DESIGN 8 ODYSSEY

UNCERTAINTY / PATTERNS / INSIGHTS   CLARITY / FOCUS

DESIGN INNOVATION BOOTCAMP

A 2-day workshop in the key concepts of design innovation & the human-centered problem solving approach

Angela Ho & Industry Friends

SUTD-MIT INTERNATIONAL DESIGN CENTRE (IDC)   SUTD SINGAPORE UNIVERSITY OF TECHNOLOGY AND DESIGN   J.P.Morgan

---

SUTD-MIT INTERNATIONAL DESIGN CENTRE (IDC)
Innovation Ready Design

Design Innovation Overview

Why care about Design?

What does the user want?

Common sense is not always common practice

What the user actually prefers

How we designed it for the user

Why Design ?

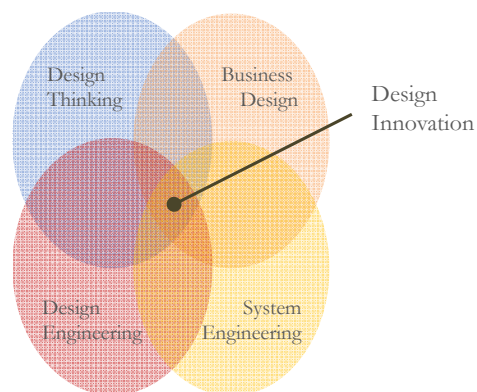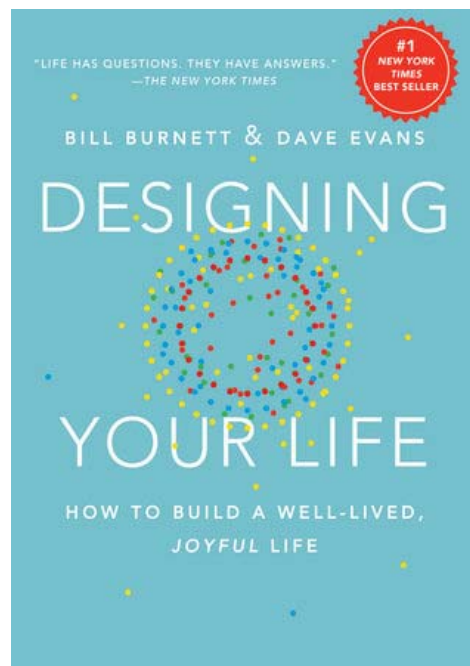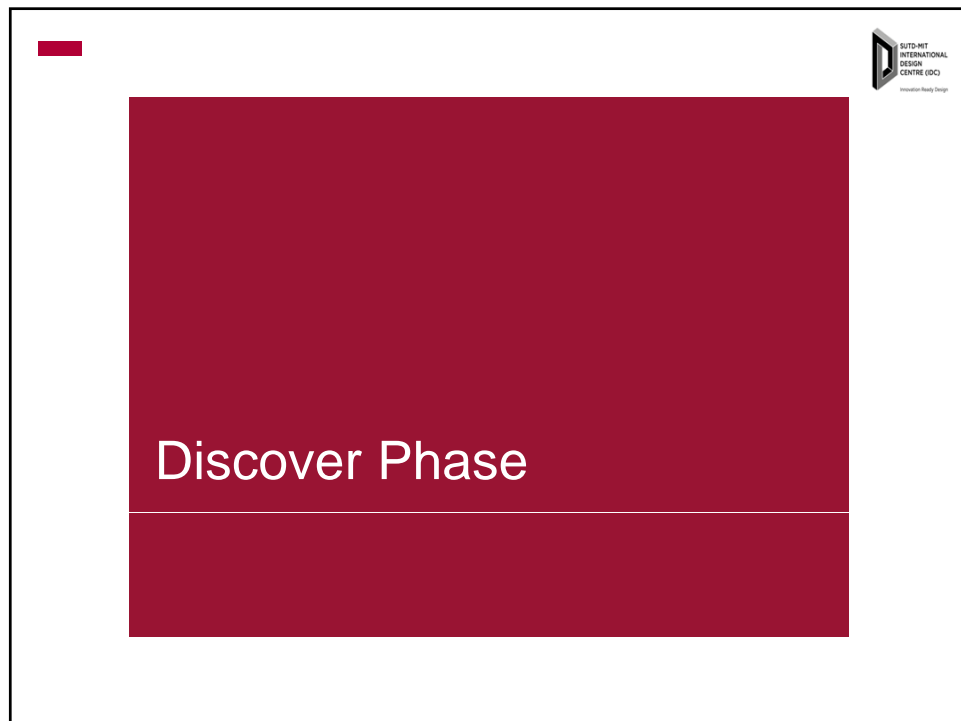| To reduce discomfort, inconveniences, unpleasant experiences… | To increase comfort, conveniences, pleasant experience… |

