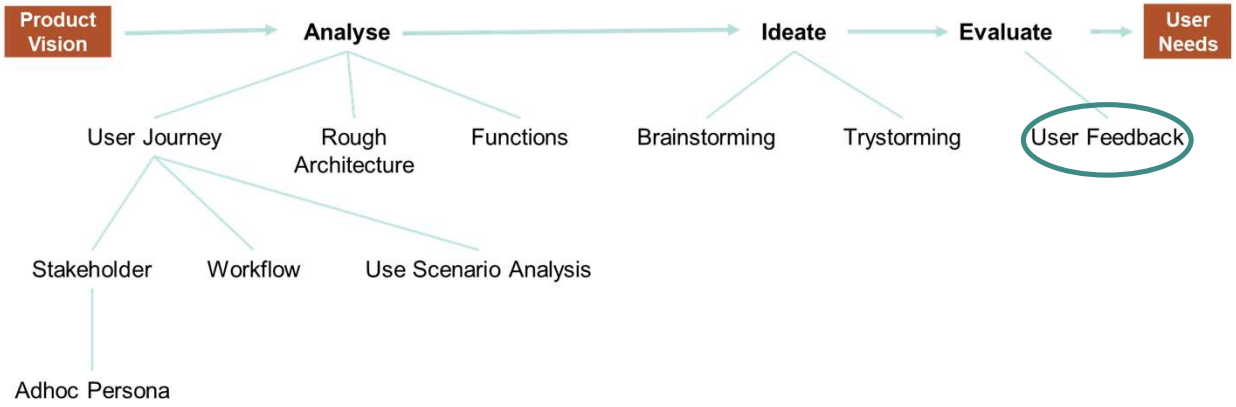
METHODS: TRYSTORMING



What to do:
- Realising ideas in simple mock-ups

Learning:
- Simple simulation of mechanisms

METHODS: EVALUATION WITH THE USERS



Mockup	Feedback User 1	Feedback User 2	Feedback User 3

What to do:
- Let the users try out
- Getting feedback to evaluate concepts

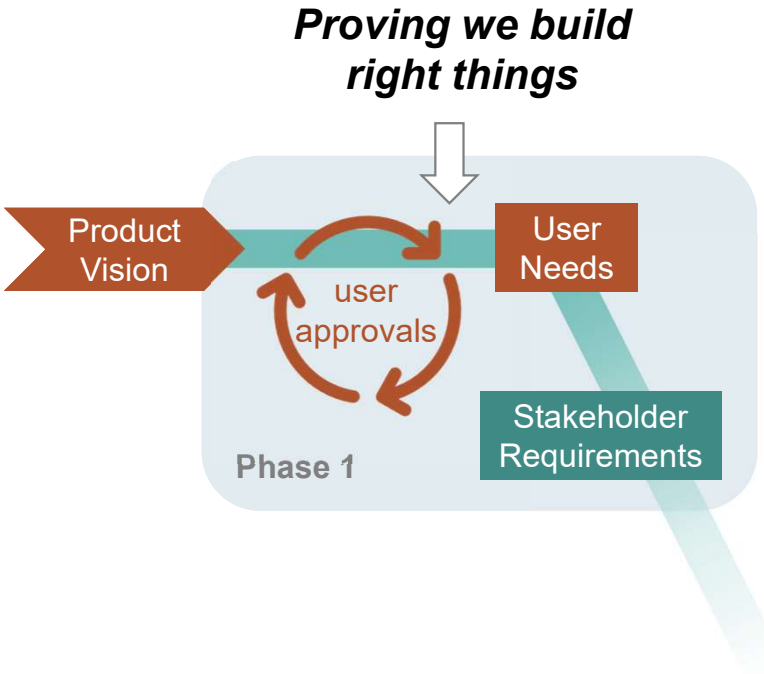
Learning:
- People can abstract better than you think
- There is always a clear favorite

