What is Design Thinking?

An introductory crash course activity for Brunei Geek Meet.
#DesignAndCupcakes

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Ice-breaker
(30 secs)

How did that feel?

What is Design Thinking?
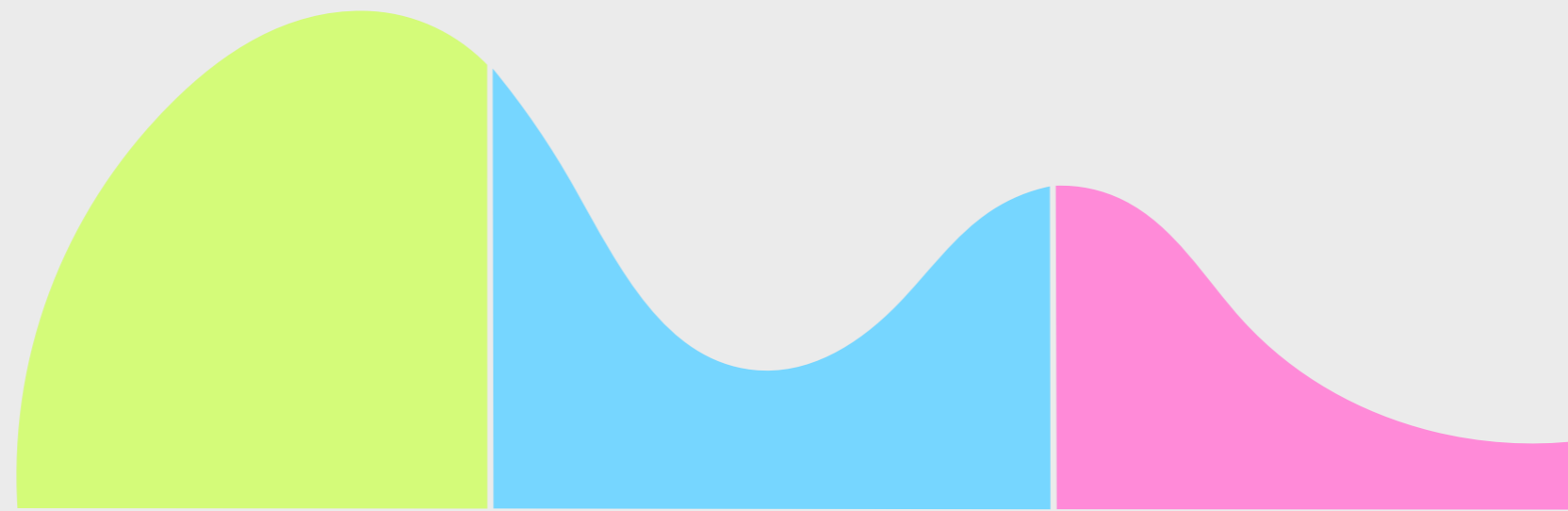
A philosophy. A way of thinking.

What is Design Thinking?

It's also about doing.

What is Design Thinking?

A human-centered approach to problem-solving.

The Design Thinking Process

Inspiration

Framing a design challenge and discovering new perspectives on the opportunity.

Ideation

Generating ideas and making them tangible.

Iteration

Continual experimentation based on user feedback.

Your challenge today: Design a better night market experience.

Get into teams of 2 or 3.

Step 1
Empathy for users.

Should we just ask them what they want?
No sir.

"If I'd asked my customers what they wanted, they'd have said 'a faster horse.'"

—Henry Ford

Interview your user.

Ask. Listen. Observe. Understand.
Find insights.
(6 mins)

How To: Interview

- **Stories.** Encourage your partner to describe their experience as stories. "Tell me about…". How do different parts make them feel?
- **Needs/Motivations.** Be aware of physical or emotional necessities. Some needs are explicit and can easily be spotted as verbs in stories. Also, what do they care about? What motivates them?
- **Outliers.** Anything they find painful / struggle with / wish could be better? Any strange behaviours or contradictions? Most memorable or surprising bits? These could be signs of latent needs.
- **Dig deeper.** Don't be afraid to ask "Why?" to reveal those underlying gems. I dare you to do it 5 times in a row and see what you get. This is how you get *insights*.
- **Capture!** Take notes or sketch so you don't miss anything.