Needs

5

Design Innovation is …

A human-centric approach of problem solving

METHODS
PROCESS
PRINCIPLES

Design Thinking

Business Design

Design Innovation

Design Engineering

System Engineering

6

What is the best thing you can "design" (or influence…?)

Discover
Identify & understand opportunities & needs collaboratively through co-creation with stakeholders

Define
Interpret & reframe needs and map them into activities, functions & representations

Develop
Ideate and model concepts based on identified opportunities

Deliver
Iteratively prototype & test concepts & models with users

with **Empathy**
ability to understand and share feelings of others, without judgments

with **Mindfulness**
paying attention in the present moment, on purpose, without judgments

with **Joy**
happiness & delight coming from a genuine sense of well-being

with **Non-Attachment**
not to hold onto, or grasp tightly what is considered as me or mine (e.g., my ideas, my solutions)

Discover Phase

Discover Introduction & Empathy Mindset

DISCOVER

Exploring & understanding the problem and people you need to help
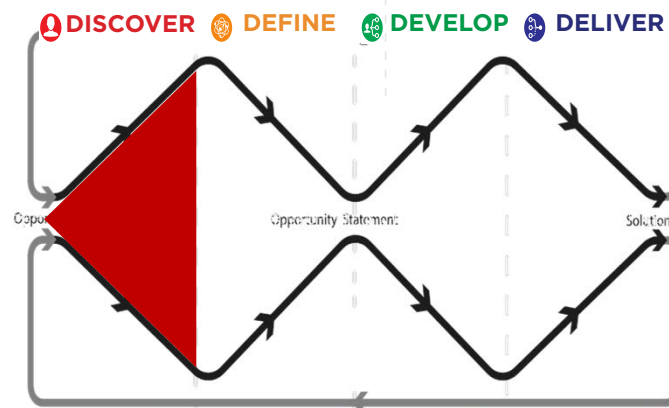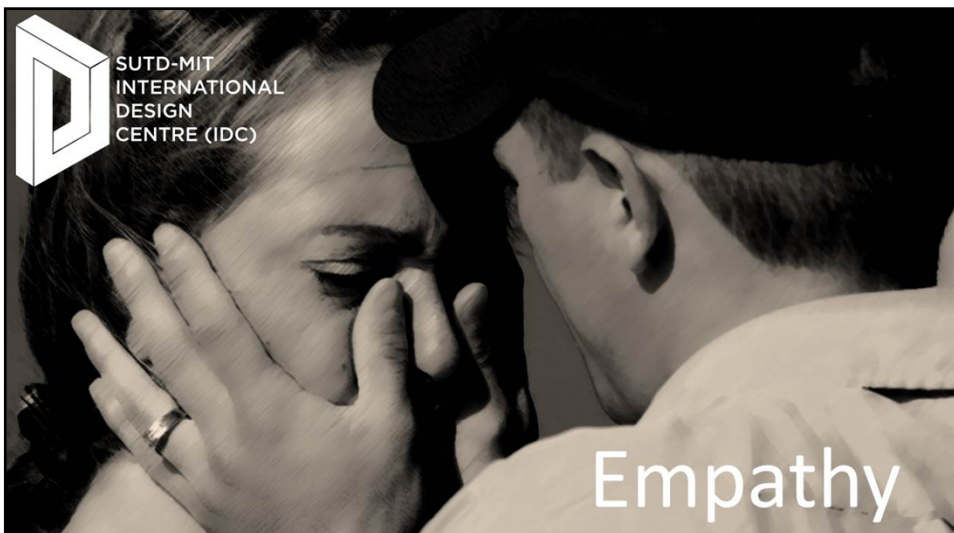
DISCOVER

Objectives are to:

- Deepen understanding of the problem or person

- Uncover pain points, challenges, unmet needs; find work arounds & unusual behaviours

- Mindset of Empathy and Curiosity!

