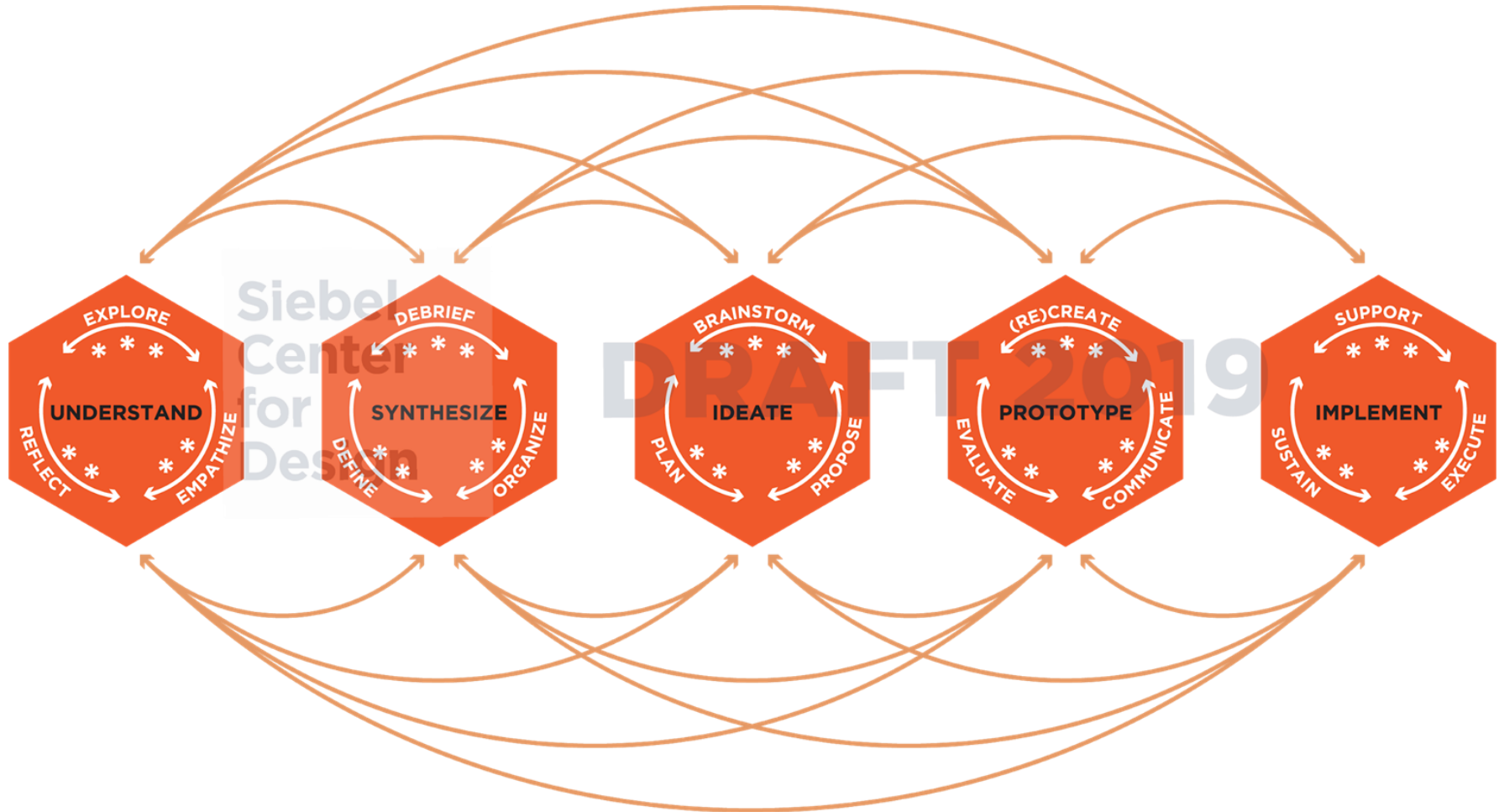

ME 170 Lab 2

Download and Synthesis



INSPIRATION

I have a design challenge.

