

Potential of Design Thinking in Business Environment

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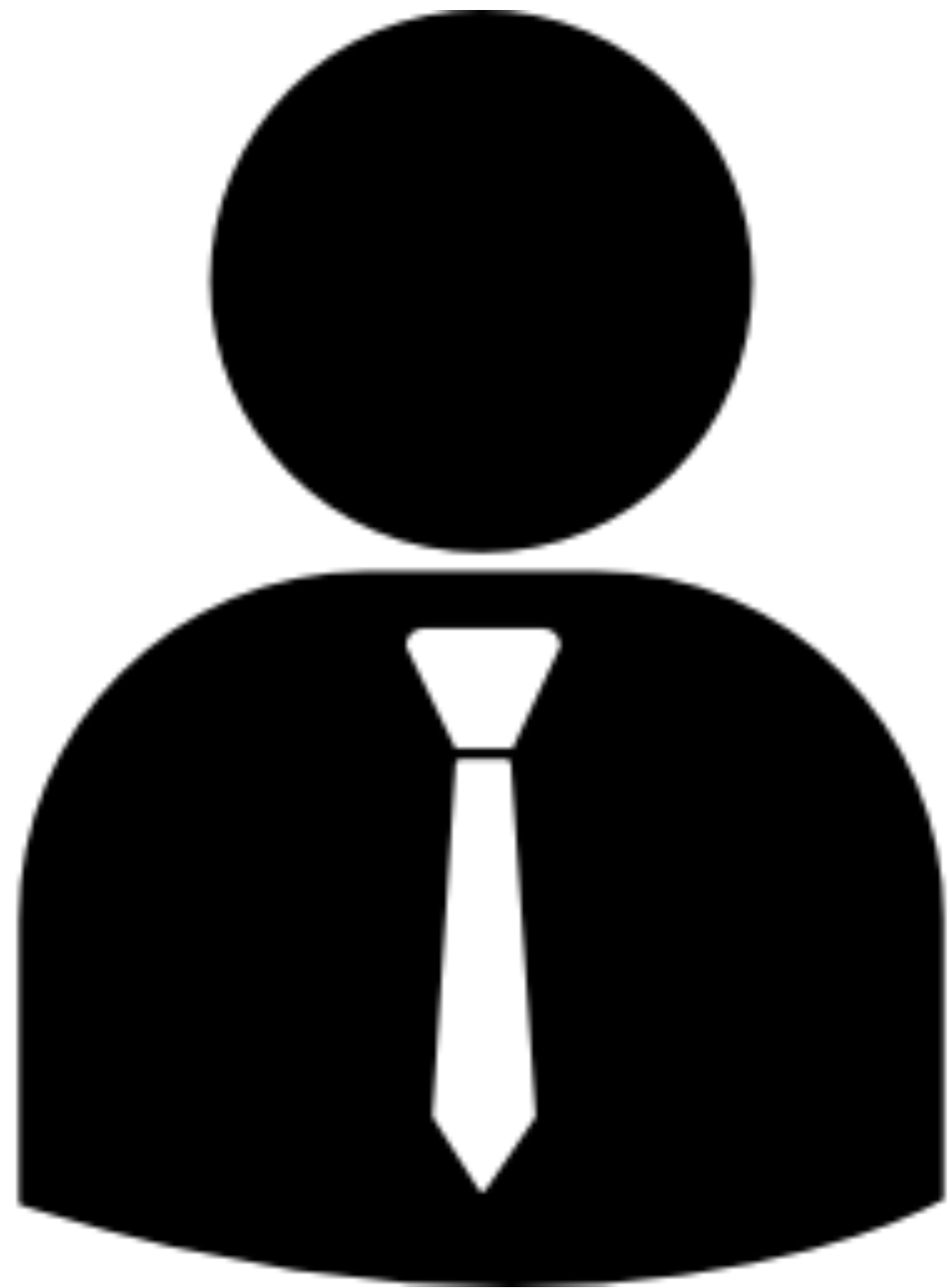
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Agenda

- Introduction
- Research and experience
- Findings about Design Thinking
- Conclusion