Insights Examples

Challenge:

Increase demand for clean, low cost toilets in the community of a developing country.

Insights:

- People often only have money to pay for toilets at the start of the month after they have been paid.
- People aren't aware of the diseases they can catch from dirty toilets.
- When toilets are too far away, young children or older people can't make the walk to the toilet in time.

Source: Design Kit

Step 2
Reframe your problems.
Using the secret phrase of top innovators.

"*If I had an hour to solve a problem I'd spend 55 minutes thinking about the problem and 5 minutes thinking about solutions.*"

––Albert Einstein

The anatomy of 'How Might We?' (HMW)

How

The 'how' part assumes there are solutions out there — it provides creative confidence.

Might

'Might' says we can put ideas out there that might work or might not — either way, it's OK.

We

The 'we' part says we're going to do it together and build on each other's ideas.

Source: The Secret Phrase Top Innovators Use (HBR)

How To: Generate HMW questions

- **Review.** Review your notes from the interview and look for your favourite insights to convert to HMW questions.
- **Creative fuel.** The best HMWs are inspiring and allow for the possibility of a large variety of solutions.
- **Not too broad.** Or you'll risk not having enough direction to be actionable, like "*HMW redesign dessert?*"
- **Not too narrow.** Or you'll risk constraining yourself to a pre-defined solution, like "*HMW create a cone to eat ice cream without dripping?*"
- **Just right.** "*HMW redesign ice cream to be more portable?*" frames the challenges, doesn't imply a solution.

Let's *How Might We!*
To be done individually. (4 mins)

HMW Examples

Challenge:
Redesign the ground experience at the local international airport

POV / Insight:
Harried mother of three, rushing through the airport only to wait hours at the gate, needs to entertain her playful children because "annoying little brats" only irritate already frustrated fellow passengers.

HMW Examples

Amp up the good: HMW use the kids' energy to entertain fellow passenger?
Remove the bad: HMW separate the kids from fellow passengers?
Explore the opposite: HMW make the wait the most exciting part of the trip?
Question an assumption: HMW entirely remove the wait time at the airport?
Go after adjectives: HMW we make the rush refreshing instead of harrying?
ID unexpected resources: HMW leverage free time of fellow passengers to share the load?
Create an analogy from need or context: HMW make the airport like a spa? Like a playground?
Play against the challenge: HMW make the airport a place that kids want to go?
Change a status quo: HMW make playful, loud kids less annoying?
Break POV into pieces: HMW entertain kids? HMW slow a mom down? HMW mollify delayed passengers?

Source: d.school

Step 3
Brainstorm.

Start by picking your best HMW.

This will be your *brainstorming fuel.*

"To have a good idea you must first have lots of ideas."

––Linus Pauling

Crazy 8s

An individual brainstorming technique for generating rapid variations of ideas.
(6 mins)

How To: Crazy 8s

- **Setup.** Fold a single piece of printer paper in half three times.
- **Be visual.** Sketch 1 panel every 45 seconds. Don't worry about getting messy.
- **Defer judgement, go for quantity.** Don't judge your ideas, just get as many of them out as possible.
- **Build upon other ideas.** Consider taking a favourite idea and making it better in the next panel.

Step 4
Share your best idea.
Take note of any feedback.
(2 mins)

How did that feel?

What just happened?

- **Step 1: Empathy for users.** We used interviewing to better understand users to uncover needs and insights.
- **Step 2: Reframe your problems.** We reframed insights and problems into HMW questions.
- **Step 3: Brainstorm.** We used HMW questions to launch our ideation and the Crazy 8s brainstorming technique to generate lots of ideas.
- **Step 4: Share.** We shared our ideas with the users we're designing for. Feedback is gold.

What should happen next?

- **Refine** your idea with user feedback.
- Turn your ideas into more solid **concepts**.
- Turn those into tangible **prototypes**.
- **Test** it on real people.
- **Iterate** with their feedback.
- **Repeat** as necessary.

Going further down the rabbit hole...

- We've only just skimmed the surface with a few methods — there are tens to hundreds more!
- There's no one method to Design Thinking. But the more you do it, the more you'll understand the underlying principles.
- Embark on your own design challenges and solve real problems!
- Join the next "Design Kit: The Course for Human-centered Design" (6 Sept - 9 Nov)

Send me a tweet!
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