

# **SPEED DATING WITH DESIGN THINKING**

An empirical study of managers solving business problems with design

| Seda McKilligan  
Associate Professor

| Tejas Dhadphale  
Assistant Professor

| David Ringholz  
Associate Professor

**IOWA STATE UNIVERSITY**

*WHAT IS...*

**DESIGN  
THINKING?**

# DESIGN THINKING

*is...*

- the way designers identify needs, frame problems and provide solutions through a series of iterative cycles.
- The thought process of designers in creating product, service and system solutions.
- a dynamic, constructive process
- an iterative, empathy-based mindset

# STRONG INTEREST

*by business and management communities*

Managers pursue opportunities, incubate innovation, develop new resources, and push their organizations forward.

Solving management problems as designers explore and solve design problems – may have important implications for management (Dunne & Martin, 2006).

# YES, *but...*

designers and managers' work flow differ significantly as well as the nature of their tasks.

while managers avoid wicked problems and mainly focus on routine tasks, designers focus on wicked problems requiring cross-disciplinary collaborations (Martin, 2005)

# the question is...

“how to better

integrate design

thinking methods into

management

to allow for them to immediately see the value  
and implementation?”

# the gap...

There are many toolkits and frameworks proposed for design thinking.

However, many of them are not empirically studied, and ones that are studied are usually experimental conditions within academic settings.

Little research has looked at their applications for fields outside of design industry.

# workshop set up...



Entrepreneurial Agribusiness Executive Conference

21 executives: CEOs, VPs, Directors, Managers

6-hour workshop on design thinking

# research questions...

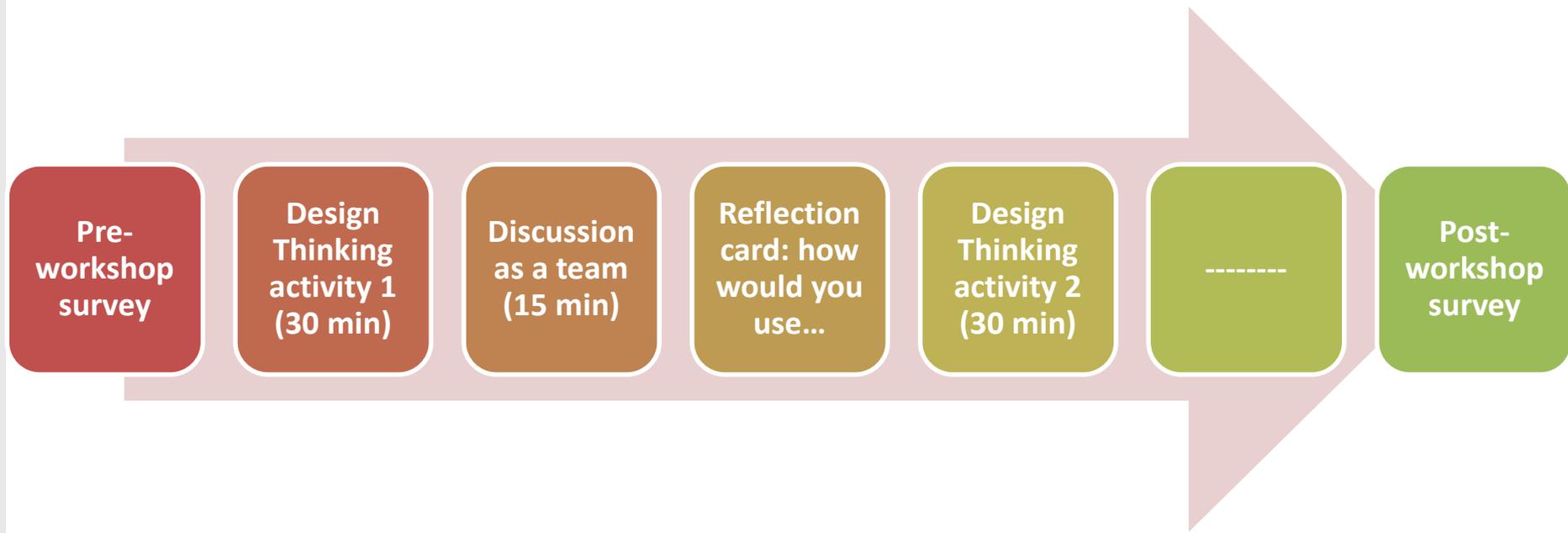
How do managers' **definitions** for design thinking vary after a short workshop?