Background

Consultant



Academic researcher



Background

Consultant



for gov. sector

Proposing strategies

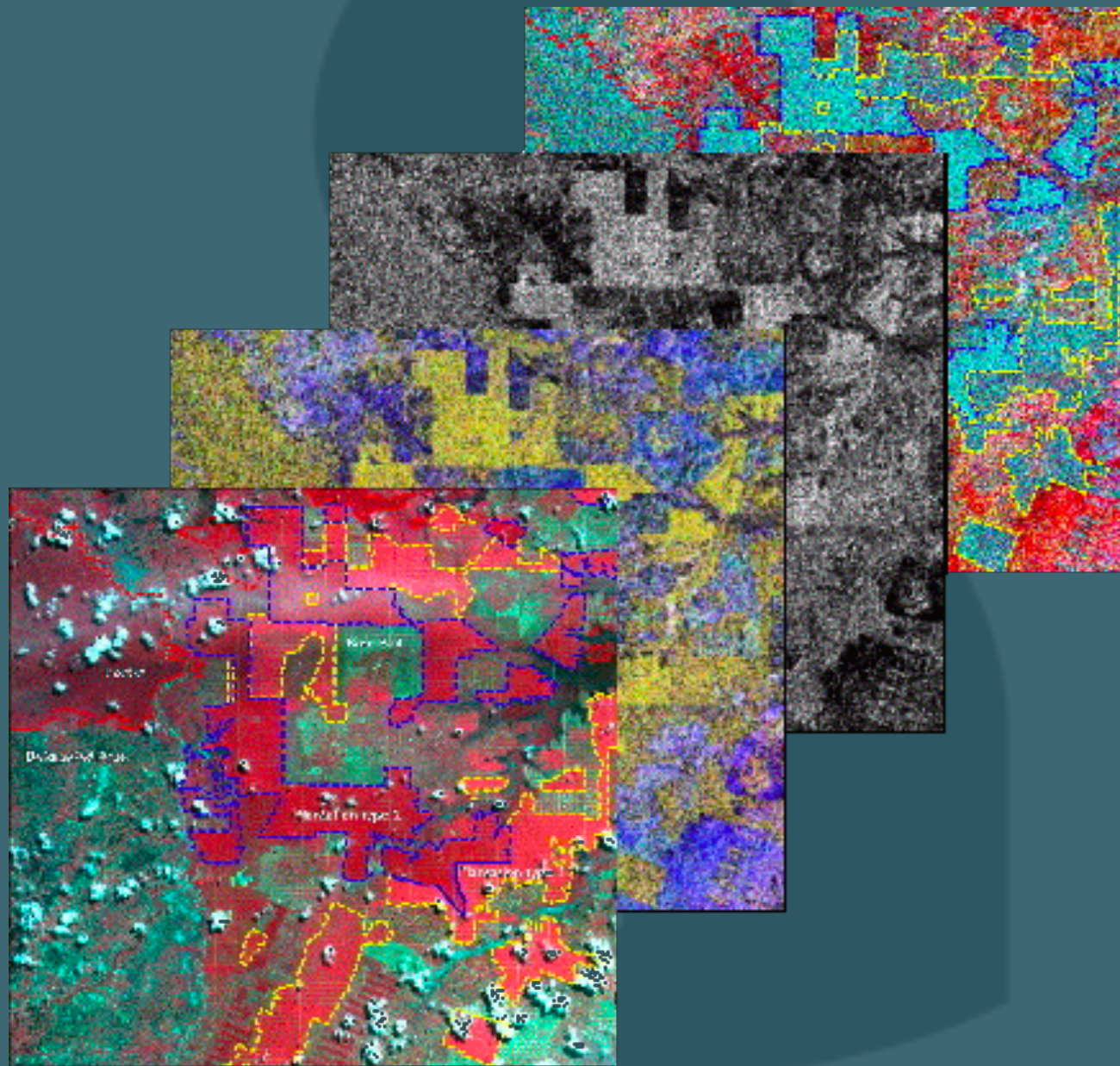
for private enterprises

Design R&D strategies



Background

Image processing
/Machine learning



Academic researcher



Background

Consultant



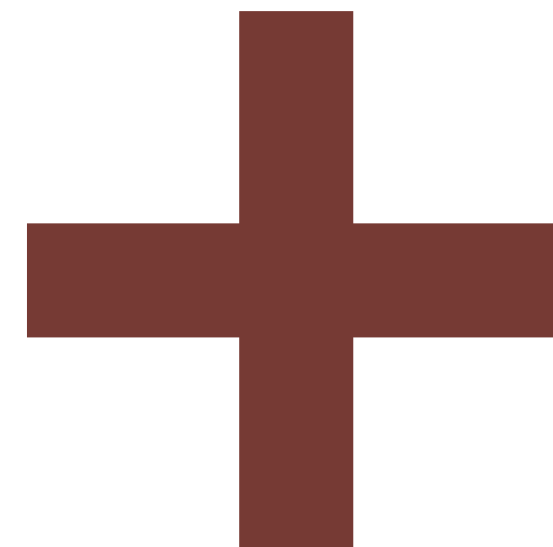
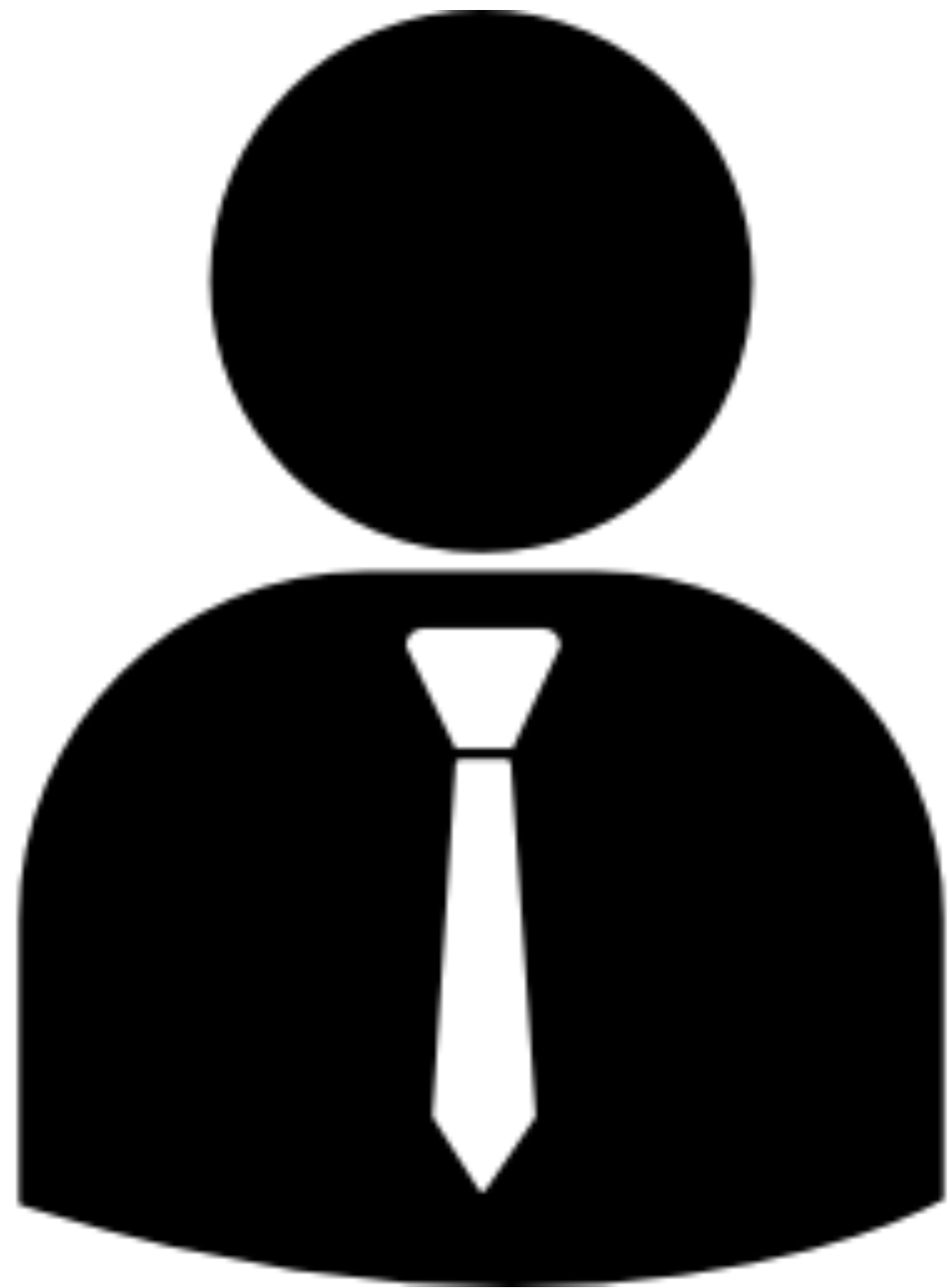
Academic researcher



