HUMAN CENTERED DESIGN
CO-DESIGN
PARTICIPATORY DESIGN
COMMUNITY DRIVEN SOLUTIONS
ALL KINDS

TECHNICAL

FINANCIAL

SPATIAL

SERVICES & SYSTEMS

POLICY

policy
telechnical
spatial
financial
services & systems
all kinds
The Course for Human-Centered Design

An Introduction to HCD

In the Inspiration phase you’ll learn directly from the people you’re designing for as you immerse yourself in their lives and come to deeply understand their needs. In the Ideation phase you’ll make sense of what you learned, identify opportunities for design, and prototype possible solutions. And in the Implementation phase you’ll bring your solution to life, and eventually, to market.

Expect to find yourself shifting gears through the process, moving from concrete observations to highly abstract thinking, and then right back again into the nuts and bolts of your prototype. We call it diverging and converging. You’ll diverge and converge a few times, and with each new cycle you’ll come closer and closer to the solution that is best suited for the people you’re designing for.

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?

I have a design challenge. How do I get started? How do I conduct an interview? How do I stay human-centered?

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?

INSPIRATION
IDEATION
IMPLEMENTATION

ALL STAGES
ALL STAKEHOLDERS
WHY IS IT DONE
DEEPER IMPACT
SUSTAINABLE SOLUTIONS
% OF SUCCESS
HOW DOES IT WORK
ISSUES

?
BIG CHALLENGE
TAKE A **HOLISTIC** APPROACH

- understanding inter-relations
- letting go of biases
broaden your perspective
derozmierz jeżowr PERSPECTIVE
recognize larger challenges
identify avenues for partnership
HOW MIGHT WE...
LUNCH TIME!
COMMUNITY ENGAGEMENT RESEARCH METHODS
HOST INTERVIEWS
GROUP GAMES
CONDUCT SURVEYS
VISUAL COMMUNICATION
LET'S PLAY!
LEAVE THE **AGENDA**

follow the story

build empathy

leave the agenda
LEARN SOMETHING
TEACH SOMETHING
BE AWARE (PROBLEMS WON'T SHOW INSTANTLY)
RESPECT PEOPLE & CONTEXT
FOLLOW UP
TIME TO BRAINSTORM
7 rules
Defer judgement
Encourage wild ideas
Build on the ideas of others
Stay focussed on the topic
Be visual
One conversation at a time
Go for quantity
WORK TOWARDS...

DESIRABILITY

FEASIBILITY

VIABILITY

SOLUTION
inspiration
ideation
desirability
feasibility
viability
implementation
PICK AN IDEA

REFLECT + FEEDBACK
STAKEHOLDER MAPPING
FUNDER/INVESTOR
funds the centre

PARTNER/HOST
provides added service/activity
pays rent for energy used

SELCO IEC
system integrator

INTEGRATED ENERGY CENTRE
solar powered unit which sustainably provides basic amenities to deprived communities

OPERATOR OR ENTREPRENEUR

USERS
pay for services provided by IEC, thereby covering running and maintenance cost of centre

user 1
user 2
user 3
LET'S STORYBOARD!
DO NOT WORKS
WE HAVEN'T SOLUTION
FOR YOU!

WHAT CAN
I DO?

HARD WATER?

DO NOT WORKS
WE HAVEN'T SOLUTION
FOR YOU!

DO NOT WORKS
WE HAVEN'T SOLUTION
FOR YOU!

DO NOT WORKS
WE HAVEN'T SOLUTION
FOR YOU!

DO NOT WORKS
WE HAVEN'T SOLUTION
FOR YOU!
Aditi, a mass communication student student, studying in Christ College sees the ‘Fix it’ hoarding outside her college. Later that day goes shopping to MG Road.

While looking at discount offers she walks ahead and falls into a pothole.
She remembers the ‘fix it’ hoarding and hoping that it doesn’t happen to anyone else she calls in.

The service provider tells her about the service and registers her request.
Since Aditi gets a holiday on Sunday she visits the pothole that she wants fixed with service provider after which she waits.

