

Brainstorming Alternatives & Observing Customers

Lecture 07 of *Researching People-Centred Design* with Tim Maciag



University
of Regina

Faculty of
Engineering and
Applied Science



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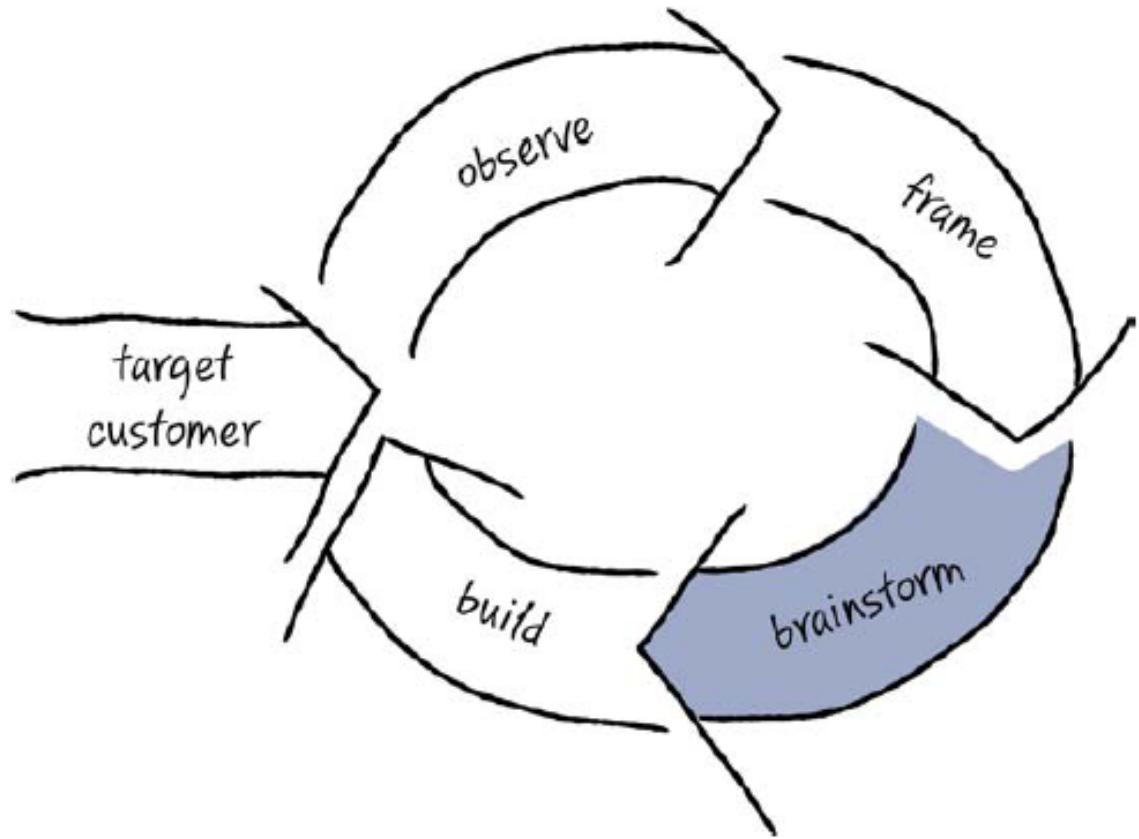
Outline

- Recap, brainstorming alternatives
- Recap, building empathy
- Complimentary research approaches
- Formative/summative research
- Finding customers
- Evaluation and feedback

Brainstorming alternatives

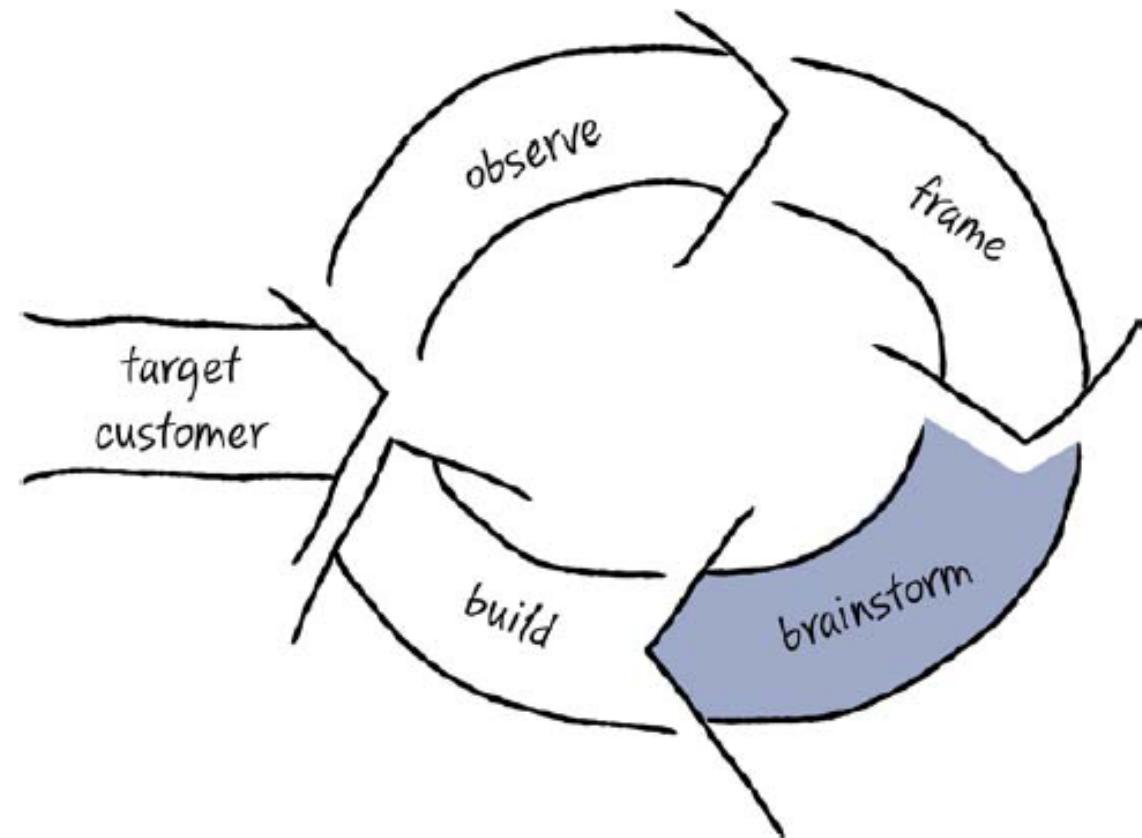
Brainstorming alternatives

- Shifting from problems to solutions



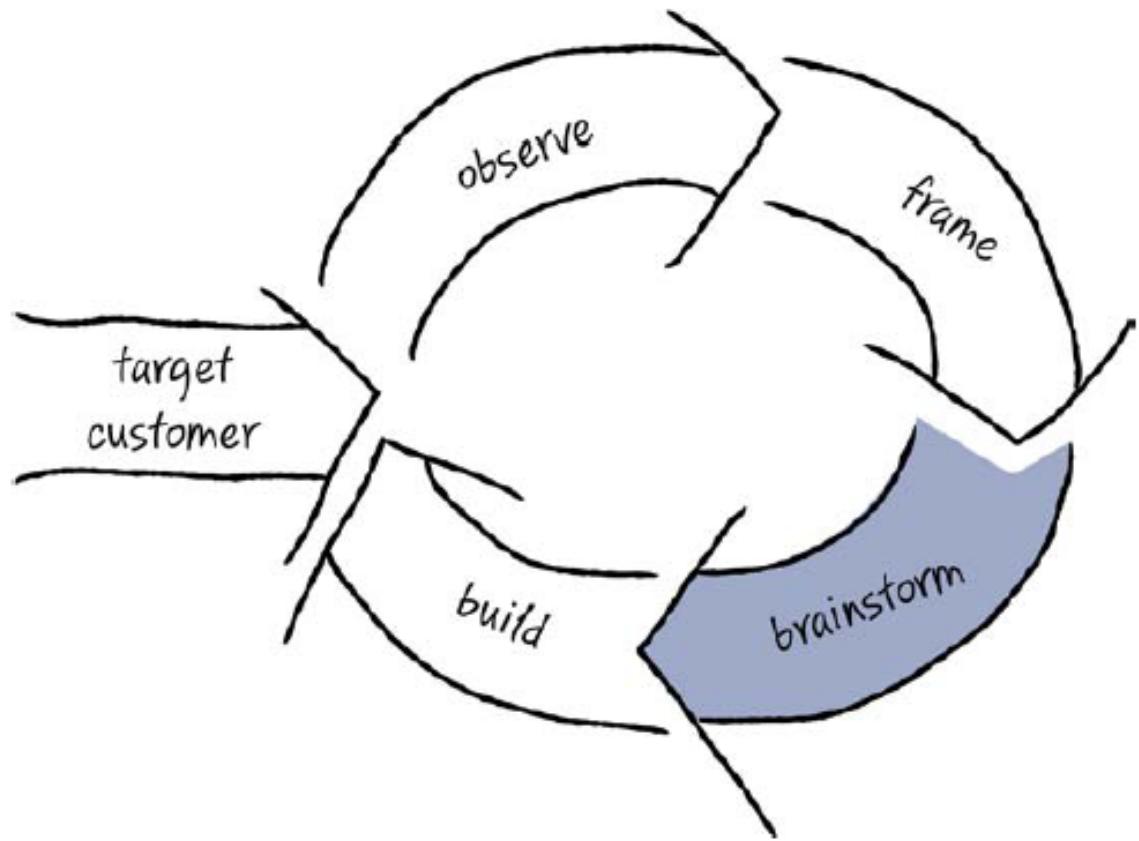
Brainstorming alternatives

- Shifting from problems to solutions
- Goal
 - Converge/diverge pattern



Brainstorming alternatives

- Shifting from problems to solutions
- Goal
 - Converge/diverge pattern
- Successful innovation
 - Diversity of ideas
 - Exploring lots of alternatives
 - Power of *blends*



Tunnel vision & fresh snow

Tunnel vision & fresh snow

- Caution: Tunnel vision



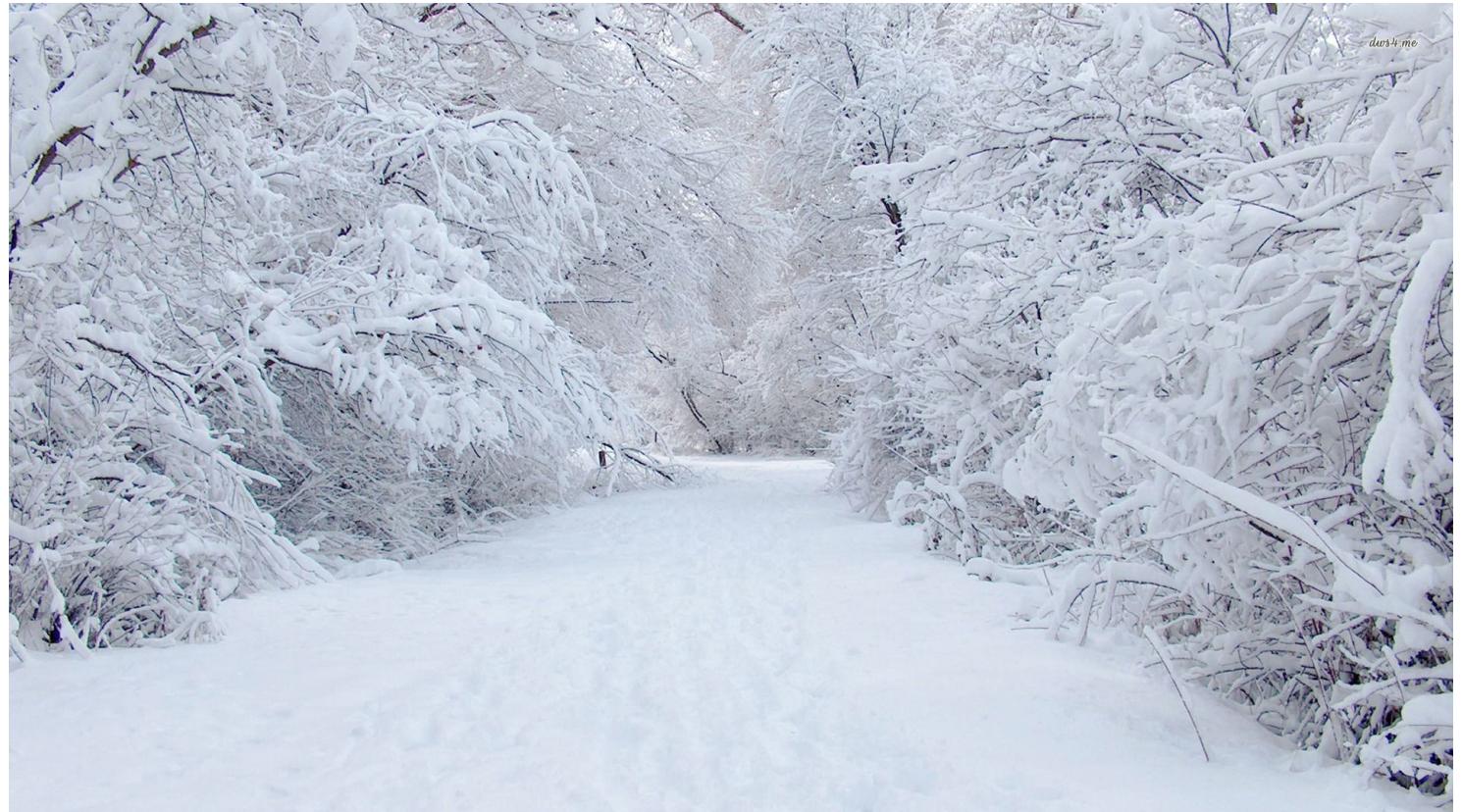
Tunnel vision & fresh snow

- Caution: Tunnel vision



Tunnel vision & fresh snow

- Caution: Tunnel vision
- Goal: Fresh snow



Tunnel vision & fresh snow

- Caution: Tunnel vision
- Goal: Fresh snow
- Mitigating the tunnel to reach the fresh snow
 - Brainstorm early
 - Quantity not quality
 - Embrace cousins (haha)
 - Lateral jumps
 - Embrace wild ideas
 - Marinate