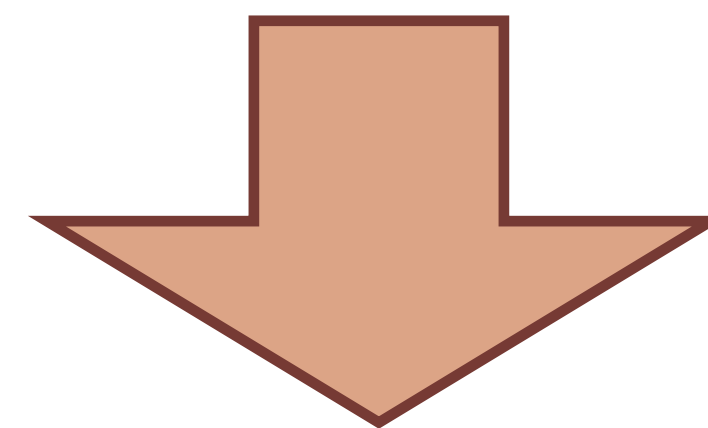
New exciting business topics

Background

Consultant



Academic researcher



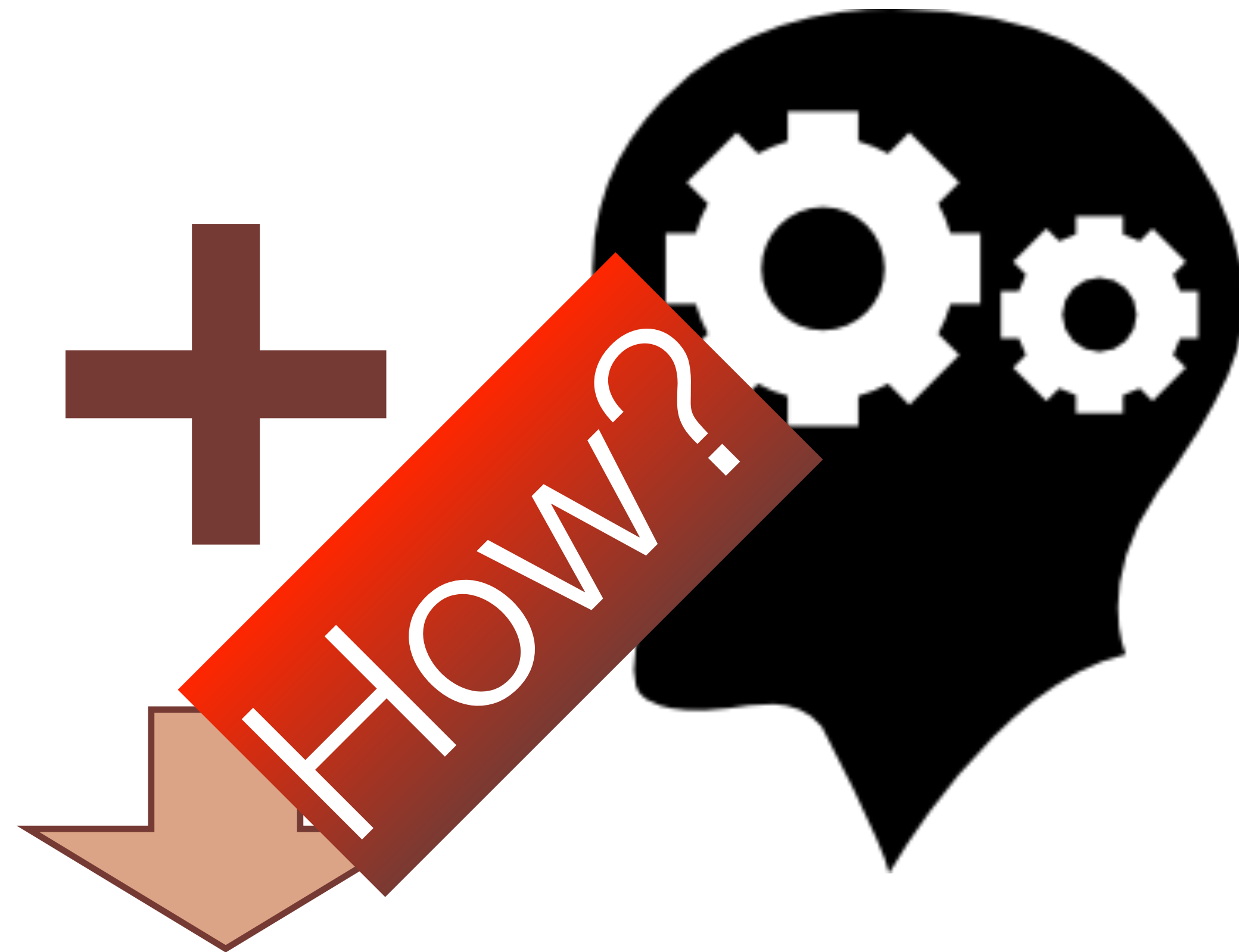
New exciting business topics

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Consultant



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New exciting business topics