- How do I get started?
- How do I conduct an interview?
- How do I stay human-centered?

IDEATION

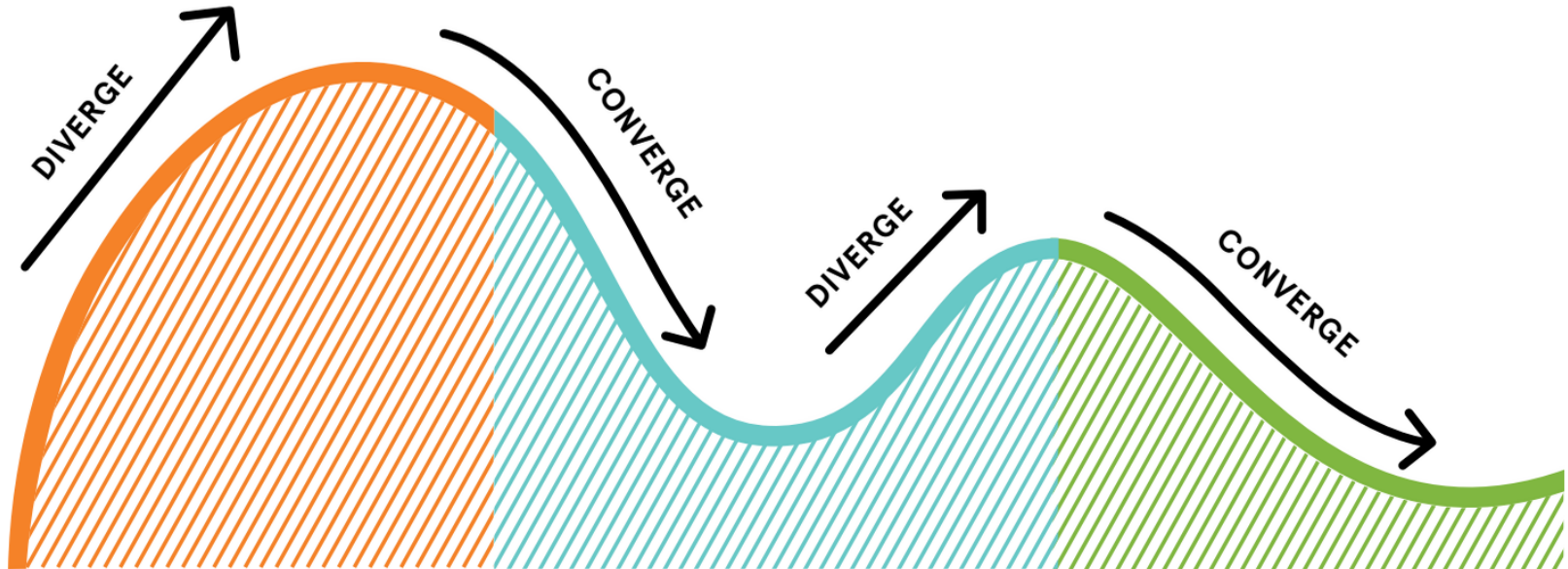
I have an opportunity for design.

- How do I interpret what I've learned?
- How do I turn my insights into tangible ideas?
- How do I make a prototype?

IMPLEMENTATION

I have an innovative solution.

- How do I make my concept real?
- How do I assess if it's working?
- How do I plan for sustainability?