CONCLUSION

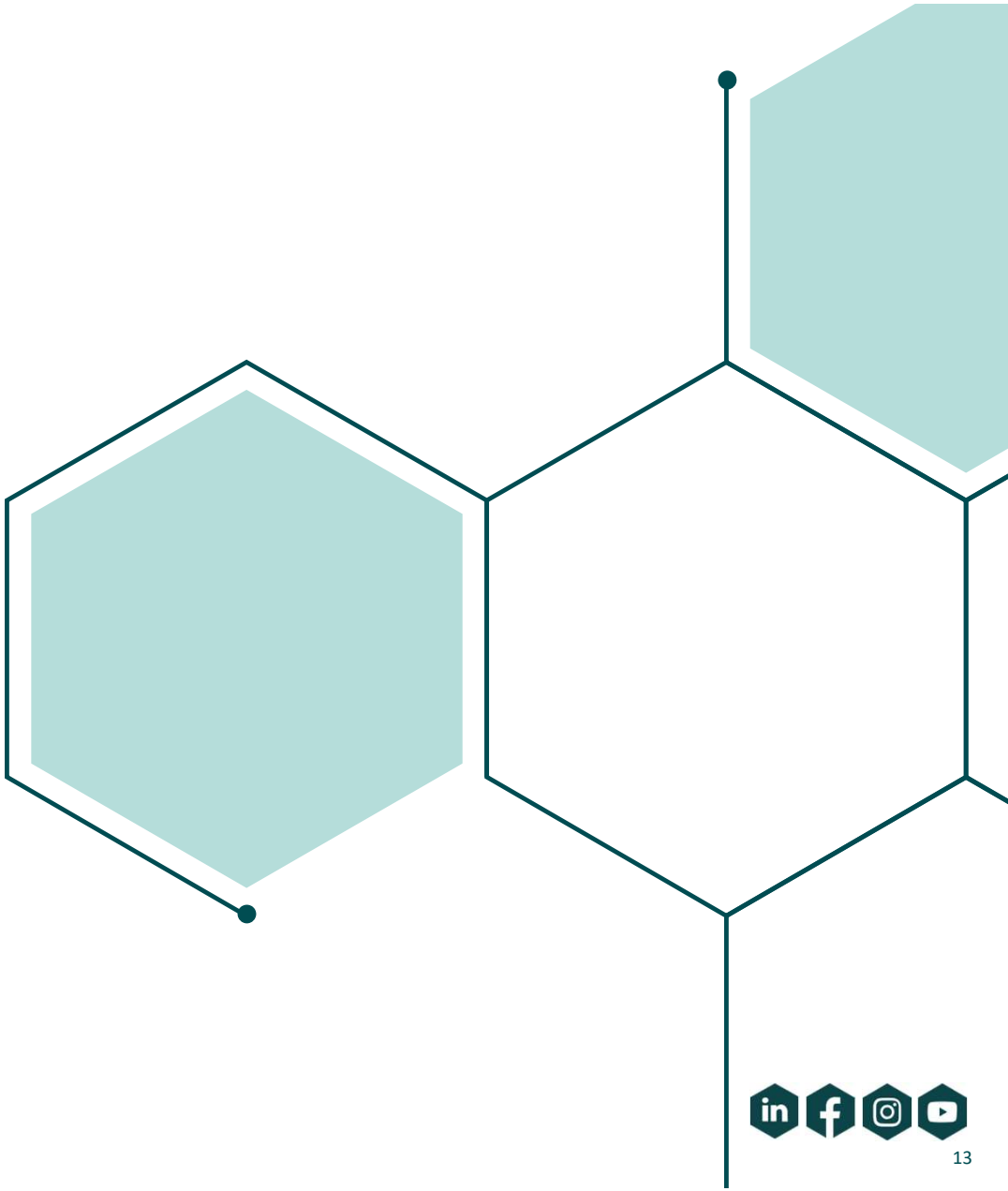
CONCLUSION

- Product vision is worthless, if users don’t like to handle it
- Start practical user-validations before formulation of requirements
- Understand the personas being involved
- The whole use scenario is often larger than you think

This is how to bridge the gap between vision and requirements in early phases of medical product development.



LET’S GET IN TOUCH WITH OUR SYSTEMS AS EARLY AS POSSIBLE!



Picture Sources:

Person holding clear round container by Drew Hays on unsplash

Person holding light bulb by Diego PH on unsplash

Frau trägt grüne Gesichtsmaske by Artur Tumasjan on unsplash

Backpain: https://ch.pinterest.com/pin/241646336252706470

Scrub nurse: https://www.bbc.co.uk/bitesize/articles/z9ywkty

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