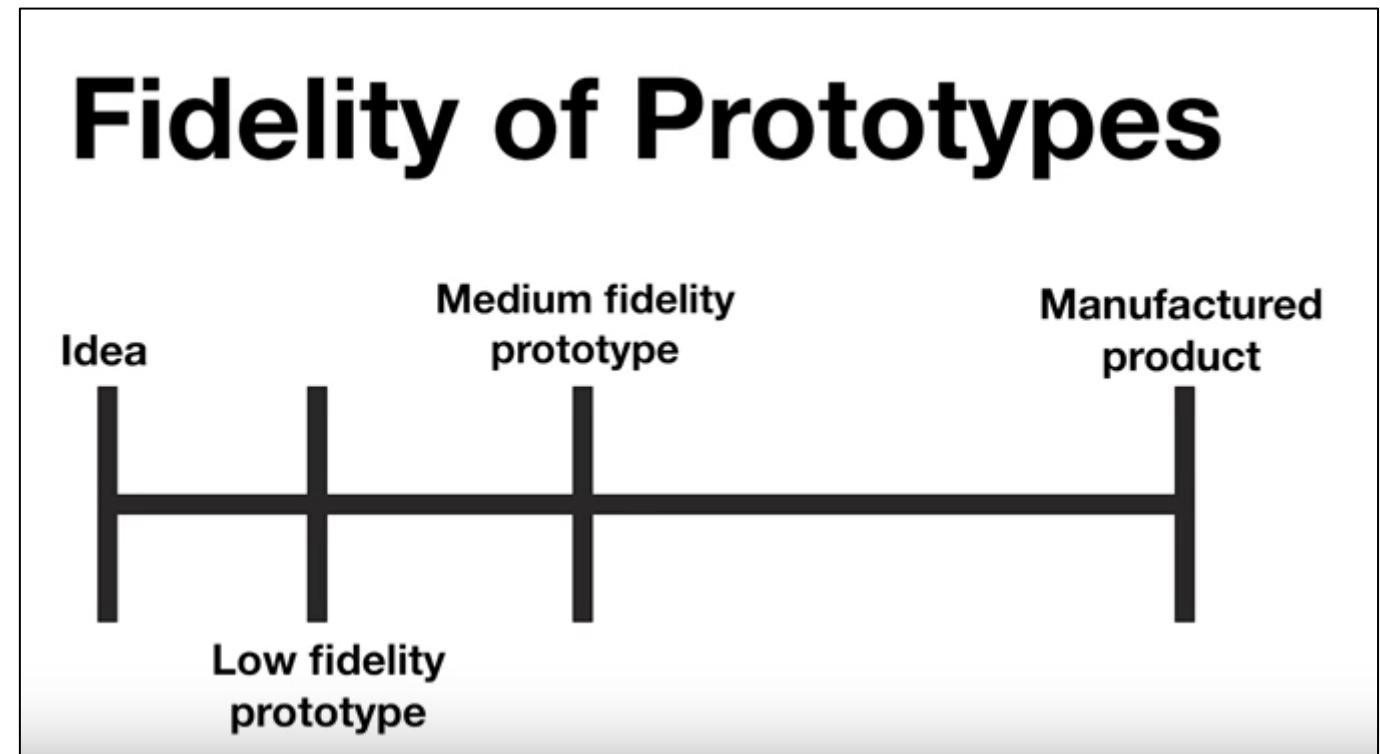


Visualization techniques

- M. Wettergreen. Fidelity of Prototypes (2015). Online: <https://youtu.be/NEzvAklhxyo> (Accessed Feb. 2019)

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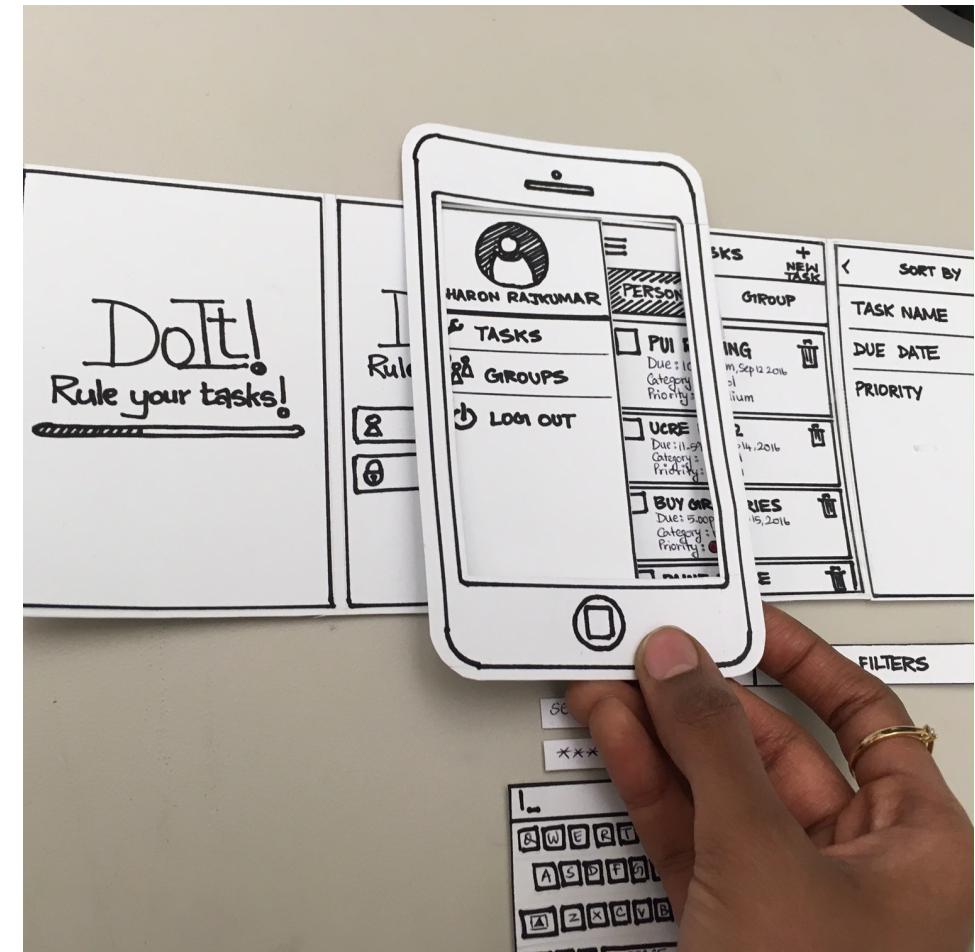
- Sketching/physical models
 - Lo/hi-fidelity prototyping
 - Beware the artist
 - “I can’t draw?!?”



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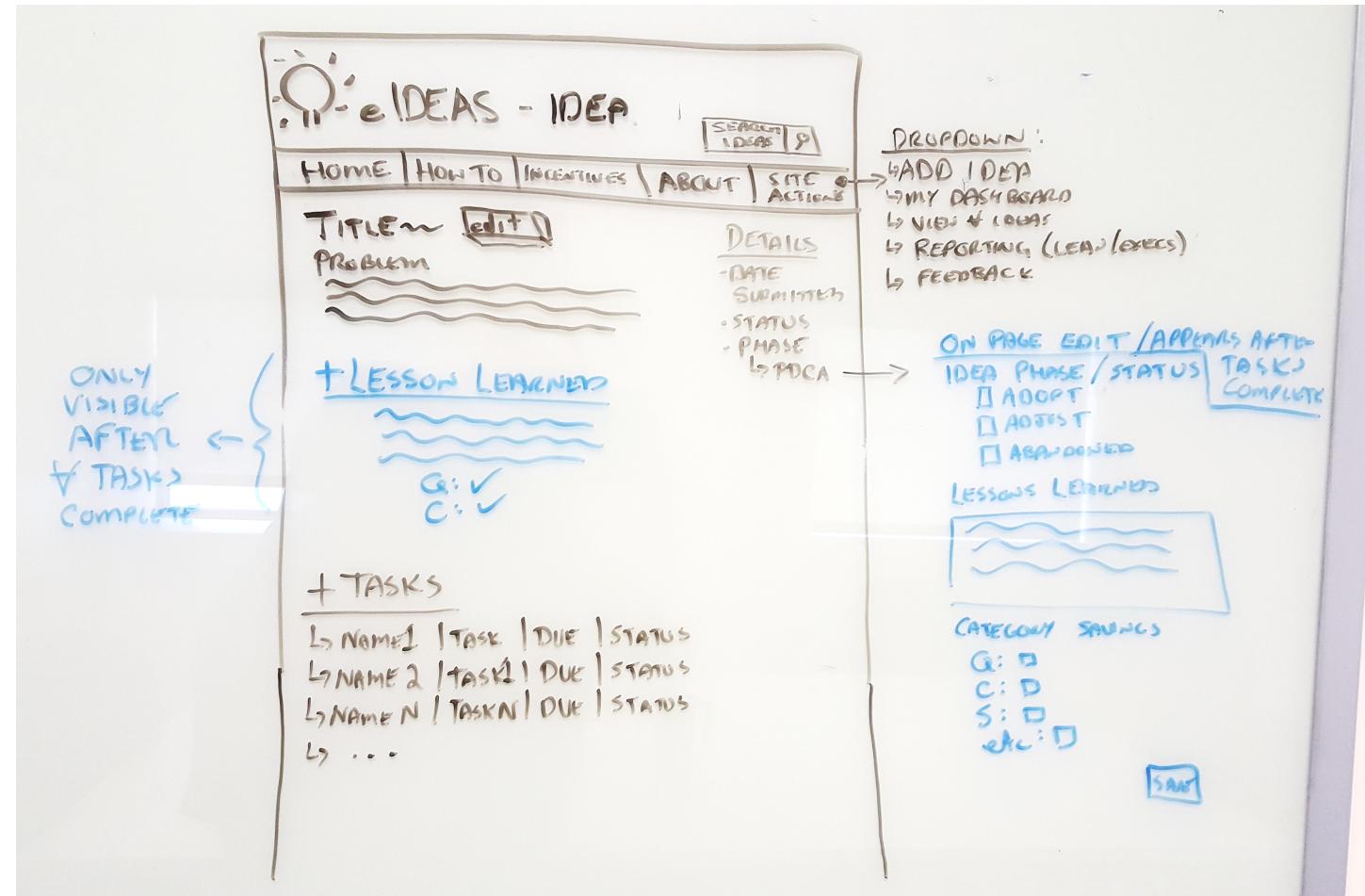
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Visualization techniques

- Sketching/physical models
 - Lo/hi-fidelity prototyping
 - Beware the artist
 - “I can’t draw?!?”
- Story boarding
 - Show sequences
 - Minimum details
 - Brief captions
 - Show people/emotions
 - Beware the artist again!