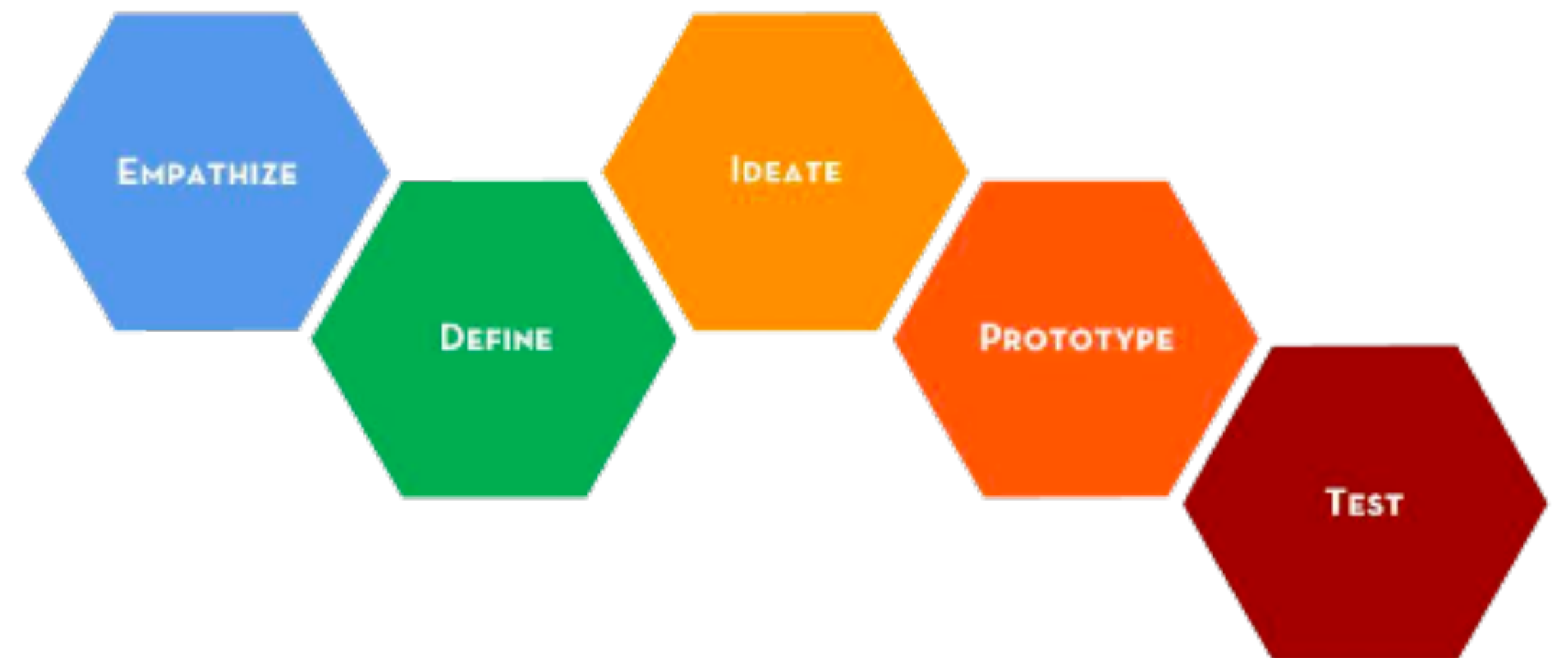
Innovation management

Design Thinking

What is Design thinking?