While she waits the service providers gets in touch with the government officials, companies that could fund the project, and the construction companies.
They finally contact her and give her a serial no. with which she can keep a check on the progress.

Checking regularly online but seeing no progress she calls in and enquires they tell her that they had problems with constructions company but they got through.
### TRACK IT!

<table>
<thead>
<tr>
<th>Serial Number</th>
<th>IND038</th>
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<tbody>
<tr>
<td>Issue</td>
<td>Pothole fix - fill and level</td>
</tr>
<tr>
<td>Area</td>
<td>M.G. Road</td>
</tr>
<tr>
<td>Company Sponsor</td>
<td>HCL Infosystems, Bangalore</td>
</tr>
<tr>
<td>Construction Company</td>
<td>Jayamahe Leela Constructions, Bangalore</td>
</tr>
<tr>
<td>Start Date</td>
<td>12th September 2008</td>
</tr>
<tr>
<td>Completion Date (approx.)</td>
<td></td>
</tr>
<tr>
<td>Progress (comments)</td>
<td>Project started. Initial field checks done, progress slow - construction company having some paper issues. Call for more details.</td>
</tr>
</tbody>
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### LATEST FIX!

- **IND038**
  - Ms. Aditi Kadghole
  - October 2007

### DONATE!

- **Projects**
  - Projects...
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<td>17th October 2008</td>
</tr>
<tr>
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<td>Completed Project</td>
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</table>

**IND038**
Ms. Aditi Kadghole
October 2007
The pot finally gets fixed and on the final day she goes with the service providers again to the site where they introduced the name on the pothole and documented her effort.

She is then able to see the uploaded picture on the site with her family and friends.
IND038
Ms. Aditi Kadghole
October 2007

DONATE!
Projects...
1. Biomass Collection:

Pourakarmika collects dry leaves, twigs and waste paper from the streets as part of her daily routine. She collects these in a separate bin meant specifically for it and at the end of the day, she takes the biomass she has collected home.

2. Biomass Processing:

She shreds the dry/semi dry leaves and waste paper finely using a small, light weight, manually operated, cost-effective shredder. After shredding she soaks the leaves & paper overnight in a bucket of water. The biomass is shredded to increase its binding ability. Soaking the shredded biomass in water further enhances compressibility.

3. Biomass Conversion:

She takes the wet shredded biomass and makes small disc-shaped pellets using a cost-effective, wooden manual press. She dries the compacted pellets in the sun for 3-4 days. The manual press produces medium density pellets which can be handled and stored easily.

4. Biomass Usage:

She uses a cost-effective, efficient, smokeless, portable biomass based cook stove to prepare her meals. To start the fire, she uses a small bunch of twigs dipped in kerosene. Once the flame stabilizes, she starts cooking by feeding the stove with pellets one at a time while maintaining a steady flame. - When the cooking is done and the stove has cooled down, she empties the ash out of the stove and uses it for washing the utensils.

This is a four step innovative process for enterprising poor urban households for achieving independence from fossil fuels.
Impure water is poured into the basin. Water vapor formed on the top cover due to evaporation.

Water vapors condensing to form water droplets.

Pure water flows down the cover and gets collected.

Green Distillation

Conventional Distillation
Build a storyboard

- User centric and experiential
- Think through the entire process
- Interesting & largely visual
- Effortless to go through
TIME TO SHARE!
INNOVATING WITH PEOPLE | DAY 2

ACARA | 27 & 28 MAY 2015
SELECT USER GROUP
CONDUCT RESEARCH
CAPTURE LEARNINGS
FRAME A CHALLENGE
IDENTIFY STAKEHOLDERS
GENERATE IDEAS
GET FEEDBACK
ITERATE, ITERATE, ITERATE
PRESENT SOLUTIONS

remember

DESIRABILITY
FEASIBILITY
VIAIBILITY
THANK YOU!

https://www.facebook.com/SelcoFoundationUCL