How do managers in a field outside of design **perceive** design thinking process and the methods?

How would the managers **use** the methods introduced to address a challenge within their organizations?



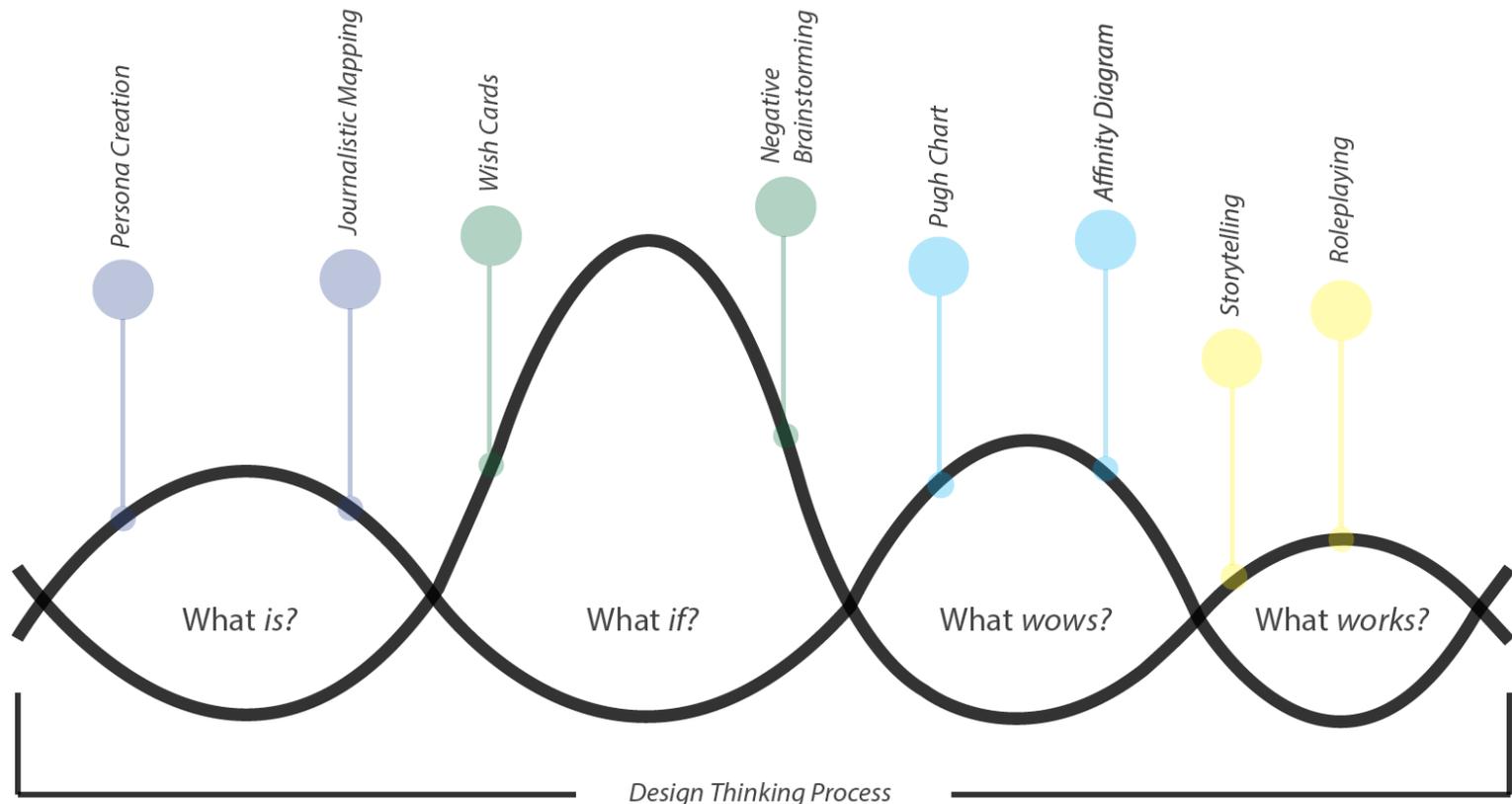
# data collection sequence...