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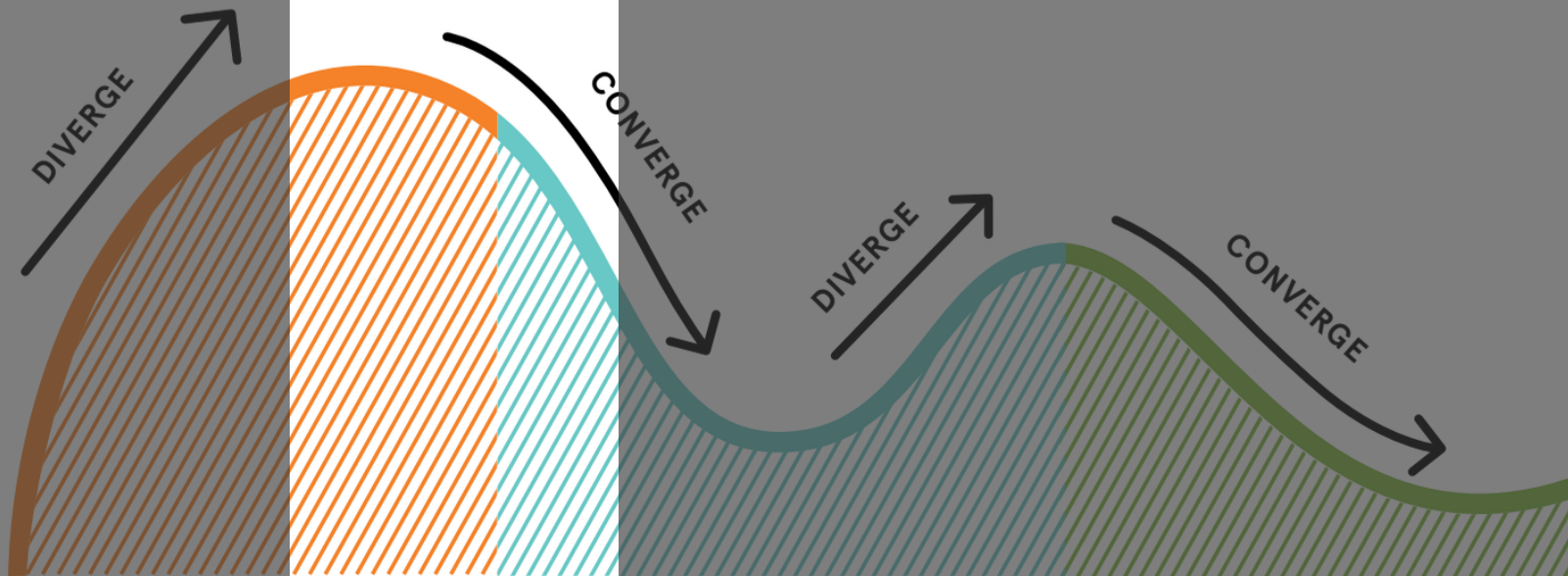
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Learning Objectives

After this lab you should be able to...

1. Communicate important observations and findings using storytelling
 2. Discover research areas where more information is needed
 3. Define “insights” and identify them in your project context
-



Observation

Empathy

What is Synthesis?

- Act of making sense of what we've seen and heard during observations to come to a shared understanding
 - Takes us from inspiration to ideas, from stories to solutions
 - Enables us to establish a new perspective and identify new opportunities
-

Steps of Synthesis

1. Downloading interviews and observations
 2. Identifying patterns and themes
 3. Extracting key insights
-

1. Tell stories about individuals

- Take turns telling stories
 - Actively listen to your team members and look for meaning
 - Analyze and interpret meaning
 - Focus on the highlights
 - Go deeper
-

NOTES & DRAWINGS

31, married 2 kids

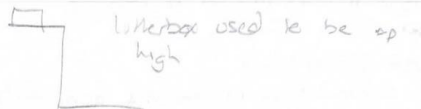
1 cat Miken G

- Needs a lot of attention
- Arm and hammer, clump and seal fresh home
- Miken
 - from Curtis orchard, given to orchard
 - she got stolen from the Orchard
 - all get adapted @ end of season
 - when she got to house she was peeing on carpet
 - ↳ after w/ had her declawed & spayed
 - ↳ temperament changed after she was declawed
 - replaced carpet
 - pee on clothes on the floor
- Don't let anyone mess w/ her extensively
- didn't pee unless

hissed when



NOTES & DRAWINGS



- Likes playing w/ laser pointers
 - would do backflips
- Litterbox experience
 - pee & poop separately
- Never had an open litter box
- Asked vet
 - hormone spray
 - ↳ hard to use consistently
 - ↳ really expensive
 - change in diet \$50/bag ⇒ too expensive
 - "she's a barn cat"
- Doesn't care that much about toys anymore
- about 2 years
- Once she had peed once on carpet