13

Empathy

Ability to understand and share feelings of others, without judgment

Begin with the end in Mind: User Needs

More about user needs…

- Go below the iceberg waterline, to intuit about what your users need…

- Ask "Why", "why", "why"…

- For example, if someone says "I need a car", or "I need a house". Don't just take it at face value.
  - "I need a car" may translate to: I need mobility to get my handicapped mother from point A to point B.
  - "I need a house" may translate to: I am getting married and would like my own private space

EXPLICIT OR EXPRESSED NEEDS

DEEP LATENT OR UNMET NEEDS ARE UNTAPPED OPPORTUNITIES

Adult

Begin with the end in Mind: Personas

WE WILL EVENTUALLY CREATE PERSONAS SO WHAT ARE THEY...?

Where do personas come from?

- Personas are fictitious characters created & distilled from your real DISCOVERY work (eg observations, interviews, chats, etc)

Example of a persona
(you can google for more examples)

An example of a Persona Template we will develop after 5-10 interviews is done

Why personas?

Personas humanise your target users	Give your users a "voice", with real needs, real challenges, real desires & motivations
It supports story-telling and makes your pitch more compelling	It is a focal point in the DEVELOP ideation process. We ideate for the Persona

Personas spark imagination and empathy, and ignite action!

How many personas?

- It depends on your interviews and how homogenous or not your user needs and user insights are!
- A good rule of thumb is maximum of about 4 personas for a project.
- Personas should be mutually exclusive in terms of needs, so we can use them as a focal point to ideate
- At the end of the day, we could have separate solutions (concepts/ideas) for each persona, or a super concept to satisfy all personas (but that is quite unlikely!)

Activity

Create a Persona Hypothesis (based on your research so far)

An example of a Persona Template we will develop after 5-10 interviews is done

\<Name of Persona\>

Name:
Age: Gender:
Education:
Department
Hobbies/Interests:
Family:
(or other relevant persona details)

Behaviours

\<Behaviour 1\>

Satisfied   Very satisfied

Deepest Needs

Motivations/Goals

"Quotatable Quote of Pesona"

Pain points

Persona Story of Persona

User Research: Observation & Interviews
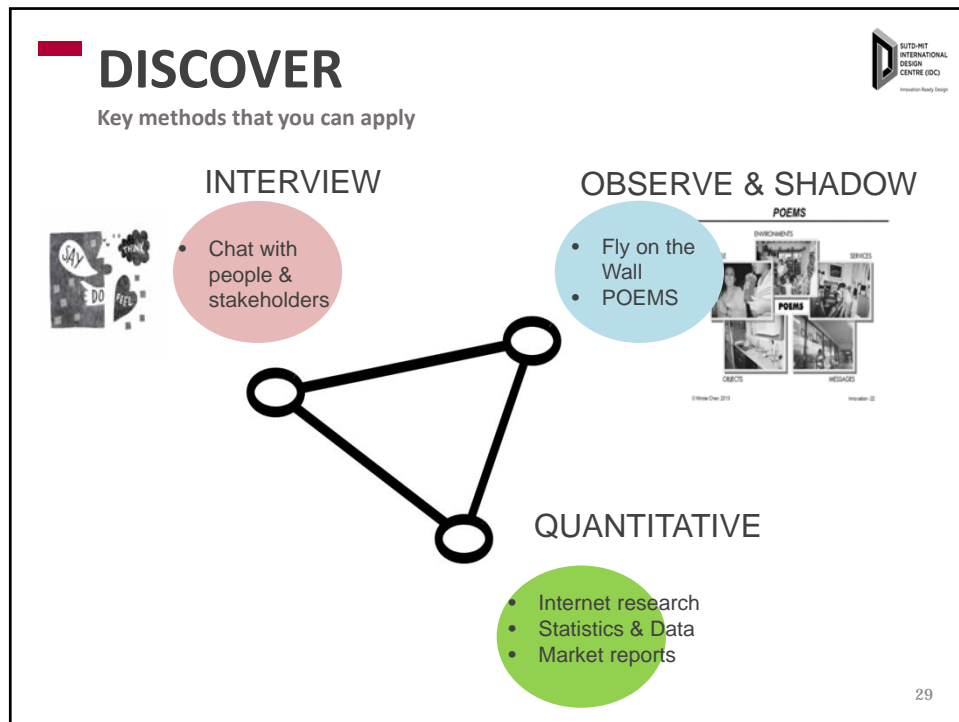
Mindsets to support Discovery

empathy	Curiosity. Ask "Tell me more". "oh…, why?"	Open-minded
non-judgmental	Build rapport!	Supportive… let your users talk!