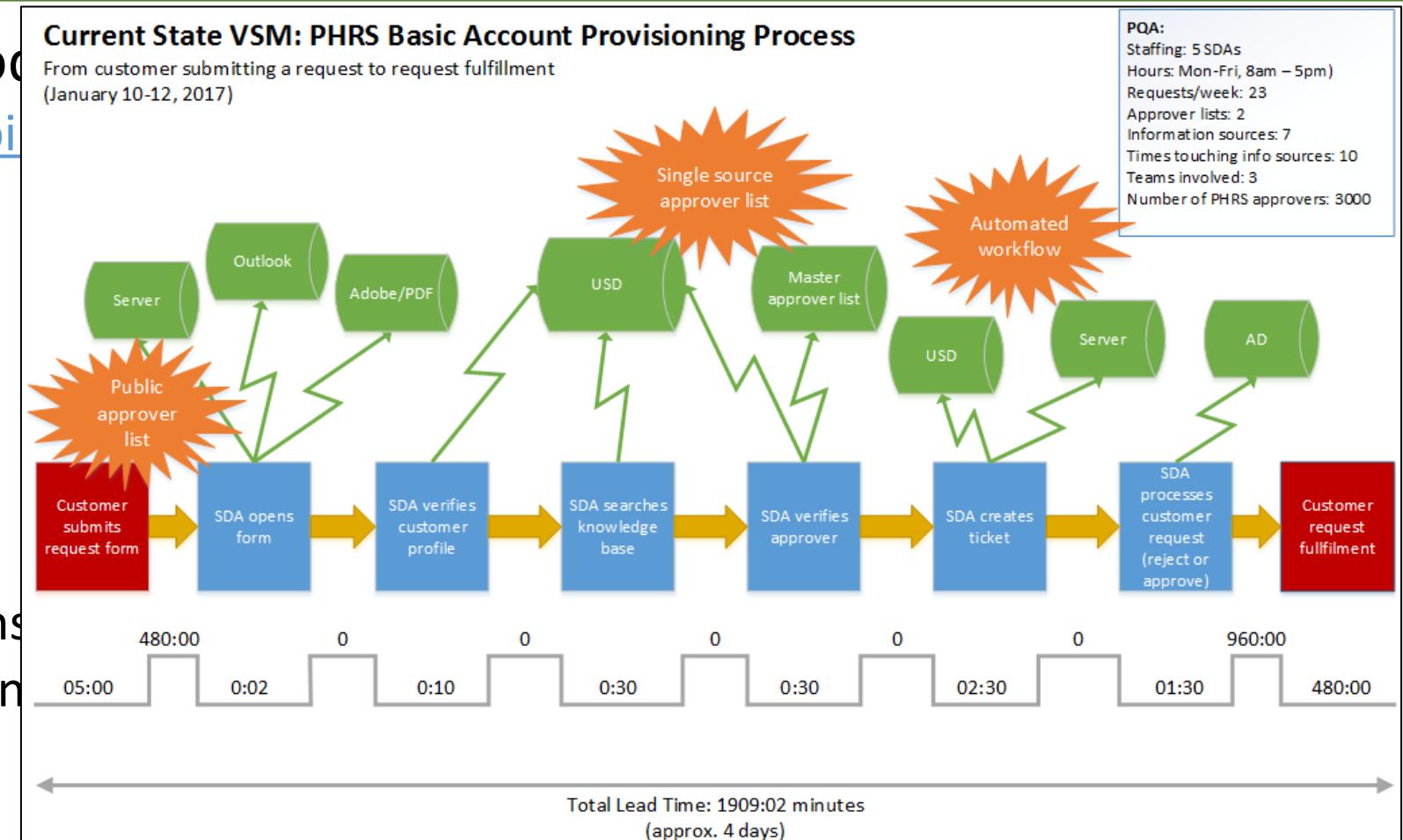


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Visualization techniques

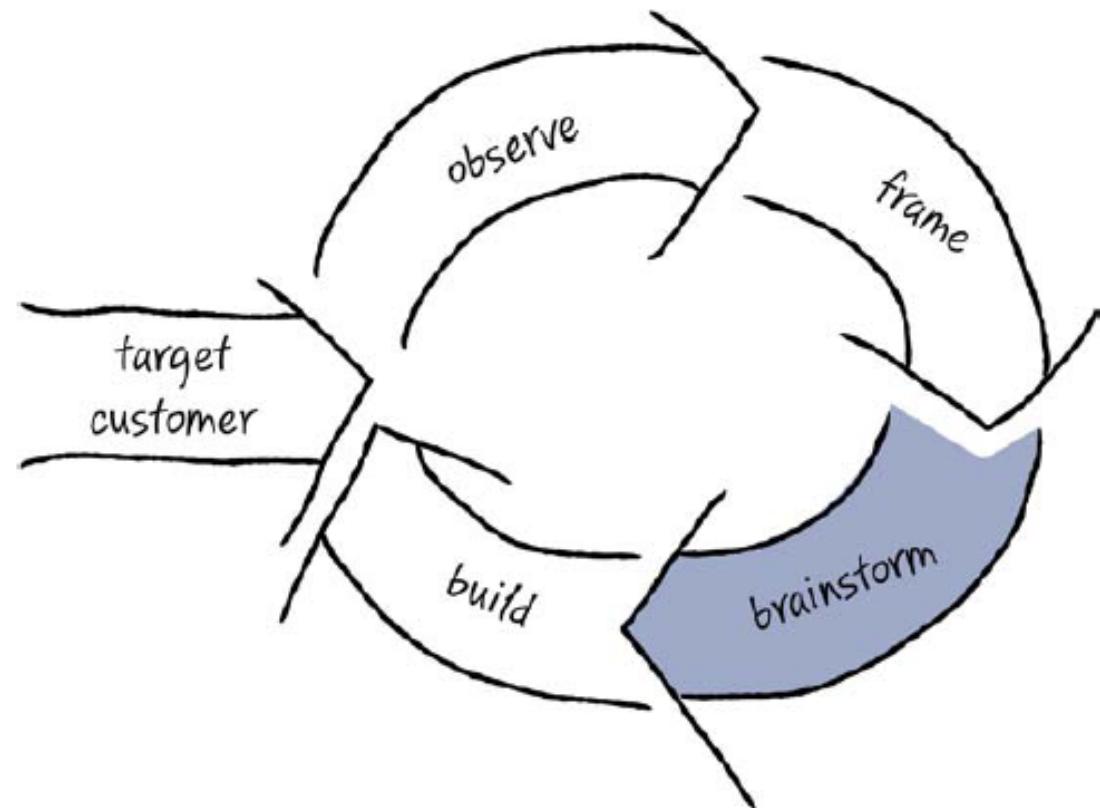
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- Flow/state diagrams



Process of brainstorming

Process of brainstorming

- Brainstorming



Process of brainstorming

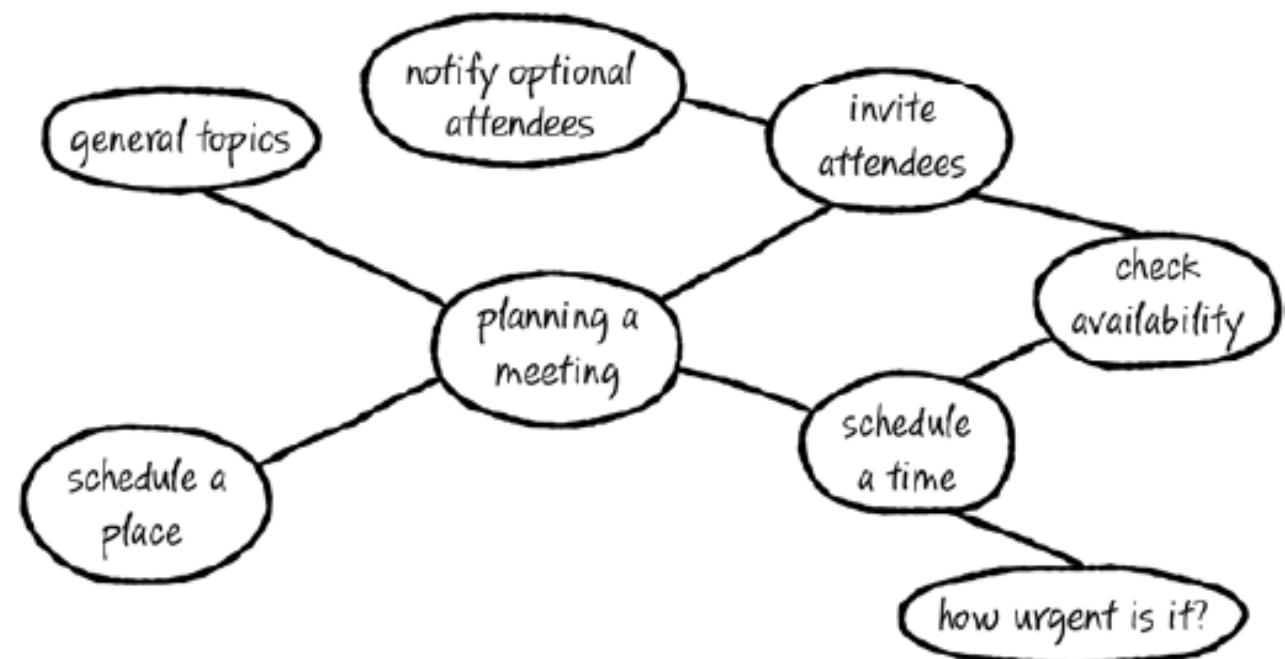
- Brainstorming
- Group brainstorming
 - Set ground rules

Brainstorming Rules

- Stay focused on the topic
- Go for quantity
- Defer judgment
- One conversation at a time
- Build on the ideas of others
- Encourage wild ideas
- Be physical or visual

Process of brainstorming

- Brainstorming
- Group brainstorming
 - Set ground rules
- Individual brainstorming
 - Mindmapping
 - Stream of consciousness
 - Sticky notes
 - Keep a notebook



Process of brainstorming

- Brainstorming
- Group brainstorming
 - Set ground rules
- Individual brainstorming
 - Mindmapping
 - Stream of consciousness
 - Sticky notes
 - Keep a notebook
- Quietstorming
 - Entry tickets
 - Start with quiet time
 - For group brainstorming
 - Pass the paper
 - Computer mediated



Recap, building empathy

- G. Goldfield (NN/g) Contextual Inquiry (2018). Online: <https://youtu.be/nC47ktX4U2I> (Accessed Feb 2019)

Recap, building empathy

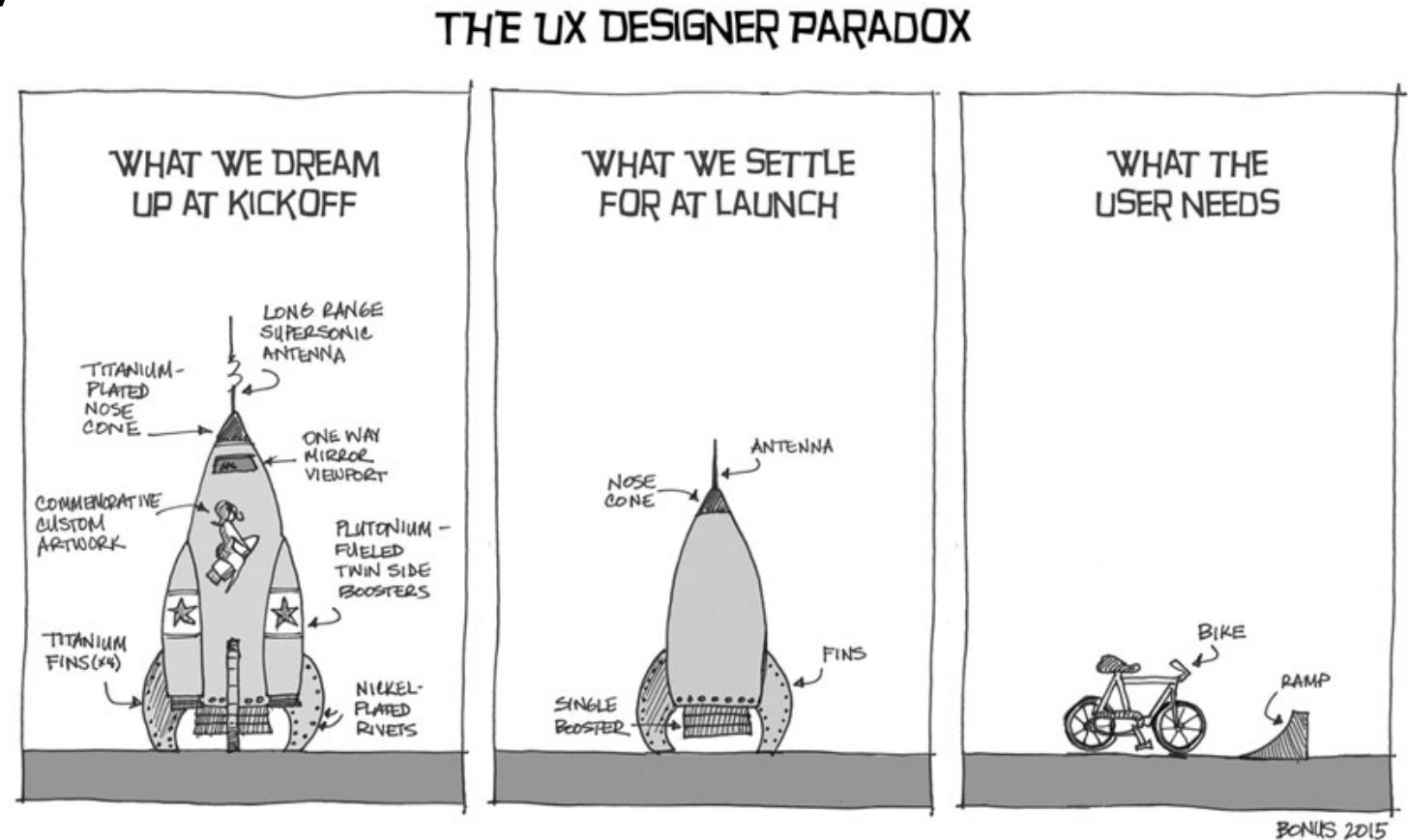
- Design is all about empathy



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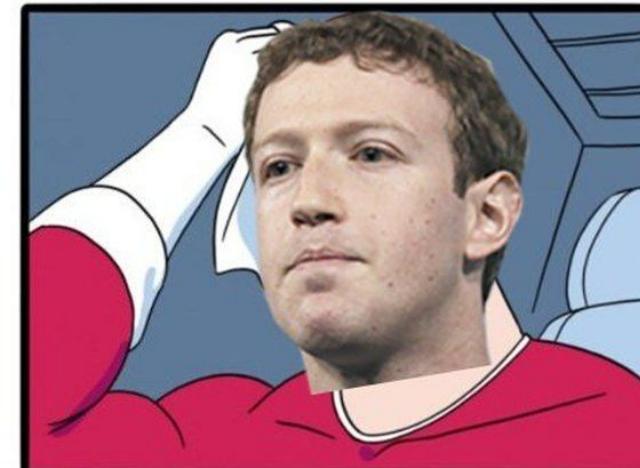
Recap, building empathy

- Design is all about empathy
- Unearthing unarticulated/latent needs



Recap, building empathy

- Design is all about empathy
- Unearthing unarticulated/
latent needs
- Gathering customer
insights



Recap, building empathy

- Design is all about empathy
- Unearthing unarticulated/latent needs
- Gathering customer insights
- Design ethnography – GOOB
 - Contextual inquiry – this is one of the best approaches IMHO



Developer watching videotape of usability test.

UX fun in the product & service design cycle

- S.Farrell (NNGroup). UX Research Cheat Sheet (2017). Online: <https://www.nngroup.com/articles/ux-research-cheat-sheet/>

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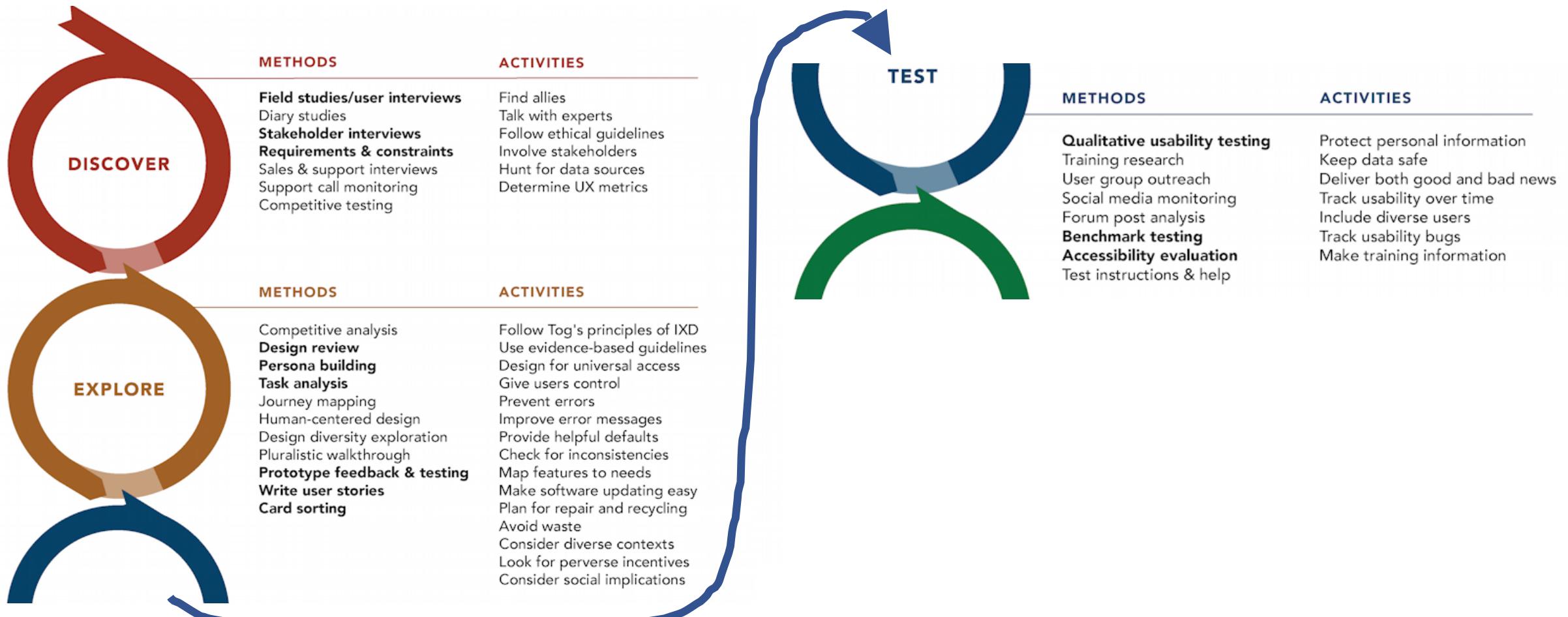
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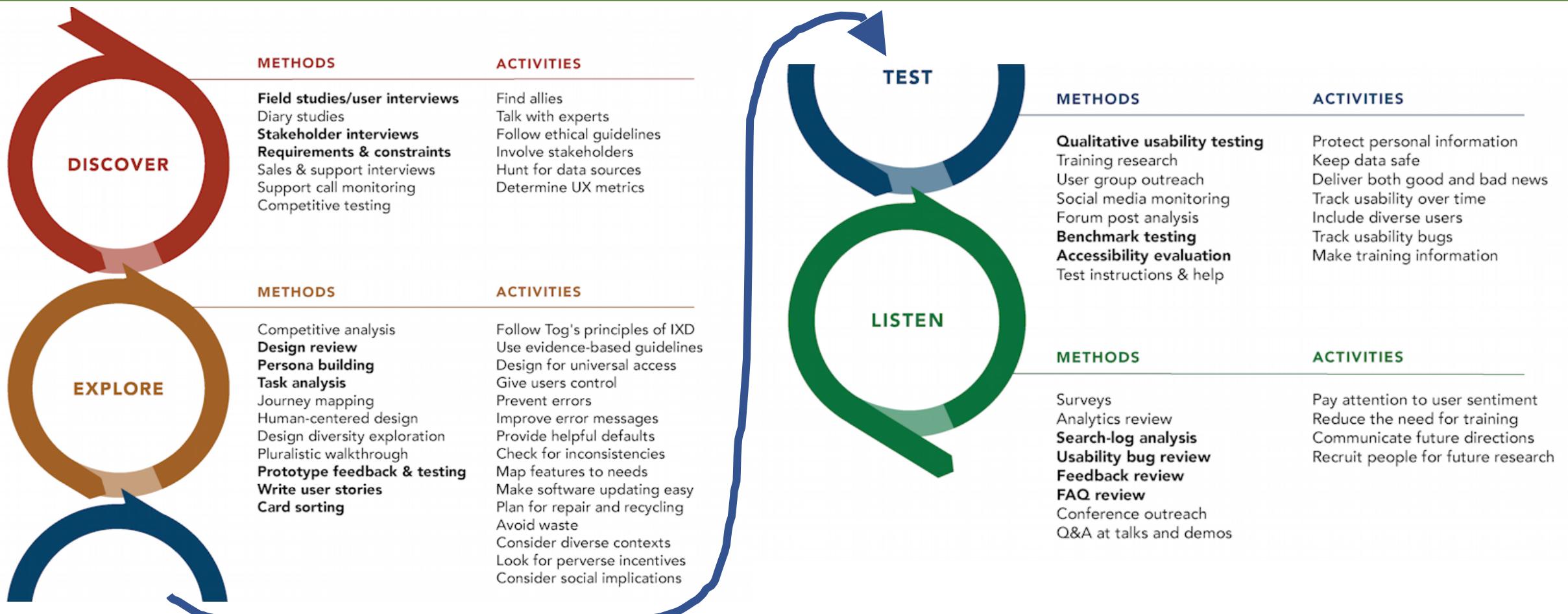
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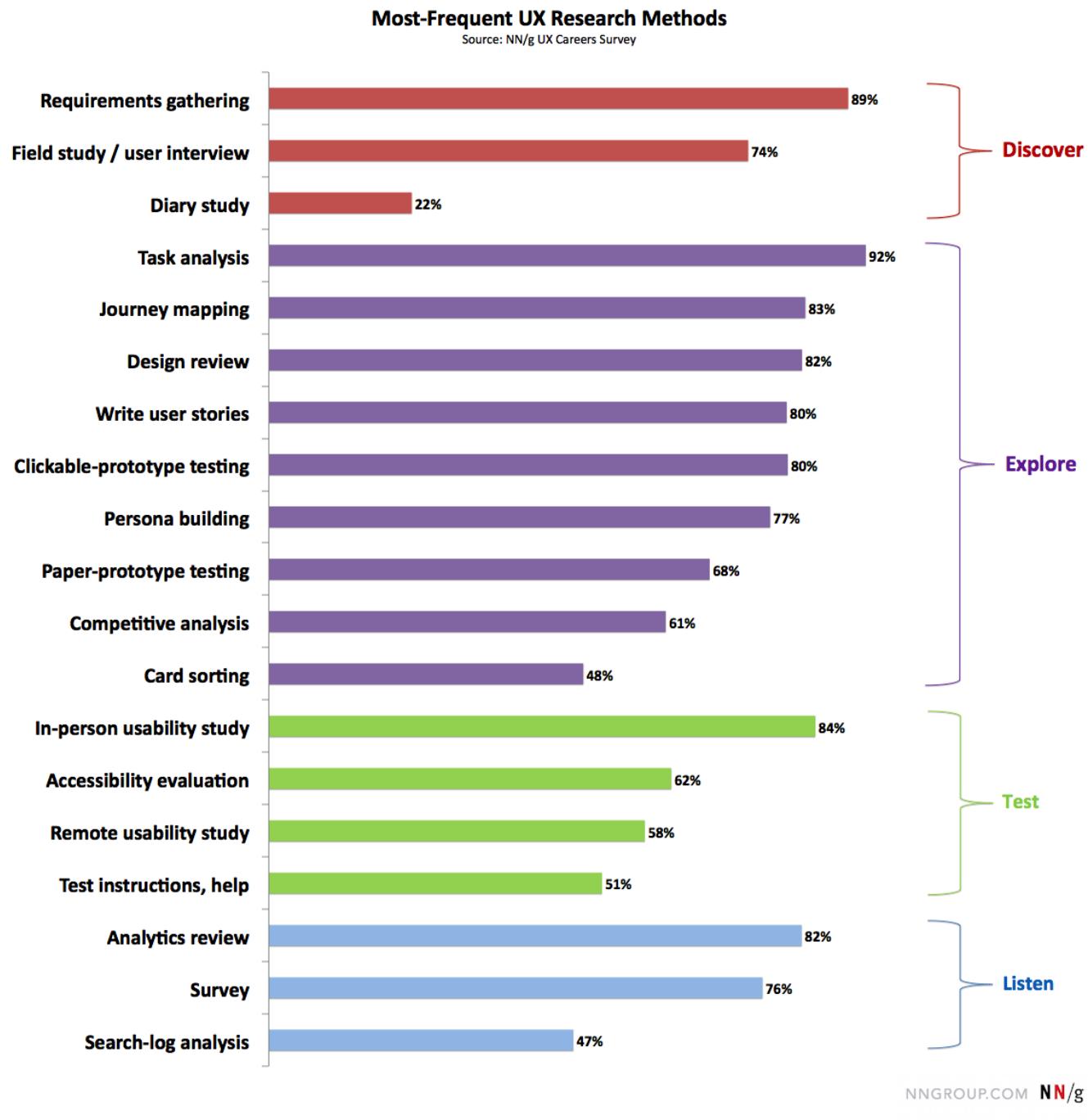
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UX fun ir

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Complimentary research approaches

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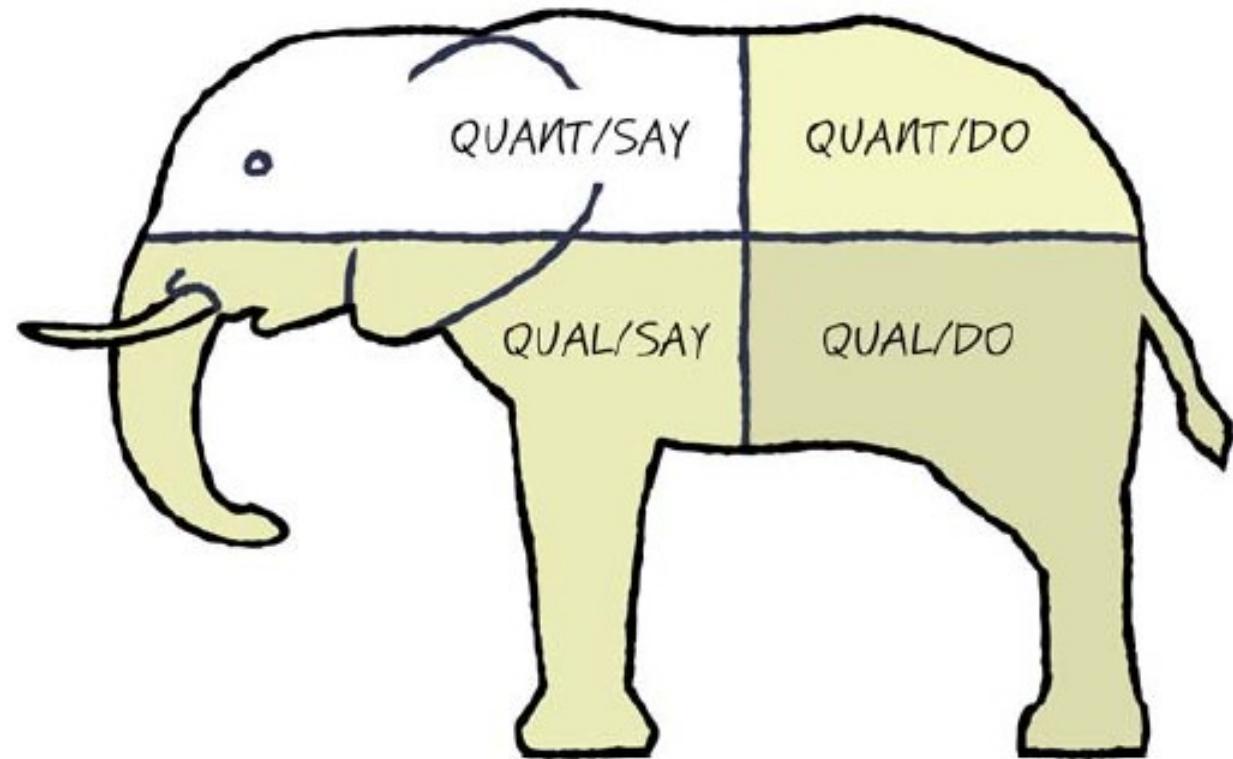
- Data is data
 - Quant vs qual