Approach is

- Problem driven
- Bottom up



Research flow



Research flow



Design Thinking Studio: Winter

- [3h x 2/week] x 10 weeks class @d.school
- Lecture

Research flow



Design Thinking Studio: Winter

- [3h x 2/week] x 10 weeks class @d.school
- Lecture



Research flow

Experience /
Understanding

Ideate / finding

Analyzing potential
in Biz. field

Design Thinking Studio: Winter

- [3h x 2/week] x 10 weeks class @d.school
- Lecture
- Team working



Research flow



Discussion with Dr. Dasher

- Reporting and analyzing each week

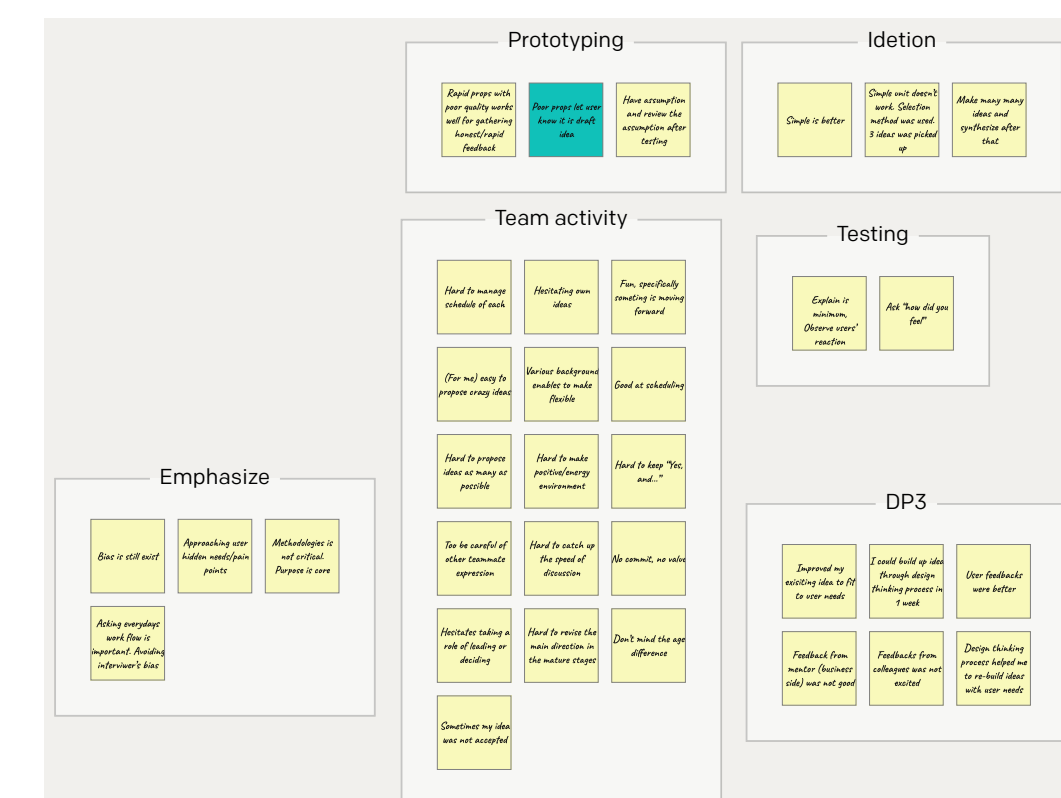
Reflecting with d.school's mentors

- Reporting and feedback



Re-organizing and finding

- Analyzing with experience and class materials
- Survey of academic paper

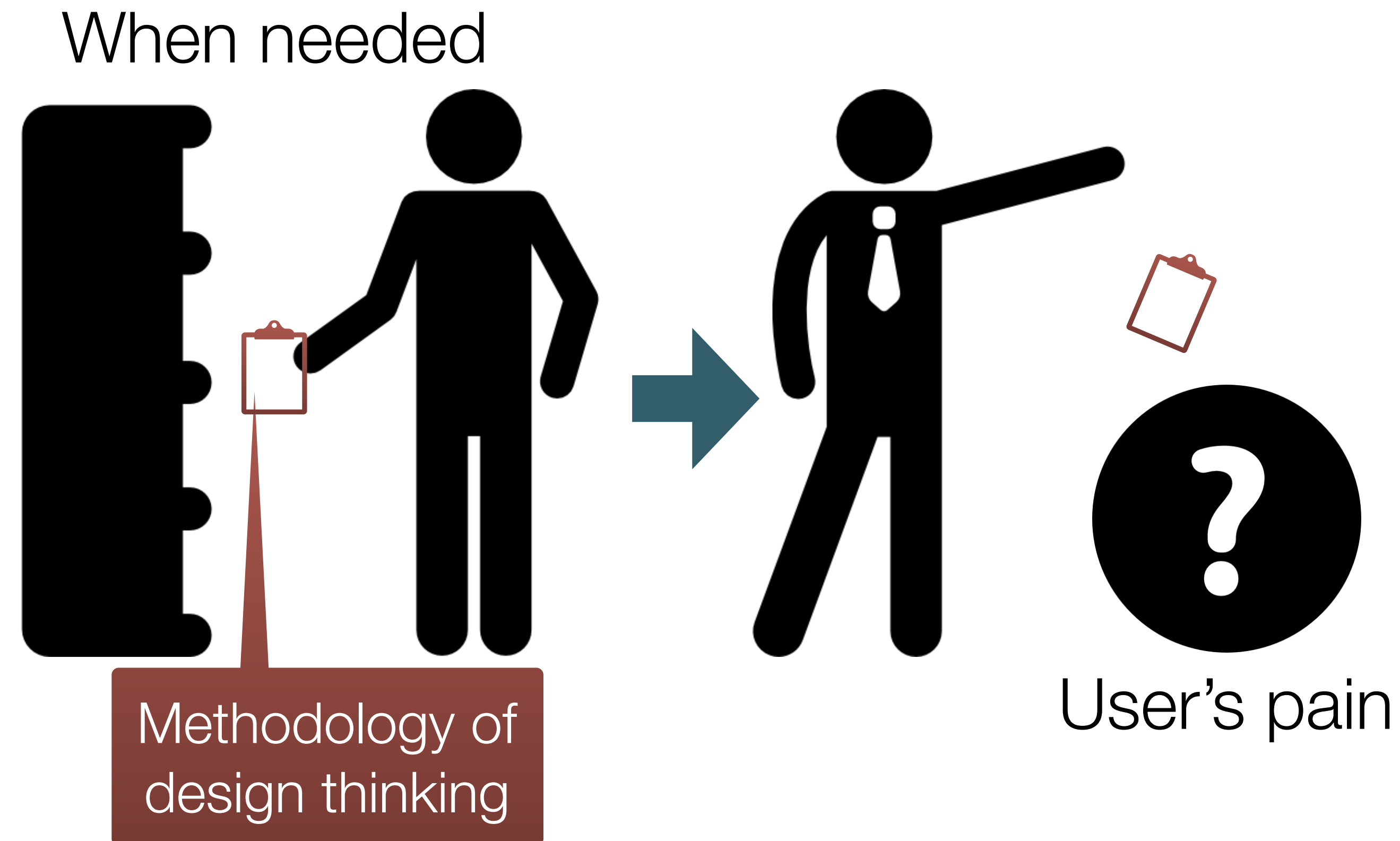


Initial findings

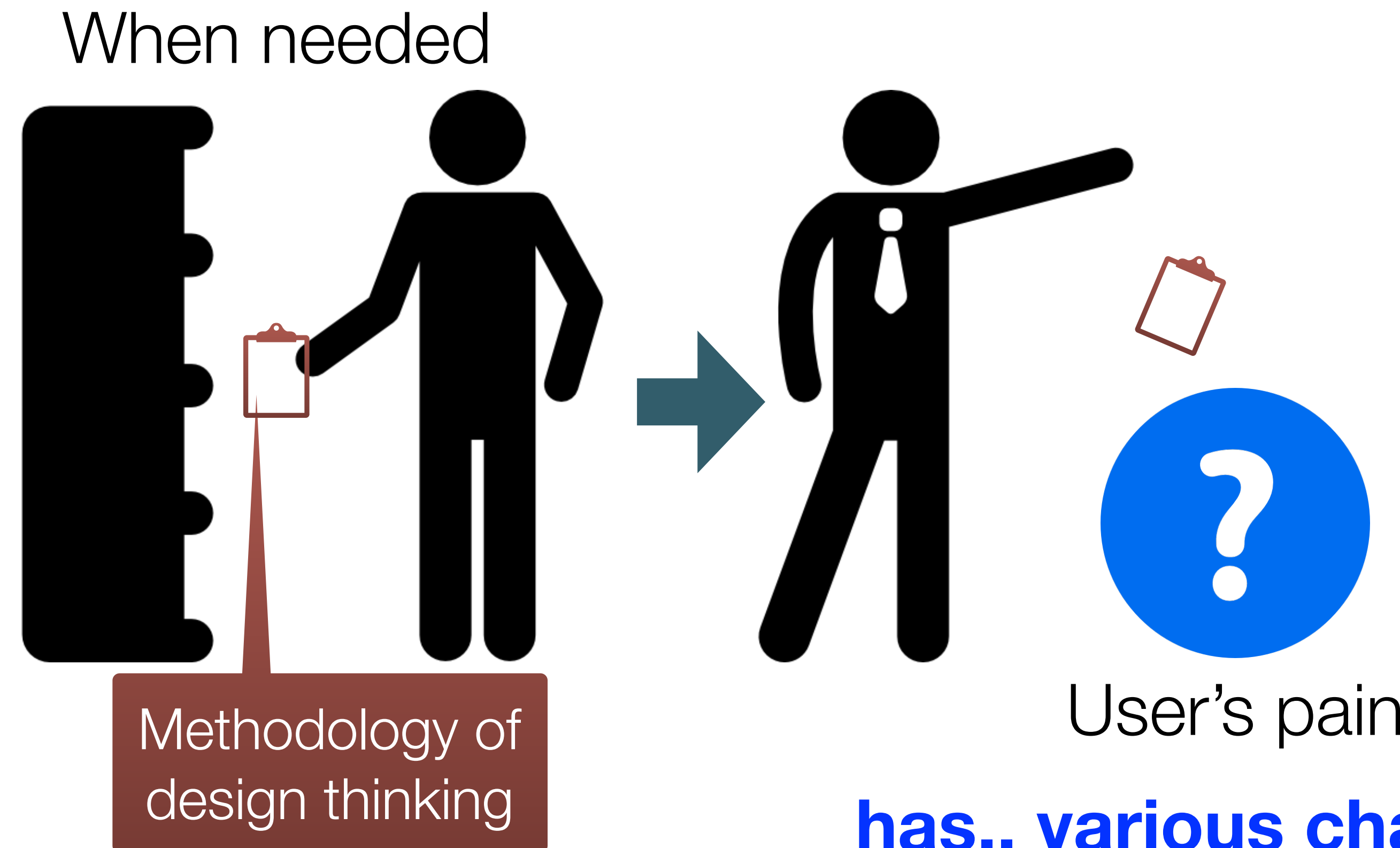
Design Thinking might be....

- “Philosophy” or “Concept” of user centered approach

Design Thinking might not be “off-the-shelf methodology”