Activity: Team Member Superpower

1. Identify and have every team member advocate a particular mindset as their superpower for the discovery phase of this project.

Tip: Some people are ore pre-disposed towards certain mindsets, so pick a mindset that is more natural for you.

On the other hand, if you know that mindset is challenging for you, it would be good to practice that midnset too!

Observe & Shadow
Discovery Method 1

Shadowing   Site Visit   Day in the Life…

Remember to probe and distinguish between
What People Say vs. People Do

Observe & Shadow with POEMS
Discovery Method

P.O.E.M.S
People. Objects. Environments. Messages. Services.

ENVIRONMENTS

PEOPLE   SERVICES

POEMS

OBJECTS   MESSAGES

© Minder Chen, 2013   Innovation - 22
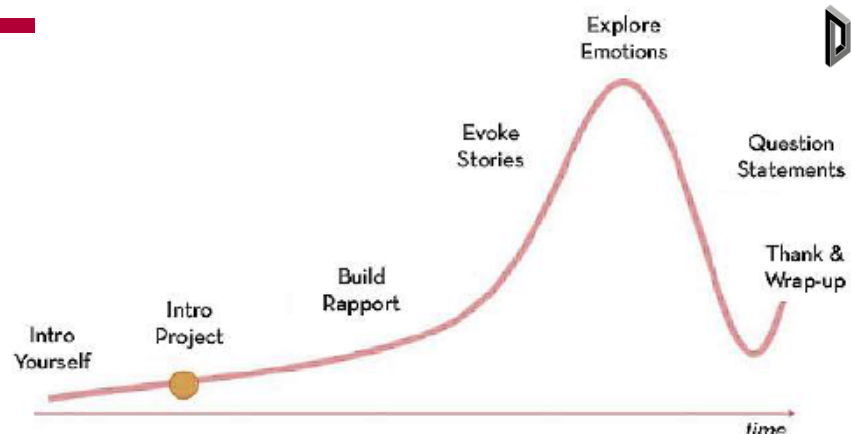
Interviews
Empathy building

- There are limits to what we can learn from just observing people

- Talking to people allows us to reach a deeper understanding (mix of questions & activities)

- Probe and ask about experience, emotions, motivations, frustrations, pain points,

- Ask "Why?" a lot. What were they thinking, hoping to achieve, feeling at that moment…

- We try to understand them through their stories & experiences, don't ask for their views & opinions

35

- A typical flow of an interview.
- Spend about 5min on intro to rapport: you want to gather demographics from them
- Spend about 10min to wrap up. Some of the best gems could come at the thanking stage. Always be listening!
- The bulk of the interview is on evoking stories, exploring emotions and following-up with what they shared with empathy and curiosity

Start by asking to share an experience

Note: Experience (real) vs. Opinion (their views)
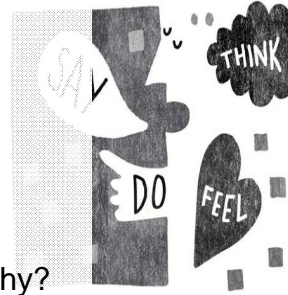
Tell me a about a recent experience

What was the best part of it?

What was the worst part of it?

How did it make you feel?

What were you hoping to gain/achieve?

Probe gently: Tell me more? Why? Why? Why?

Follow-Up Questions…

Note: Experience (real) vs. Opinion (their views)

- Why?
- How did you feel?
- What were you thinking?
- Yes,… please go on
- Please tell me more
- Why not?
- That's really interesting. Tell me more…

Bad Questions

Note: Experience (real) vs. Opinion (their views)

- Too long. Using too many conjunctions like "and", "or", "but". Just keep the question to 7 words or less.
- Avoid double-barrel questions: asking more than 1 question
- Leading questions (leading your users to say a certain "correct" answer in your mind!)
- Closed question leading to a dead-end "yes or no"

Non-Verbals are important!

- As you notice an extra laugh, a nervous chuckle, an eyebrow twitch, a throat clearing, rapid shaking of leg… …that's your indication to ask…
- "what was that about". Or "tell me more", or "what are you feeling about what you've just said", or some other question to PROBE deeper!

Engage your users!