	SAY	DO
QUAL	Interview	Direct observation
QUANT	Survey	Instrumentation, big data, A/B testing

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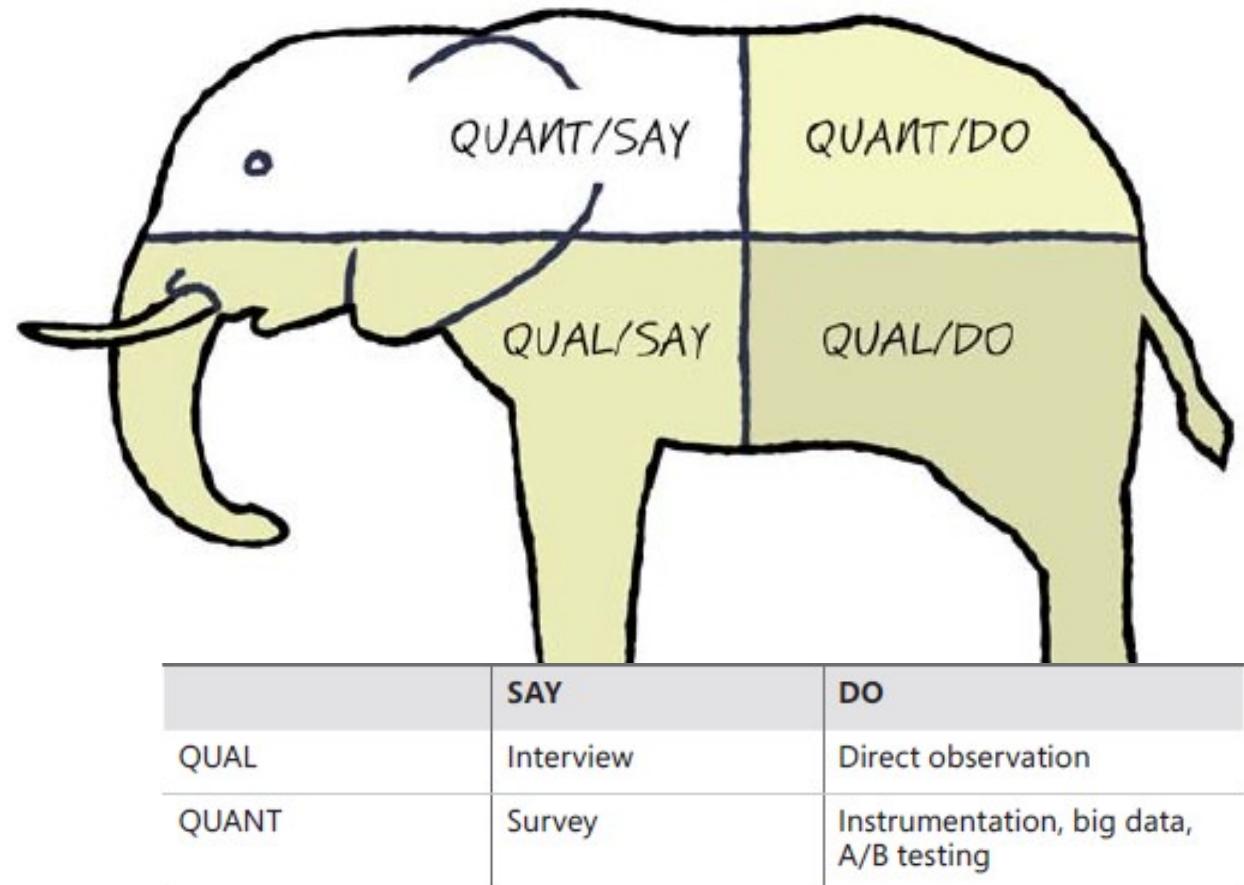
- Data is data
 - Quant vs qual
- Needs to be triangulated!



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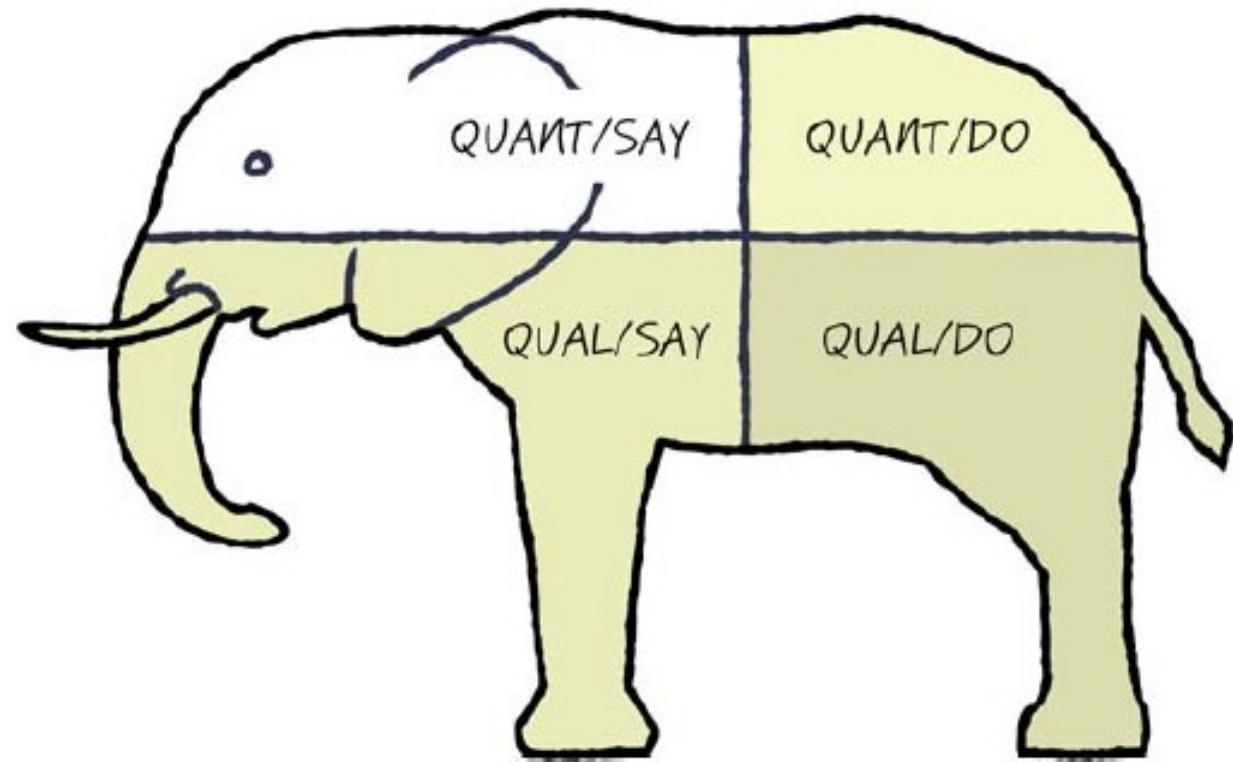
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- Hard vs soft data



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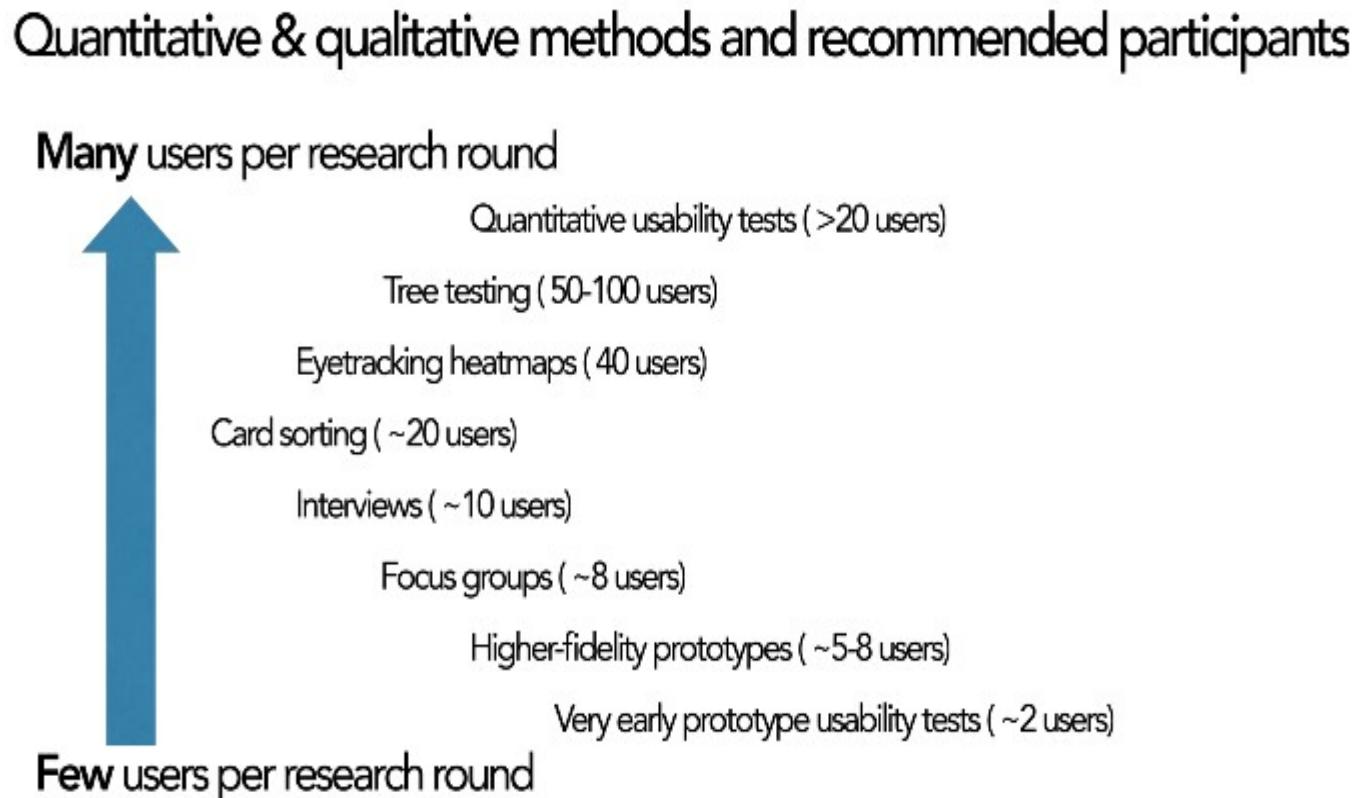
- Data is data
 - Quant vs qual
- Needs to be triangulated!
- Hard vs soft data
- Statistical significance
 - More about stat significance



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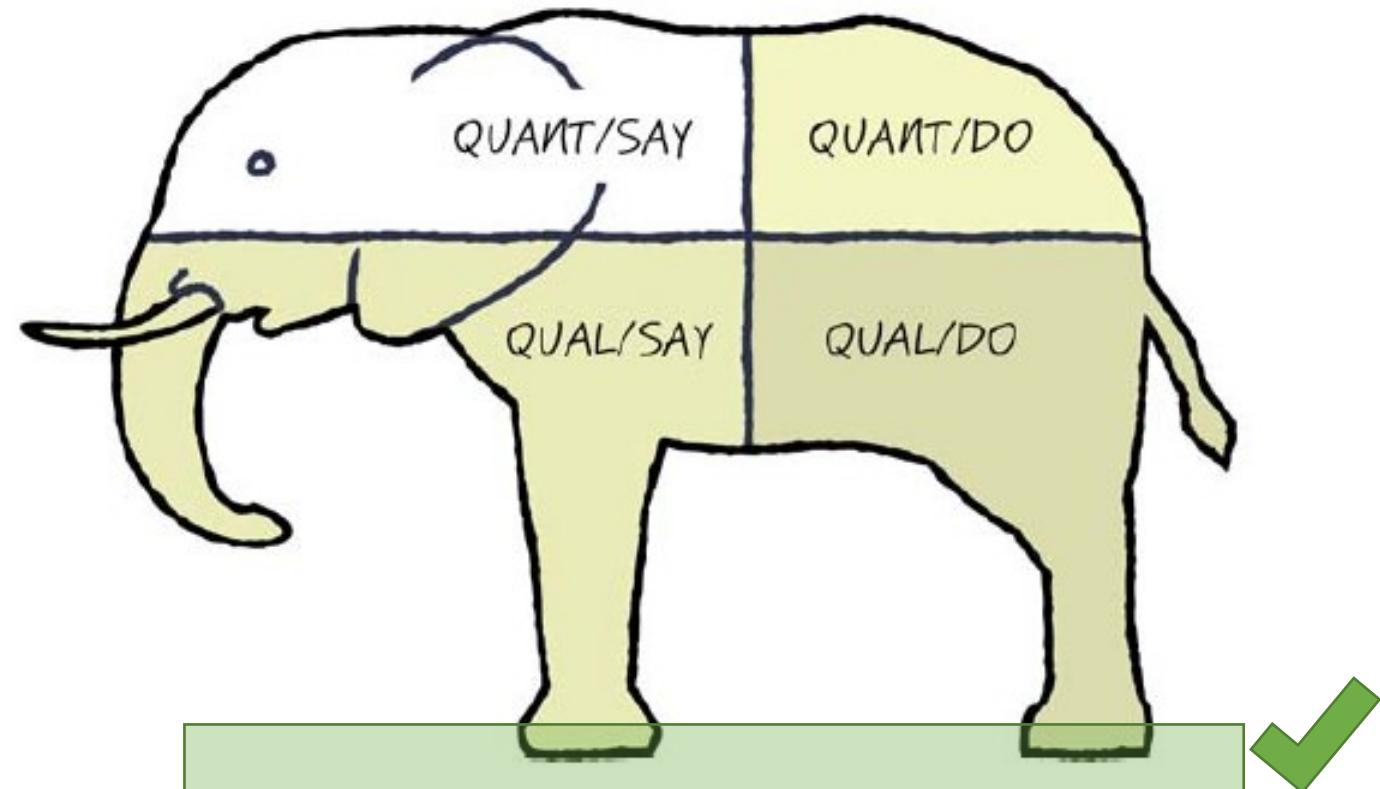
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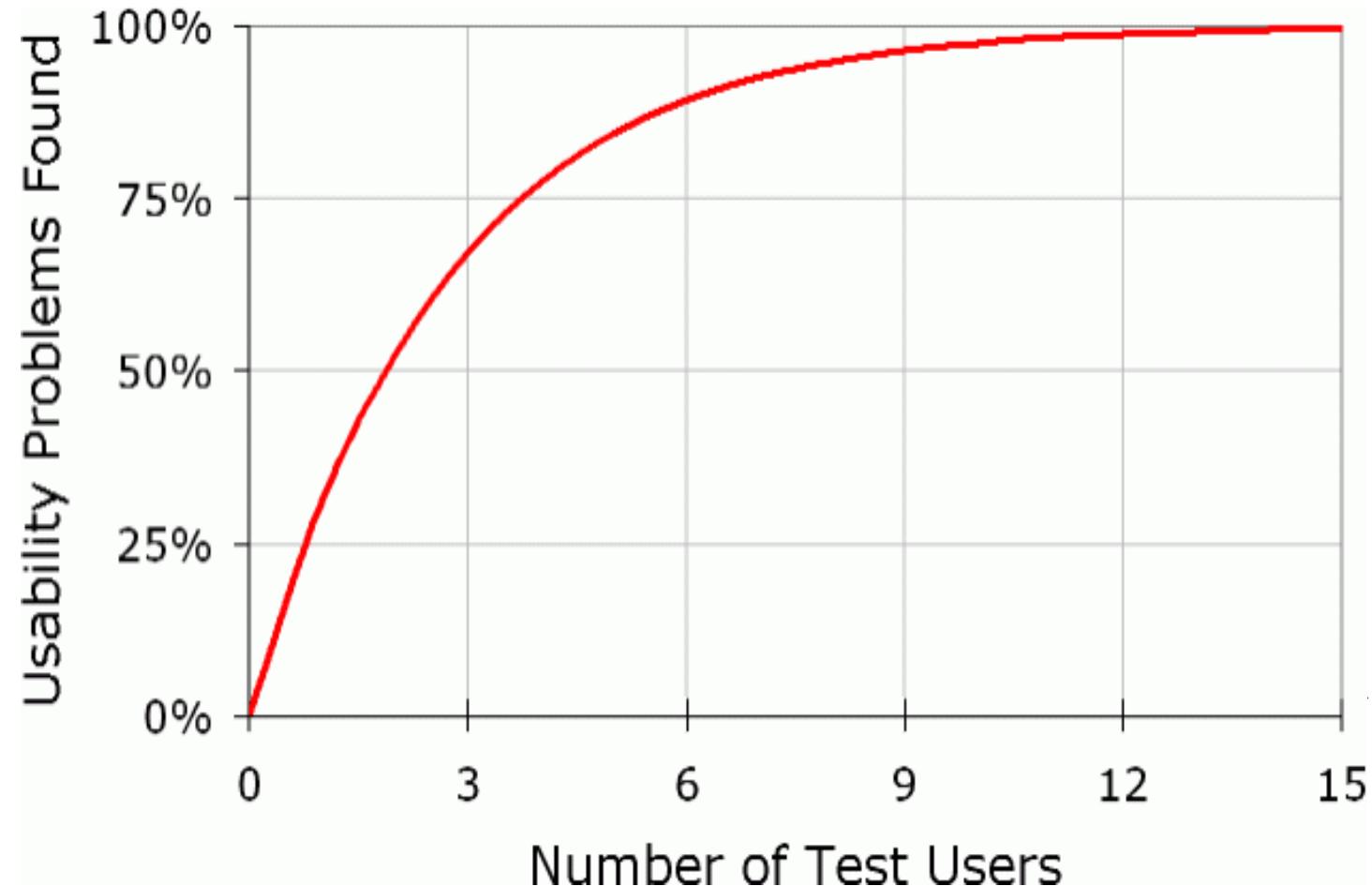
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- Only time for one?



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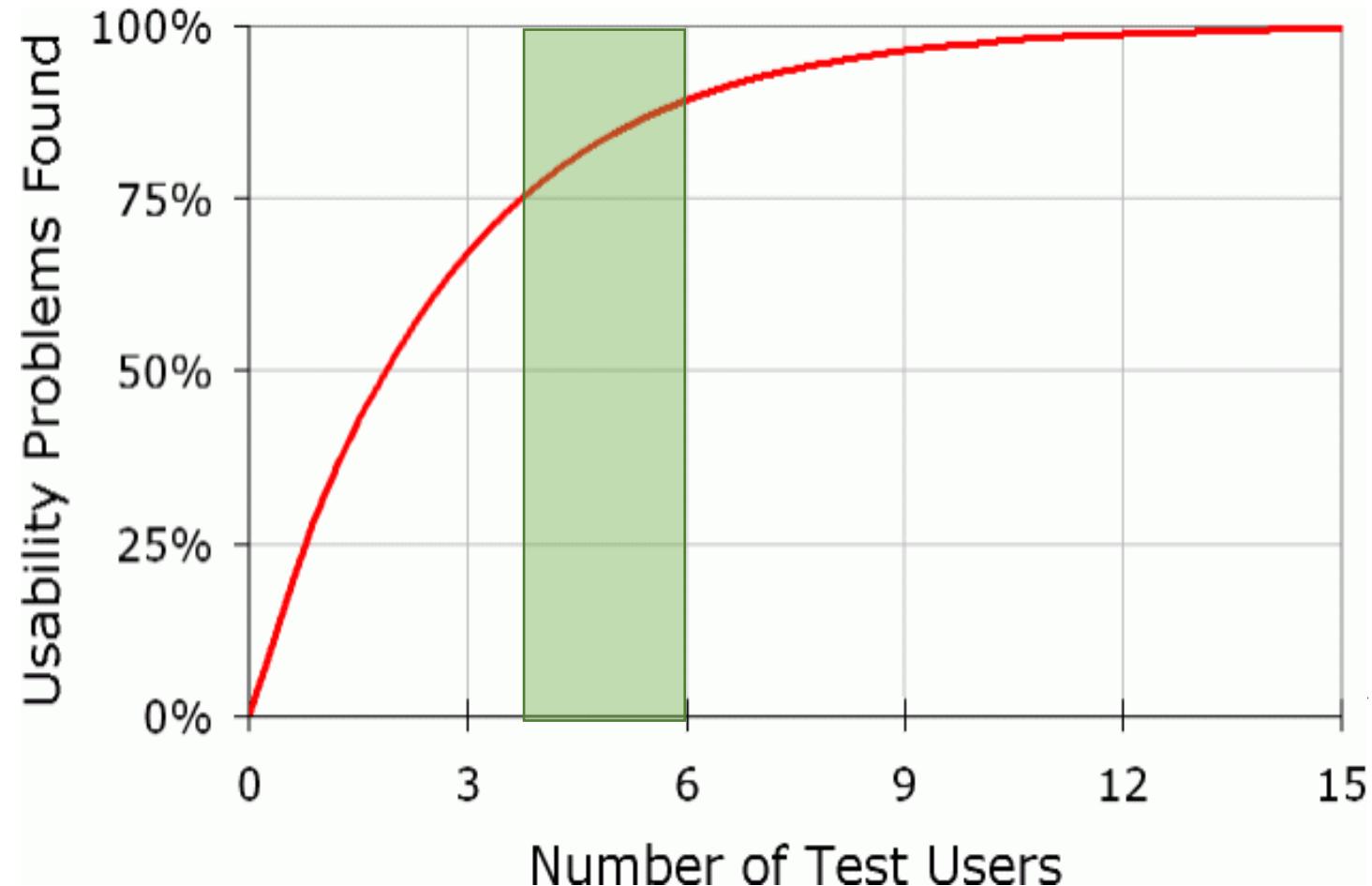
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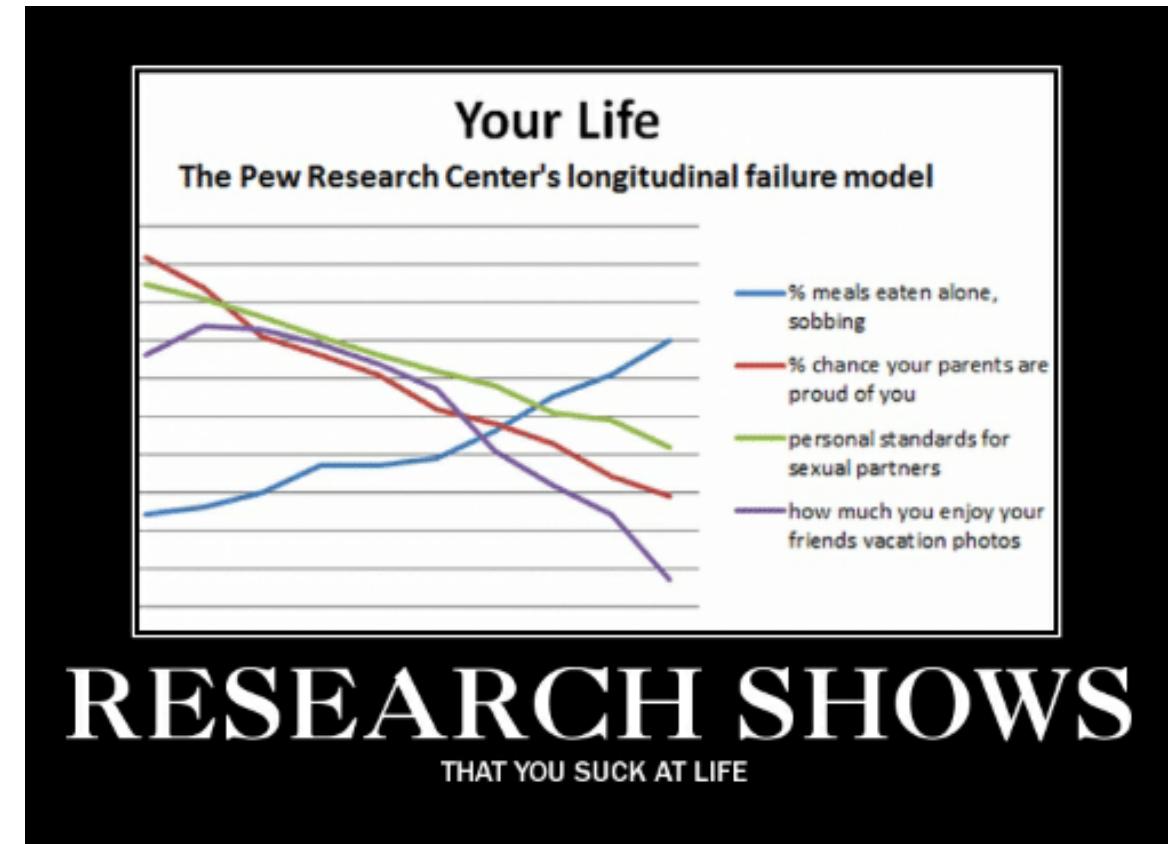
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...Complimentary research approaches

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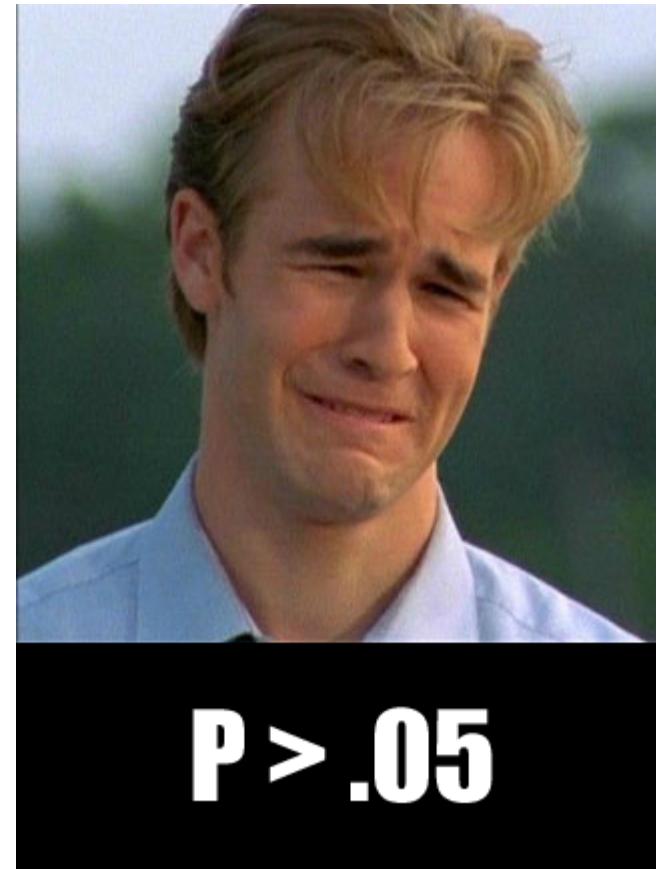
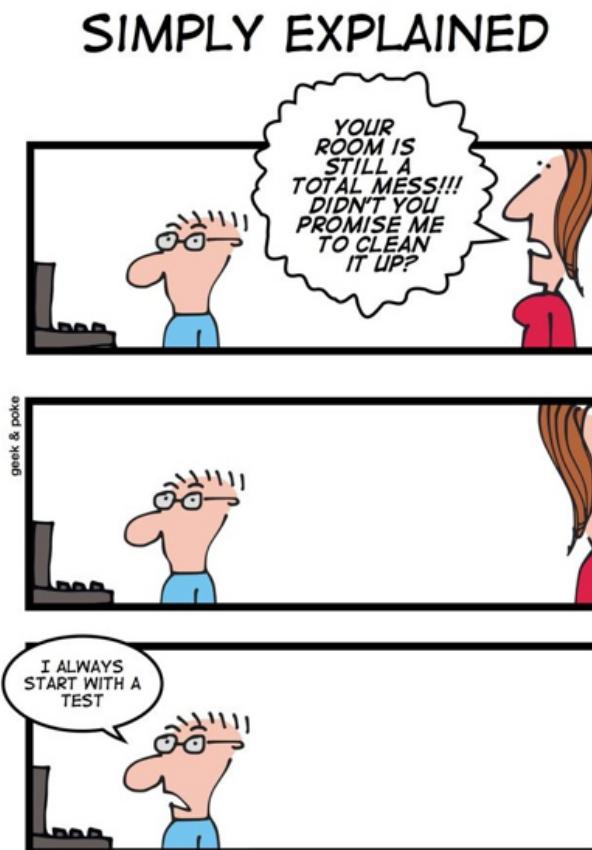
- Over time



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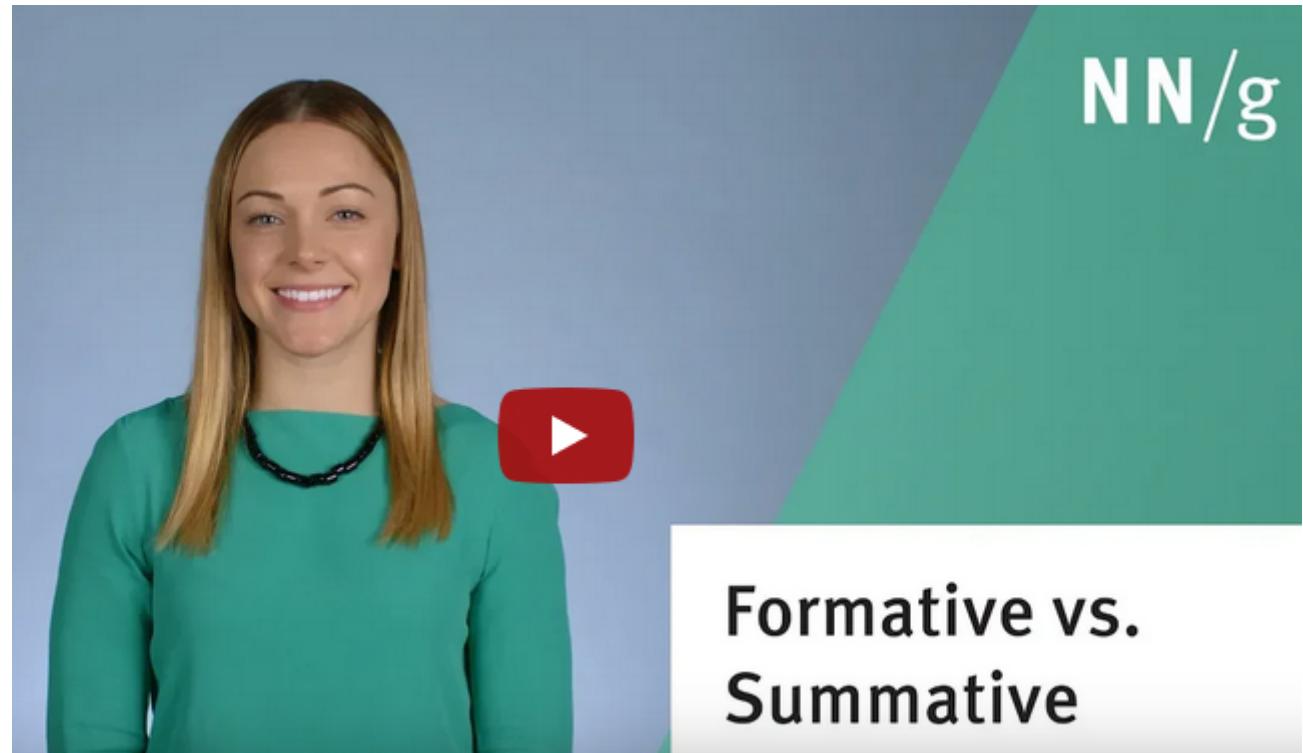
...Complimentary research approaches

- Over time
- Formative research



...Complimentary research approaches

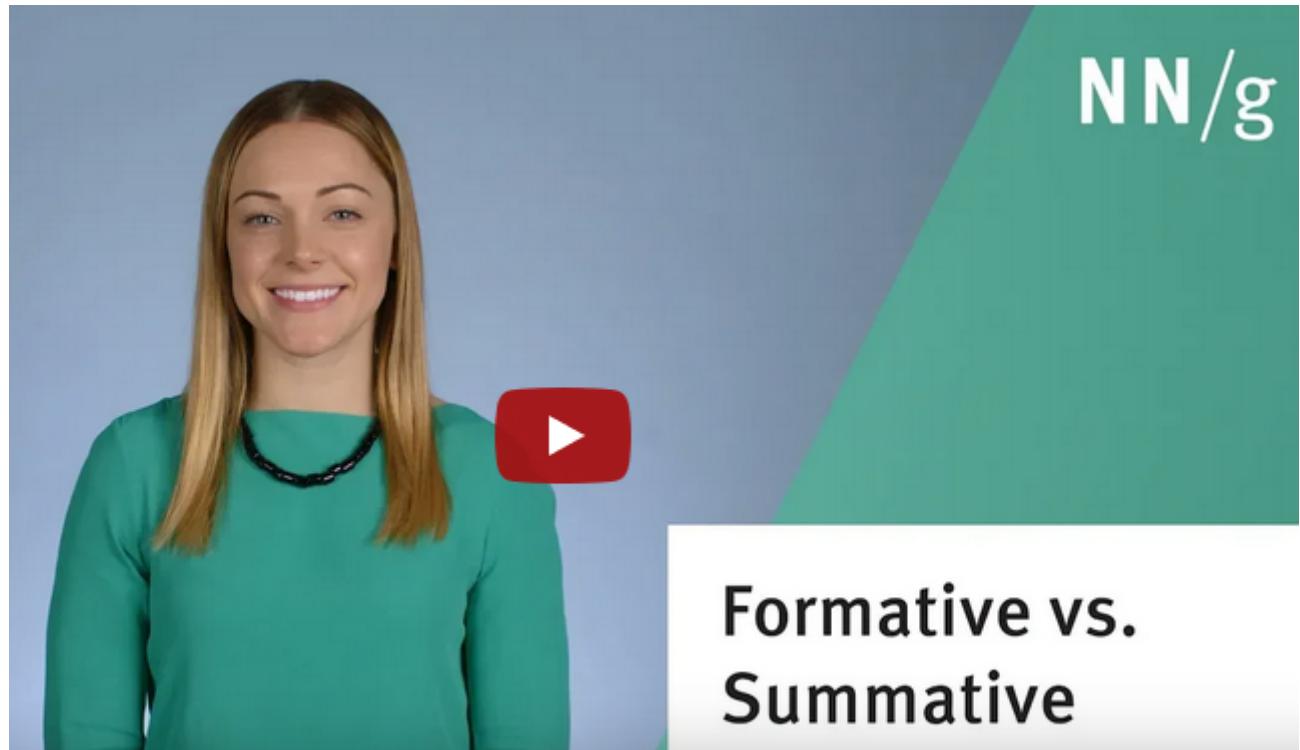
- Over time
- Formative research
- Summative research



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...Complimentary research approaches

- Over time
- Formative research
- Summative research
- Hear from the experts



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Finding customers & our role in it all

- M. Granovetter. The Strength of Weak Ties. American Journal of Sociology. Vol.78, n.6. 1973. Online: <https://www.jstor.org/stable/2776392> (Accessed Feb 2019)

Finding customers & our role in it all

- Online groups
 - Twitter (early stages), Facebook, LinkedIn (my new favorite)
 - Weak/strong ties



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- Go to where the customer are



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- Ask around



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- Go to where the customer are
- Ask around
- Get recommendations
- Talking to the right people



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- Go to where the customer are
- Ask around
- Get recommendations
- Talking to the right people
- Role of Engineers?



Why evaluate/get feedback?

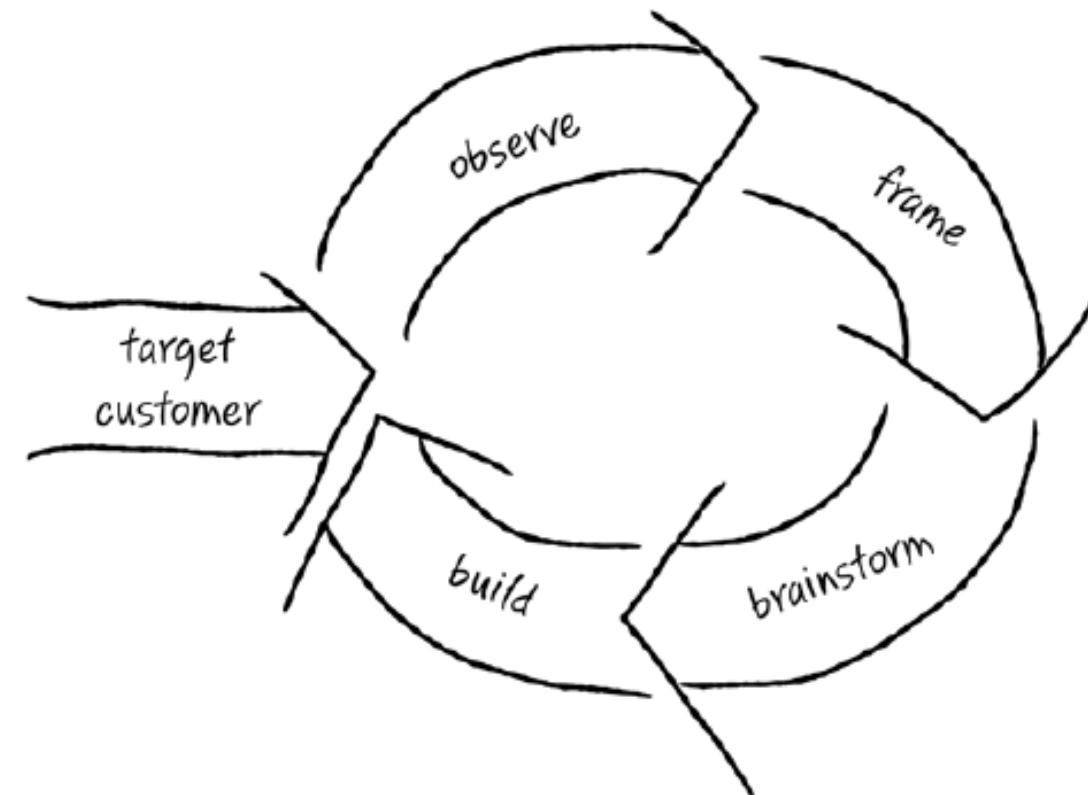
Why evaluate/get feedback?

- “Lightening bolt moments”



Why evaluate/get feedback?

- “Lightening bolt moments”
- Fast-feedback cycle



Why evaluate/get feedback?

- “Lightening bolt moments”
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- Provides focus



Why evaluate/get feedback?

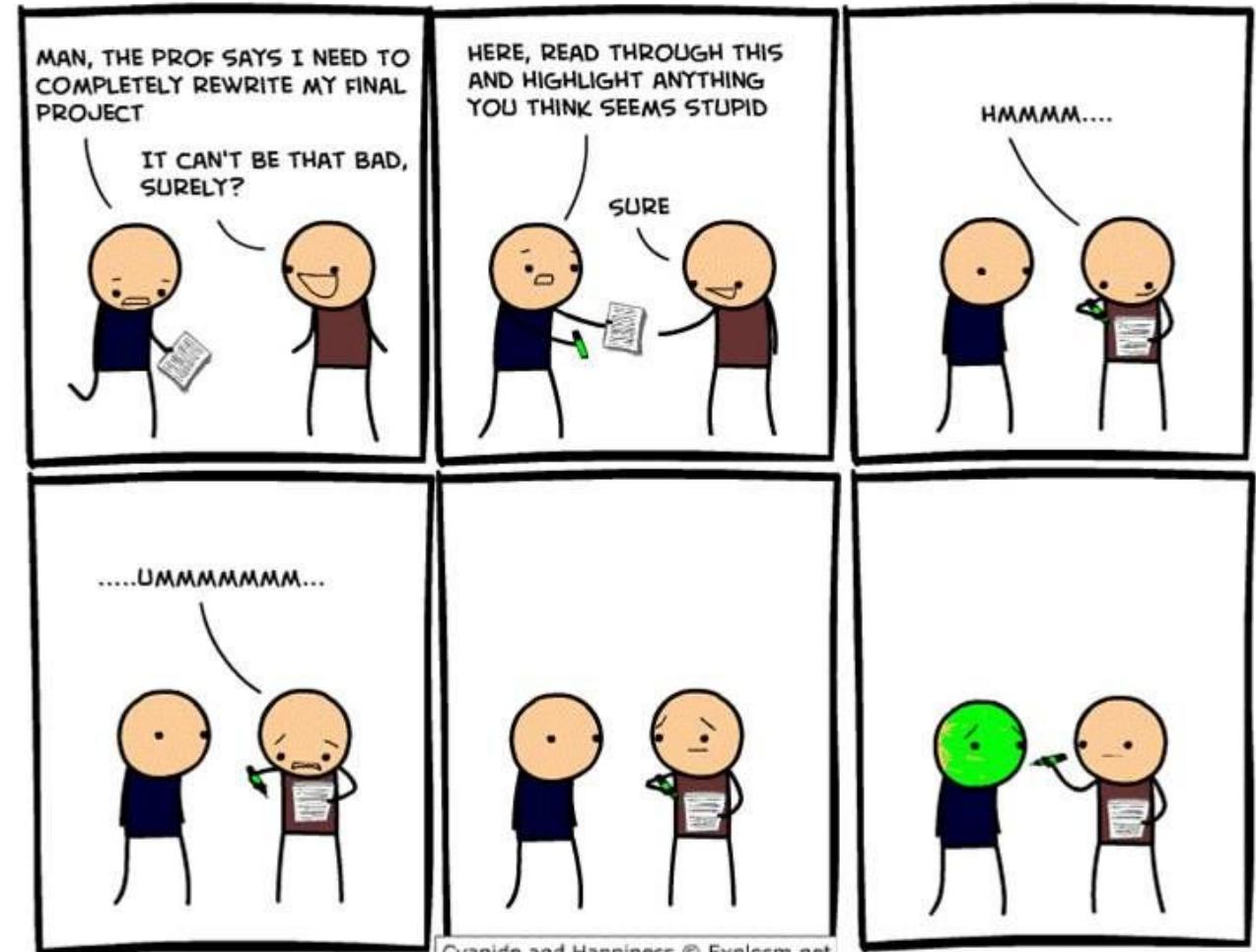
- “Lightening bolt moments”
- Fast-feedback cycle
- Provides focus
- Did we get it right?



The Zen of giving/receiving feedback

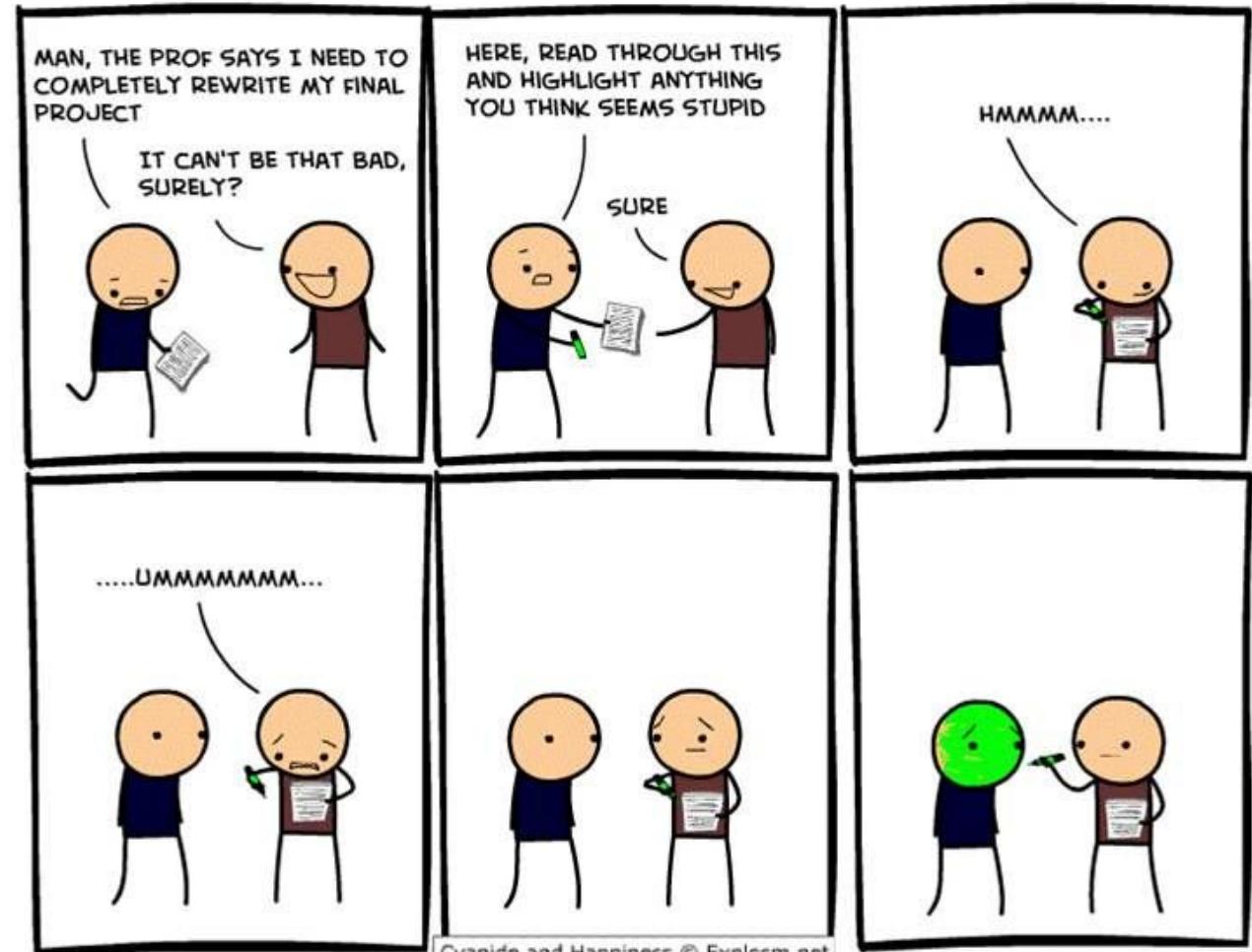
The Zen of giving/receiving feedback

- Receiving
 - Code of conduct
 - Active listening



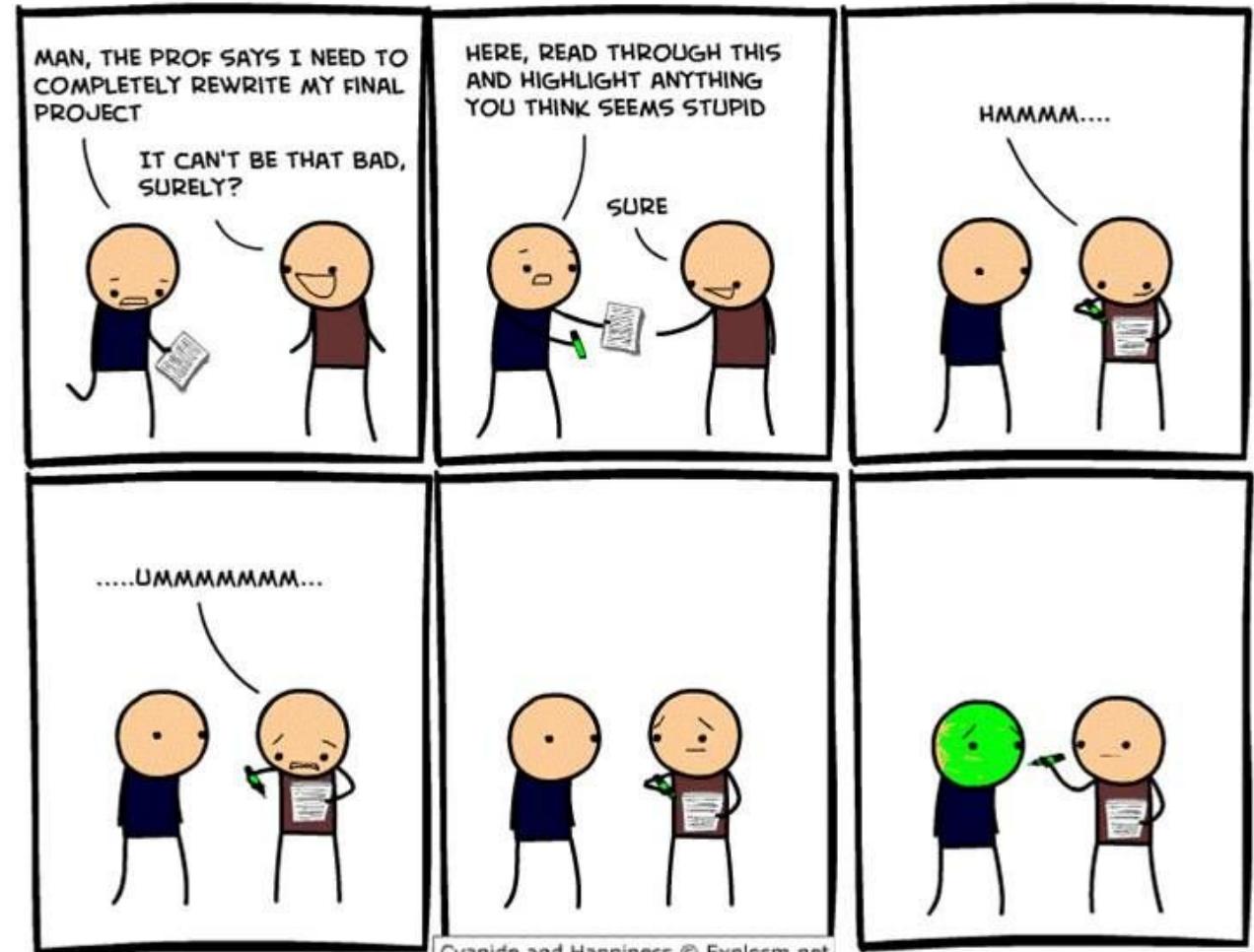
The Zen of giving/receiving feedback

- Receiving
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- Giving
 - Code of conduct
 - Benefits of open-ended questions



The Zen of giving/receiving feedback

- Receiving
 - Code of conduct
 - Active listening
- Giving
 - Code of conduct
 - Benefits of open-ended questions
- Be pragmatic
 - Kind, humble, & an open mind



Questions/discussions

- Brainstorming ideas
- Sketching
- Group brainstorming
- Design ethnography
- Qual/quant #1
- Qual/quant #2
- Number of users
- An Engineer's intuition
- Giving feedback
- Receiving feedback

Image refs

- Num of users, <https://media.nngroup.com/media/editor/alertbox/20000319-user-testing-diminishing-returns-curve.gif>
- User needs, <http://i.imgur.com/7YNW6Wd.jpg>
- Usertesting, <https://adamfard.com/wp-content/uploads/2018/08/UsabilityTest.png>
- You != user, You are not the user, <https://upyourdigitaliq.com/wp-content/uploads/2017/07/youarenotyouruser.png>
- Zuckerberg, <https://i.pinimg.com/736x/8a/9a/ad/8a9aadd4288e504bdc452cd2aa0b7a78.jpg>
- Aha moment, <https://i.imgur.com/GzA7Brq.png>
- Gadget, <http://worldartsme.com/images/inspector-gadget-clipart-1.jpg>
- Dilbert, <https://i0.wp.com/better-operations.com/wp-content/uploads/2015/02/Dilbert-lean-value-for-the-customer-7.gif?resize=640%2C199>
- Tell me more, <https://i.pinimg.com/236x/eb/ff/38/ebff38063b30af2bd2abaa79827a3fd3--business-card-templates-business-cards.jpg>
- Longitudinal, <https://pics.me.me/your-life-the-pew-research-centers-longitudinal-failure-model-meals-2553918.png>
- Formative, https://www.datamation.com/imagesvr_ce/5126/initial-test.jpg
- Stats, <https://i.pinimg.com/originals/aa/6a/48/aa6a4855a33ec51740620c2eb8302d02.png>
- Feedback, <https://cdn.iwastesomuchtime.com/November-07-2011-20-37-00-highlighter.jpeg>
- Gandalf, https://img.memecdn.com/you-really-should-study_o_7108859.jpg