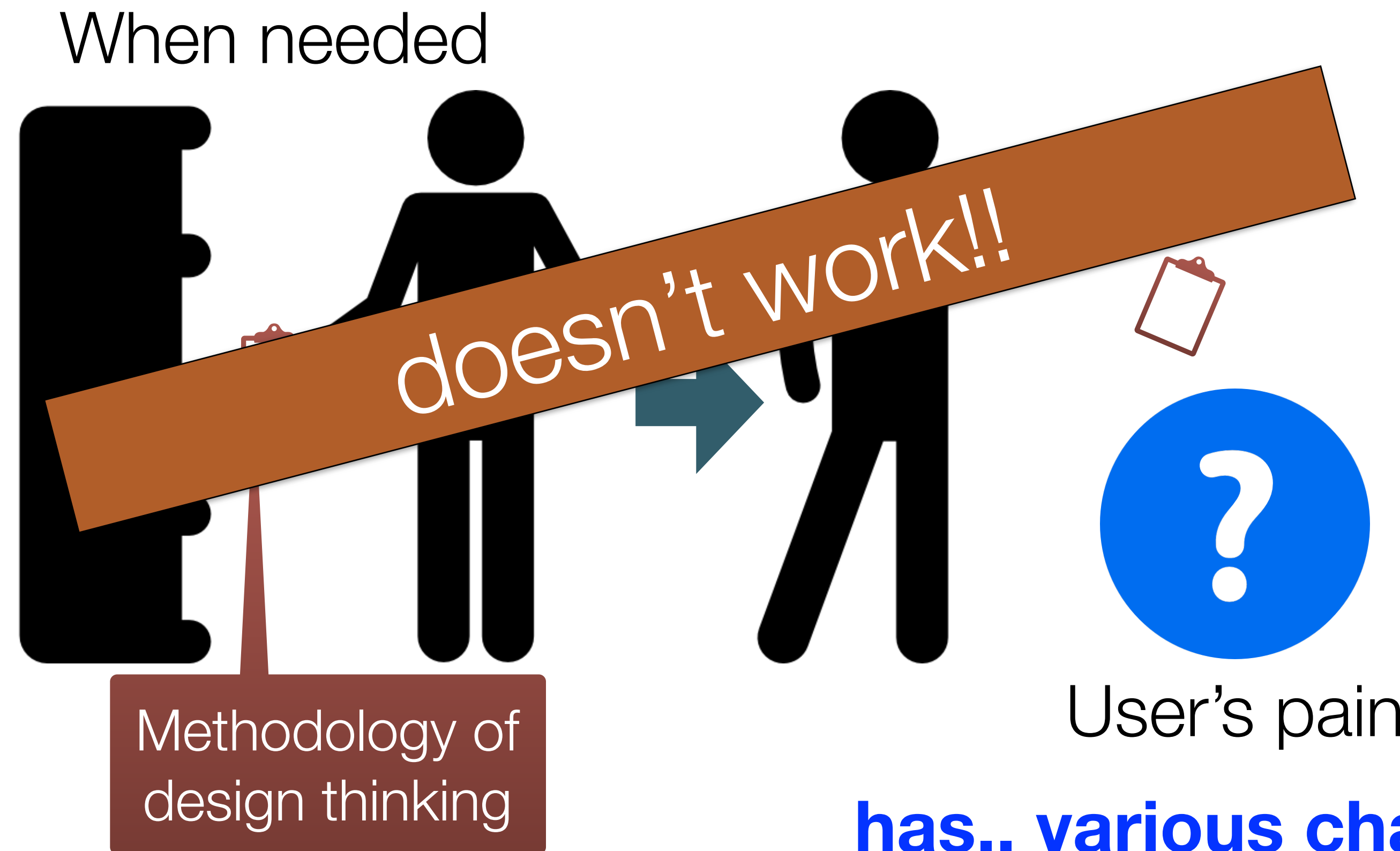


Design Thinking might not be “off-the-shelf methodology”



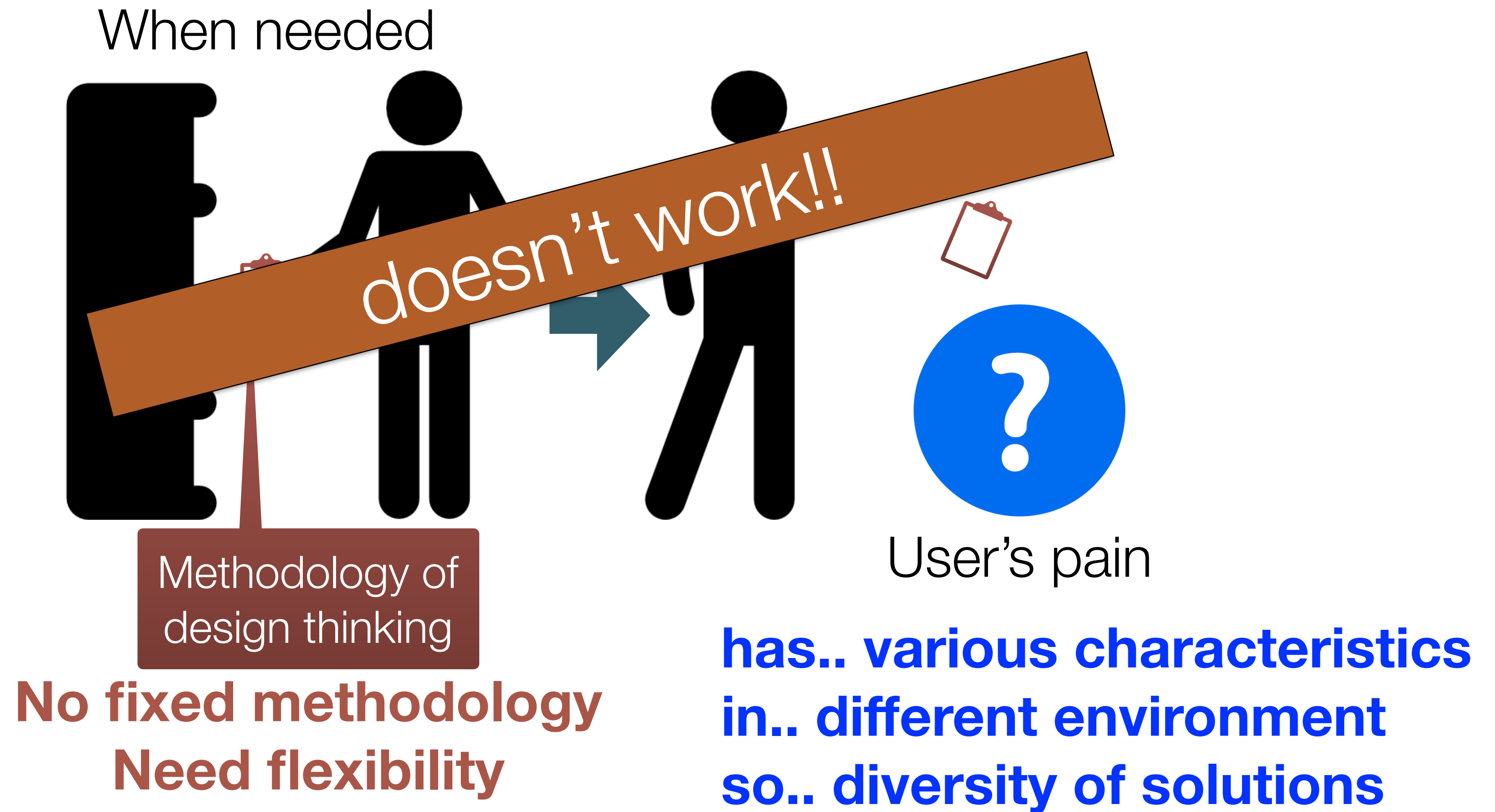
**has.. various characteristics
in.. different environment
so.. diversity of solutions**

Design Thinking might not be “off-the-shelf methodology”



**has.. various characteristics
in.. different environment
so.. diversity of solutions**

Design Thinking might not be “off-the-shelf methodology”





Design Thinking might be “Philosophy” or “Concept”

Photo by Taichi Takayama

Initial findings

Design Thinking might be....