—

Work with
your class to
download
interviews &
observations
(up to 60 minutes)

Name

*3-5 bullets of
biographical
information*

*quote/
observation #1*

*quote/
observation #2*

*quote/
observation #3*

*quote/
observation #4*

Steps of Synthesis

1. Downloading interviews and observations
 2. Identifying patterns and themes
 3. Extracting key insights
-

2. Identify patterns and themes

- Look for buckets/groups/themes
- Consider the relationships between these
- Group and re-group
- POINT
 - **P**roblems, **O**pportunities, **I**nsights, **N**eeds, **T**hemes



Now it's your turn

Work with your team to
Identify Patterns and Themes

(15 minutes)

Steps of Synthesis

1. Downloading interviews and observations
 2. Identifying patterns and themes
 3. Extracting key insights
-

3. Extracting Key Insights

An insight should be a full sentence that takes a stance on a particular topic.

- Insights are **revelations** - the unexpected things that make you sit up and pay attention
 - Insights bring **visibility** and **clarity** to previously hidden meaning
 - Insights allow us to **see the world in a new way**
-

Patterns & Themes into Insights

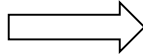
Pattern/Theme

Insight

Dining halls have
diverse options



Students want
consistency and
familiarity



Offering many diverse meal options may only
be desirable at certain times or locations.

Now it's your turn

Work with your team to
Extract Key Insights

(15 minutes)

Steps of Synthesis

- 1. Downloading interviews and observations**
- 2. Identifying patterns and themes**
- 3. Extracting key insights**
4. Create frameworks to visually communicate insights



*Not covered in ME 170, but useful for
sharing complicated insights quickly*

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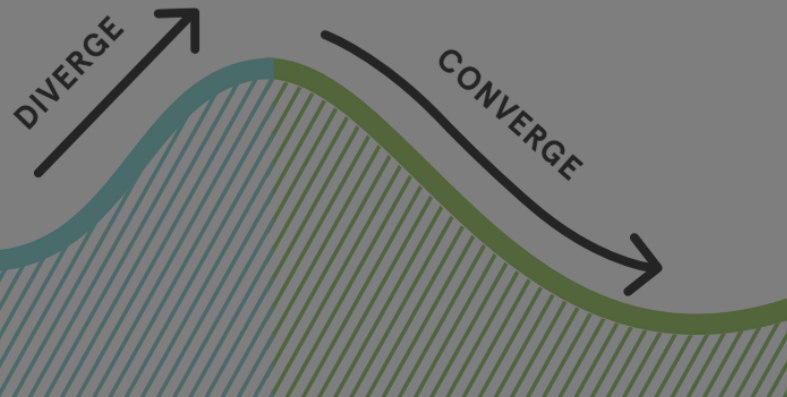
IMPLEMENTATION

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Capture your understanding

Frame your current understanding of the problem using a “Point of view” statement.

“ User needs unmet need because
 surprising insight ”

Instructions

Work with your team (5 mins):

- 1) Choose a user group you'll be designing for
 - a) Make sure you can justify your choice!
 - 2) Write a POV statement for that group
 - 3) Ask your TA to give approval
-



What else do you need to know from this group?

- Revisit the interview packet with this user group in mind
 - Review your notes and your POV statement
 - What information is still missing?
 - What system is in place currently?
 - What's the experience like?
 - What's the target?
 - Make a plan to fill in the gaps
-