1. What are your techniques to **motivate employees to take initiatives** in your organization?
2. What are the issues in your **organizational structure** that limits productivity? How do you address these?
3. How to cultivate a **creative atmosphere** to facilitate innovation?
4. How do you address **cross-functional team** issues?

issues

# workshop flow...



Design Thinking Process

(based on Liedtka & Ogilvie, 2011)

# some prep we did ahead of time...

## *for easy adoption*

Converted the 'd.school's wallet' exercise to 'design your partner's breakfast' exercise, as a crash course for design thinking.

Researched issues commonly observed at upper administrations regarding human challenges.

Prepared simple personas that they could relate to immediately, and they added details to reflect their potential employees.

Provided a set of questions and noun-verb combinations for them to choose from for journalistic mapping, as prompts (e.g. how to motivate \_\_\_\_ to be a team player?).

.....

# what is design thinking?

Emphasis on <b>process</b>	<p>“Define the problem, analyze the pros and cons by asking good questions practice/test a solution then implement this solution (execute)”</p> <p>“Digging deeper into a core assumption by understanding more about people and then coming at the assumption through various angles”</p> <p>“Process to identify what works by placing self in shoes of others and working through concepts/ideas from that point of view”</p>
Emphasis on <b>systematic approach</b>	<p>“A different way of thinking that leads solutions/answers that aren't the most obvious - forces us to frame the problem in a systematic way”</p> <p>“Discovery, iteration, trial, and movement forward”</p>
Emphasis on the <b>use of tools</b>	<p>“ Using deliberate and purposeful tools to drive the best and most innovative outcome of a team”</p> <p>“An approach to solve multidimensional problems through creative methods”</p>

# How would design thinking influence your organization?

Emphasis on <b>stimulating creative thinking</b>	“Involves a level of critical/innovative thinking that goes beyond the surface level. Allow to find real long term solutions” “Can influence us to be more creative in how we solve issues and problems” “Helping people think outside box - no dummies, no bad ideas”
Emphasis on <b>improved competency and efficiency</b>	“Helps you get to the root cause of issues in a more effective way” “Companies need to constantly be working ahead and finding ways to differentiate itself” “Gives me a systematic approach to find viable solutions faster”

# questions about the methods...

<b>Persona Creation</b>	“Understand the why's behind someone's action; Better feel for where that person is in life; what the person sees as relevant”
<b>Journalistic Mapping</b>	“Writing down the verb: noun combinations that solidifies the essence of the problem as a means to keep a problem solving team focused on the core issue”
<b>Wish Cards</b>	“Be open minded when thinking of solutions; solve the problem or at least try; Dream big; don't throw it out; consider it”
<b>Negative Brainstorming</b>	“Intend to use this when employees say something "can't be done" - list reasons why it can't and reverse those to 'how they can'”
<b>Affinity Diagramming</b>	“Could be useful in our strategic planning each year to prioritize new ideas or allocation of limited capital”
<b>Roleplaying</b>	“Role playing would be helpful in teaching people about how others respond. I would use it when trying to impress how various people and value systems show up differently in the work place”

# lessons learned...

All of the participants acknowledged the **importance of design thinking** as a new thinking process and its **potential value for their organizations**.

Adopting this new approach seemed to be **easy** for many managers as they were comfortable with elaborating **how they could integrate** these methods to solve some of the problems in their **existing settings**.

While there were some differences in precise definitions, they were mostly able to integrate some of the **design thinking terminology** when they were asked to describe what design thinking was.