SESSION AGENDA

• Opening Remarks and Introductions
• What is Human-Centered Design?
• What’s On Your Radar?
• Ethnographic Research
• Rose, Bud, Thorn + Affinity Cluster
• Creative Matrix + Visualize the Vote
• Wrap Up
SESSION OBJECTIVES

• Introduce the concept and a few practices of Human-Centered Design (HCD) as a construct for innovative civic engagement.

• Apply these practices in a collaborative setting to the realities of the Michigan Street Corridor

• Hone your observation, synthesis, and creative problem solving skills.

• Share learnings, cross-pollinate ideas, and begin thinking about how to use Human-Centered Design to add value to the civic engagement component of the Michigan Street Corridor project.
How do you define Design?
Human-Centered Design is the discipline of creating solutions intended to cause improvement that are driven by the needs, desires, and context of the people for whom we design.
TO ADOPT A MINDSET OF HCD IS TO ADOPT AN ATTITUDE OF:

- Humble
- Curious
- Empathetic
- Iterative
- Imaginative
- Collaborative
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- Walk-a-Mile Immersion
- Looking Ethnographic Research
- Understanding Patterns & Priorities
- Affinity Clustering
- Making Design Rationale
- Creative Matrix
TO BE SKILLED AT HUMAN-CENTERED DESIGN IS TO BE SKILLED AT . . .

Looking

Methods for observing human experience

Understanding

Methods for analyzing challenges and opportunities

Making

Methods for envisioning future possibilities
TOOLKIT OF HUMAN-CENTERED DESIGN METHODS

Looking
Methods for observing human experience:

ETHNOGRAPHIC RESEARCH
- Interviewing
- Contextual Inquiry
- Walk-a-Mile Immersion
- Fly-on-the-Wall Observation

PARTICIPATORY RESEARCH
- What’s-on-your-Radar?
- Build-your-Own
- Buy-a-Feature
- Journaling

EVALUATIVE RESEARCH
- Usability Testing
- Heuristic Review
- A/B Testing
- System Usability Scale

Understanding
Methods for analyzing challenges and opportunities:

PEOPLE & SYSTEMS
- Stakeholder Mapping
- Persona Profiles
- Experience Diagramming
- Concept Mapping

PATTERNS & PRIORITIES
- Affinity Clustering
- Bull’s-eye Diagramming
- Importance/Difficulty Matrix
- Visualize-the-Vote

PROBLEM FRAMING
- Problem Tree Analysis
- Statement Starters
- Abstraction Laddering
- Rose, Bud, Thorn

Making
Methods for envisioning future possibilities:

CONCEPT IDEATION
- Thumbnail Sketching
- Creative Matrix
- Round Robin
- Alternative Worlds

MODELING & PROTOTYPING
- Storyboarding
- Schematic Diagramming
- Rough & Ready Prototyping
- Appearance Modeling

DESIGN RATIONALE
- Concept Posters
- Video Scenarios
- Cover Story Mock-ups
- Quick Reference Guides
HCD IS A COMBINATION OF THREE BASIC BEHAVIORS

• Engagement with users (and other key stakeholders)
• Frequent iteration
• Interdisciplinary collaboration

HCD IS NOT ...

• Something entirely new
• A one-shot deal
• A development process
A SAMPLING OF METHOD COMBINATIONS

Method set for the “Research” phase of a process

- **Understanding PEOPLE & SYSTEMS**
  - Stakeholder Mapping

- **Looking ETHNOGRAPHIC RESEARCH**
  - Interviewing

- **Understanding PEOPLE & SYSTEMS**
  - Persona Profiles

Method set for the “Concept” phase of a process

- **Understanding PATTERNS & PRIORITIES**
  - Bull’s-Eye-Diagramming

- **Making MODELING & PROTOTYPING**
  - Schematic Diagramming

- **Making MODELING & PROTOTYPING**
  - Rough & Ready Prototyping

- **Looking EVALUATIVE RESEARCH**
  - Usability Testing

Method set for the “Support” phase of a process

- **Looking EVALUATIVE RESEARCH**
  - Heuristic Review

- **Understanding PATTERNS & PRIORITIES**
  - Affinity Clustering

- **Understanding PATTERNS & PRIORITIES**
  - Importance/Difficulty Matrix

Usability Testing

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“Everyone designs who devises courses of action aimed at changing existing situations into preferred ones.”

- HERB SIMON
HCD facilitates collaboration among these key disciplines.
Let’s get started!
An exercise where people organize items on a diagram by concept and importance.
QUICK GUIDE: WHAT’S-ON-YOUR-RADAR

• Draw three concentric circles and segments.
• Explain the rings (Critical, Important, Peripheral).
• Explain the labels for the categories.
• Tell them the topic for the activity.
• Ask them to write information on Post-it® Notes.
• Invite them to plot each item on the diagram.
• Ask participants to present their diagram to the group.
• Ask questions when they present if you need clarification.
BENEFITS:

• Hear from participants directly.

• Help stakeholders express needs and desires.

• Remind teams who they’re building for.

EXPERTISE: ★★★★☆ TAKES SOME PRACTICE
SESSION AGENDA

• Opening Remarks and Introductions
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• Creative Matrix + Visualize the Vote
• Wrap Up
“What people say, what people do, and what they say they do are entirely different things.”

MARGARET MEAD
ANTHROPOLOGIST
CONTEXTUAL INQUIRY: PREPARING TO CAPTURE DATA
A way of building empathy through first-hand experience.
DISGUISED
A TRUE STORY

“What happens when a woman of 26 assumes wrinkles and wig and passes for 85? She learns a lot about the young, the old and herself.”
— from Reader’s Digest

PAT MOORE
WITH
CHARLES PAUL CONN
Walk-a-Mile Immersion

BENEFITS:

• Develop first-hand knowledge of the domain.
• Develop deeper empathy for the target users.
• Help teams challenge assumptions.
• Help teams build a shared understanding.

EXPERTISE:

DO IT WITH AN EXPERT

ETHNOGRAPHIC RESEARCH

Looking
Methods for observing human experience
An approach to conducting research in an unobtrusive manner
QUICK GUIDE: FLY-ON-THE-WALL OBSERVATION

- Predetermine the location and setting to be visited.
- Determine the target users or user groups.
- Determine the tasks and activities to be observed.
- Work with the client to obtain permission(s).
- Prepare materials for capturing the experience.
- Go and observe.
- Report your findings to the team.
Fly-on-the-Wall Observation

**BENEFITS:**

- Develops familiarity with users in context
- Develop questions for further research
- Help teams build a shared understanding
- Help teams challenge assumptions

**EXPERTISE:**

YOU CAN DO IT!

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A protocol for interviewing and observing the behavior of people in their native context
QUICK GUIDE: CONTEXTUAL INQUIRY

- Predetermine the location and people involved.
- Create your protocol beforehand, and bring it with you.
- Bring tools for recording (notepads, cameras, etc.)
- Make participants feel comfortable. Start easy.
- Observe the environment and its effect on people.
- Note any constraints on people’s activity.
- Observe tools used, and “rules” or procedures followed
- Identify roles played by each person
BENEFITS:

- Reveals unarticulated knowledge
- Promotes deep stakeholder empathy
- Challenges outdated and personal assumptions
- Serves as a good customer relations technique

EXPERTISE: ★★★☆☆

TAKES SOME PRACTICE
A directed conversation between you and another person to gather information.
QUICK TIPS: INTERVIEWING

• Write down questions ahead of time.
• Confirm consent and record the interview.
• Start easy. Set the tone. Build trust.
• Direct the conversation, but don’t “lead the witness.”
• Ask open-ended questions.
• Draw out specifics.
• Listen more than you speak.
BENEFITS:

• Get information from stakeholders directly.
• Remind teams who they’re building for.
• Challenge assumptions.
• Help teams develop customer relationships.

EXPERTISE:

YOU CAN DO IT
A way of identifying things as positive (rose), having potential (bud) or a problem (thorn)
ROSE = R

BUD = B

THORN = T
QUICK GUIDE: ROSE, BUD, THORN

- Convene an interdisciplinary team.
- Assemble a set of Post-it® Note pads.
- Select one color to indicate positive things (rose).
- Select another color to indicate things with potential (bud).
- Select a final color to indicate problems (thorns).
- Sort items into clusters or tag items previously grouped.
- Encourage discussion.
BENEFITS:

• Give various contributors a “voice.”
• Facilitate constructive discussion.
• Analyze a collection of issues quickly.
• Build a shared understanding.

EXPERTISE: ★★★★★

EASY AS PIE
A graphic technique for sorting items according to similarity.
QUICK GUIDE: AFFINITY CLUSTERING

• Convene an interdisciplinary team.
• Assemble a collection of data.
• Write one issue or concept per Post-it® Note.
• Read each issue or concept aloud.
• Stick items on a work surface and discuss relationships.
• Sort notes into related groupings.
• Label the various groupings.
Affinity Clustering

**BENEFITS:**

- Organize large amounts of data quickly.
- Identify emergent issues, concepts or themes.
- Facilitate collaborative teamwork.
- Build a shared understanding.

**EXPERTISE:**

EASY AS PIE

⭐⭐⭐⭐⭐
A format for creating “systematic mash-ups” to generate many wide-ranging ideas.
QUICK SKETCHING TIPS

- Use bold strokes
- Combine basic shapes
- Make & reuse icons
- Use arrows as verbs
- Add text annotations
- Try some special effects
<table>
<thead>
<tr>
<th>Social Media</th>
<th>Outdoor Enthusiasts</th>
<th>Business Commuters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camp Card</td>
<td>What to take with you</td>
<td>Spot Scout Shot Cut</td>
</tr>
<tr>
<td></td>
<td>Campfire</td>
<td>Text Alert for disposal</td>
</tr>
<tr>
<td></td>
<td>Everyone needs an umbrella</td>
<td>Get directions</td>
</tr>
<tr>
<td></td>
<td>Outdoor Aromas</td>
<td>Text Alert for disposal</td>
</tr>
<tr>
<td>Wearable/Mobile Tech</td>
<td>GPS enabled walking vest</td>
<td>Train Ticket Overcoats</td>
</tr>
<tr>
<td></td>
<td>Personal Shirt Display</td>
<td>Seat Belt Accessories</td>
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<td></td>
<td>RF Tag</td>
<td>Boarding Pass Jackets</td>
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<tr>
<td></td>
<td>Trace Walkie</td>
<td>Survive Ties</td>
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<tr>
<td></td>
<td>First Aid</td>
<td>Carry On</td>
</tr>
<tr>
<td>Wildcard</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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A quick way of polling collaborators to uncover the strongest ideas or patterns of interest.
Description

- video game
- multi-player
- points assigned to food choices
- based on actual food
- themed sports
- storylines and food choices

Kids 4+ are
• Convene an interdisciplinary team.
• Distribute just a few votes (on sticky tabs) to each person.
• Set the criteria for voting.
• Votes can be placed “all-on-one” or distributed.
• Listen to the rationale of various presenters.
• Everyone vote simultaneously (1... 2... 3... go!).
• Encourage discussion, and re-vote as necessary.
BENEFITS:

• Help teams agree upon priorities.
• Help build strong consensus.
• Diminish “pet” projects.

EXPERTISE: EASY AS PIE
Discussion of Next Steps & Wrap Up