- “Philosophy” or “Concept” of user centered approach

For successful Design Thinking, we might need...

- decide specific/extreme users
- keep mind about what/why to do that
- clear assumption and evaluation

Many points might be taken care with flexibility

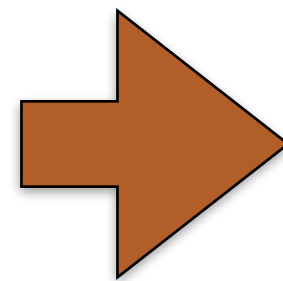


**Keep using Design Thinking to
continually revise solution if necessary**

Research flow



>100 organizations
have official Design Thinking effort
(Source: Koppen et al, 2016)



Every leader of innovation
has to show the value
of Design Thinking

Measuring helps improve
how design thinking is applied

(Source: A. Royalty et al, 2018)

Measuring innovation

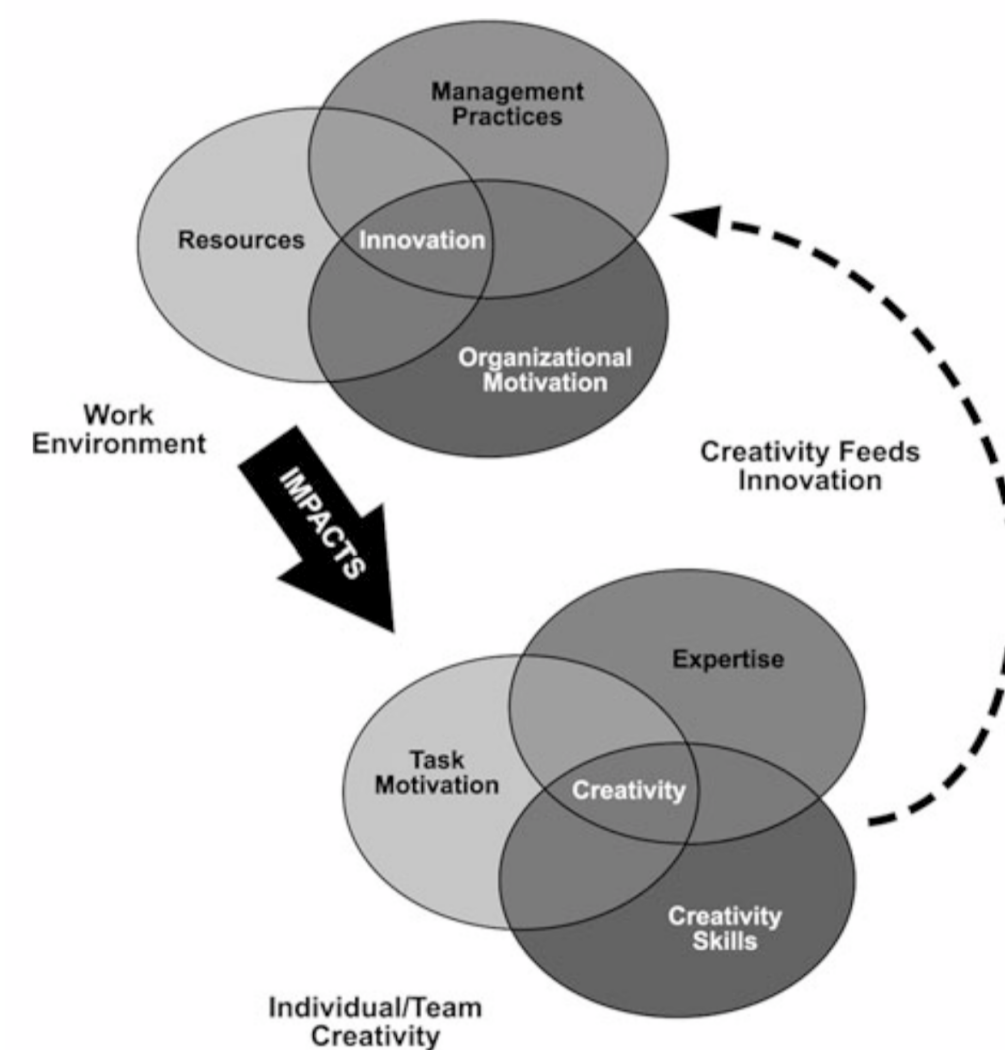
- Some projects have focused on measuring design thinking.

Hawthorne et al. 2014

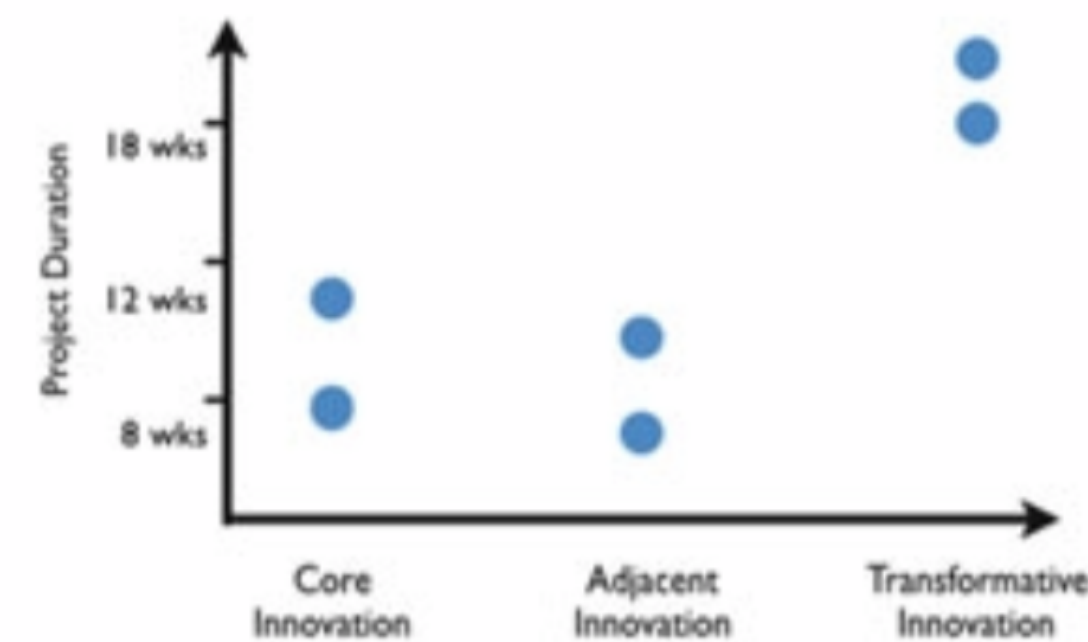
Royalty et al. 2012, 2014, 2015, 2016, 2018

Saggar et al. 2016

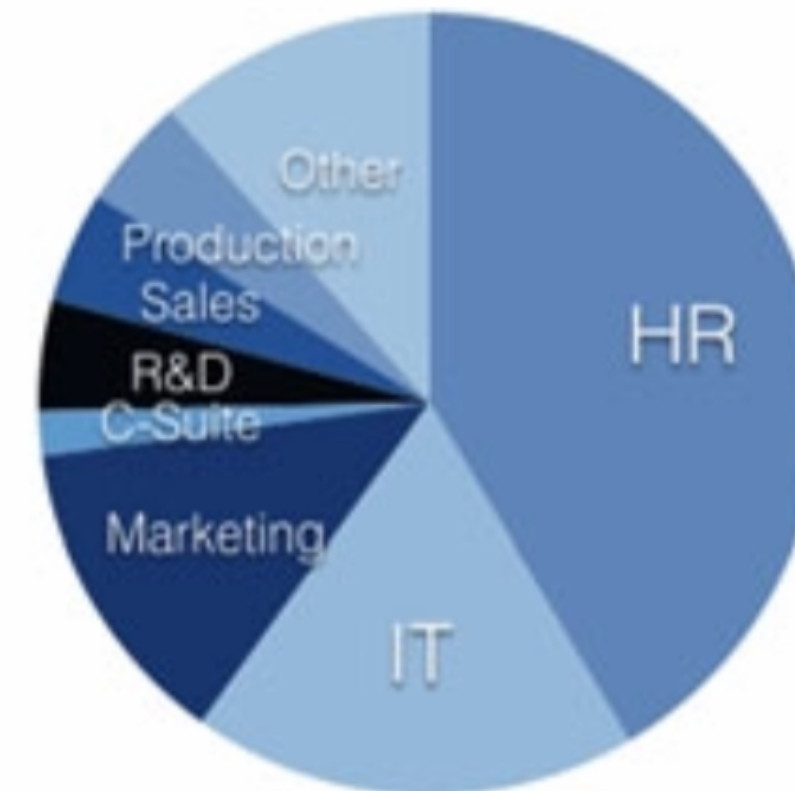
- Some models of creativity and innovation in organization



Amabile's model
(Source: Amabile 1996)



Innovation
Target



Business Unit
Distribution



Employee
Training Profile

Ecology map on design thinking
(Source: Royalty et al 2018)

Measuring innovation

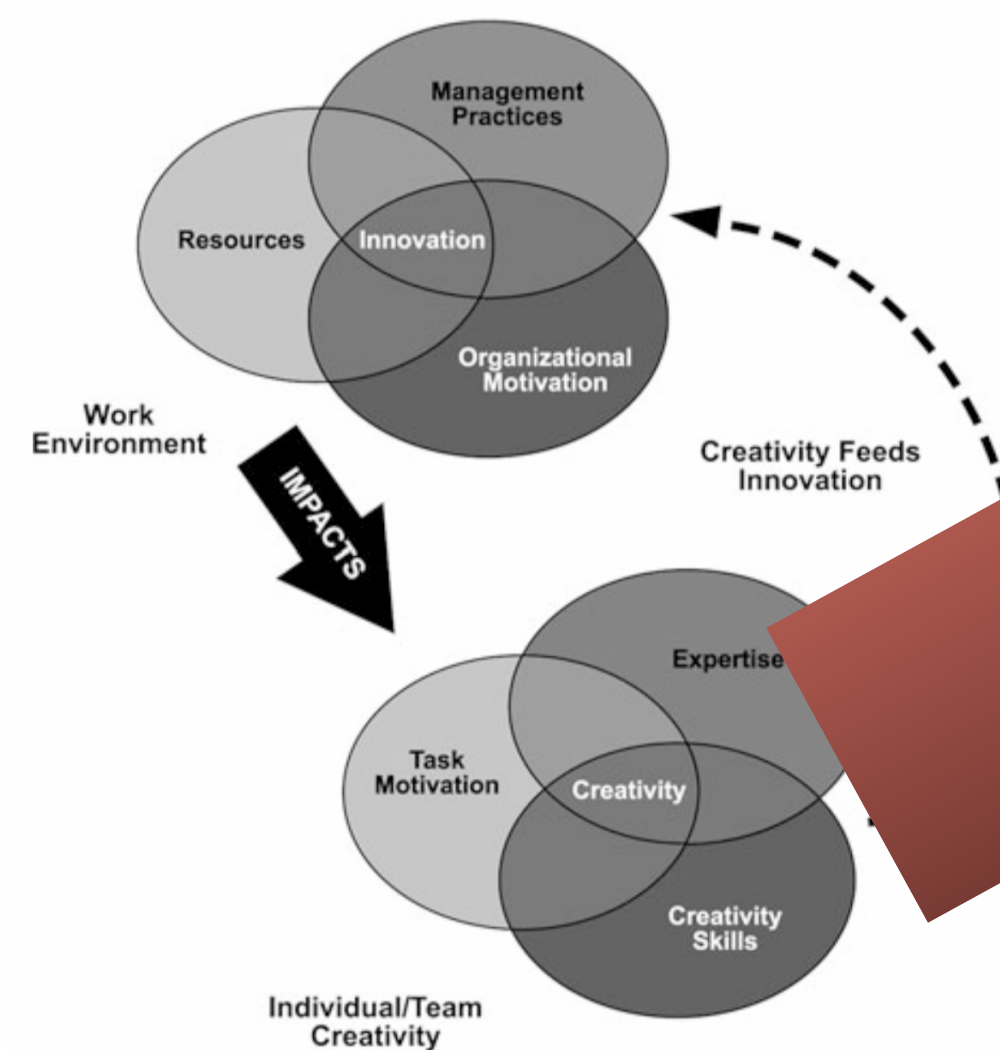
- Some projects have focused on measuring design thinking

Hawthorne et al. 2014

Royalty et al. 2012, 2014, 2018

Saggar et al. 2016

- Some models of creativity and innovation



Amabile's model
(Source: Amabile 1996)

Still challenging topic



Innovation Target



Business Unit Distribution



Employee Training Profile

Ecology map on design thinking
(Source: Royalty et al 2018)

Research flow



on going until this Aug.



Summary

- **Experienced** Design Thinking through the class at d.school
- **Analyzed** Design Thinking itself through discussion and reflection
- Design thinking is not a methodology, might be “**Philosophy**” or “**Concept**” of user centered approach.

Next steps

- **Analysis** of practical cases in business use.
- **Proposing better approaches** of reflecting Design Thinking on current enterprise activities
- **Proposing evaluation methods** of each assumptions

Thank you
welcome your feedback!



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