- "Draw me your ideal XXX "
- "Sketch for me your journey map" (get them to indicate high/happy points and low/sad points

---
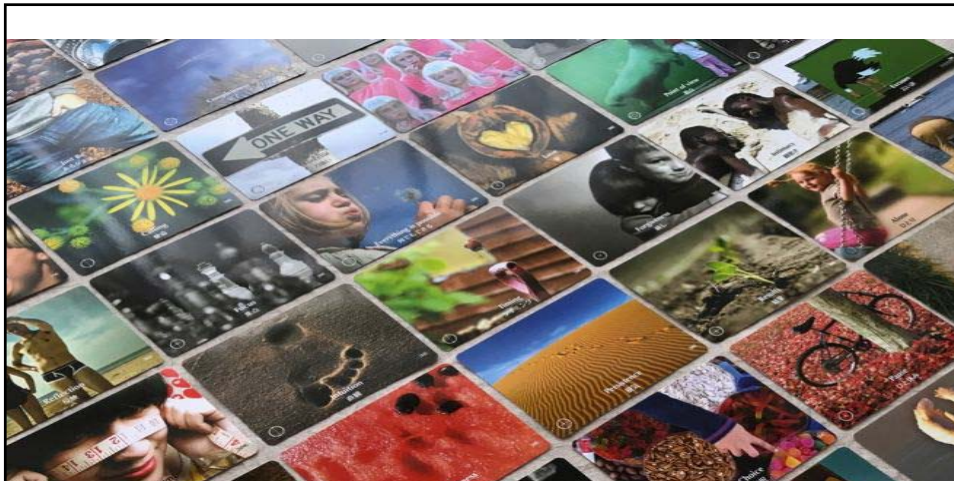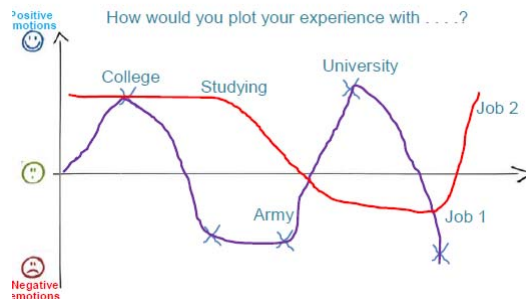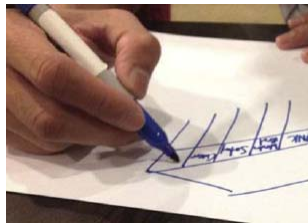
Ask your user to sort a deck of cards you pre-prepare. Cards have a suitable photo and a keyword. Ranking the cards can show you quickly what your user values. You can prepare your own deck that is customised for your project.

Some Best Practices

- Interview should be done in pairs
- Interview length is at least 60 minutes
- Always prepare an interview guide.
- Flow in the interview. Don't follow your interview guide strictly
- Capture quotable quotes
- Interview one user at a time
- Interview at least 8 users for meaningful data
- Always debrief immediately after the interview. Allow 30 minutes for the debrief
- Remember to take a photo of your user!

Debriefing the Interview Process

- What went well?
- What could have been done better?
- What question should we have asked but didn't? (you can follow-up with a phone call)
- What new question would you like to add to your interview guide

After that, please update the rest of your team so everyone knows your learning and can apply it!

Debrief the Actual Interview
Post-Interview Debrief Template
(30min, immediately after the interview so you don't forget!)

| Insert Real Photo here | Overview of your interviewee Name: (relevant demographic profile, Relevant likes/dislikes, relevant lifestyle, habits etc.): |

Goals/Motivation:

Quotable Quote:

Current Experience:

Challenges or Pain-points:

3 most memorable things about the interviewee:

User Insights or Deep Needs:

Activity: Create a schedule of user research (both Interviews / Observations) for your Project over the next few months…

User Research Schedule

SN	Interviewer	Note-taker	Interviewee Name	Brief Profile of Interviewee	Interview Date/Time
1					

Activity: Conduct 2-3 User Interviews Before Friday Pitch… and debrief using the Post-Interview Debrief Template

Insert Real Photo here

Overview of your interviewee
Name:
(relevant demographic profile,
Relevant likes/dislikes, relevant lifestyle, habits etc.):

Goals/Motivation:

Quotable Quote:

Current Experience:

Challenges or Pain-points:

3 most memorable things about the interviewee:

User Insights or Deep Needs: