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Design Thinking

presented by

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HOW DOES THIS WORK?

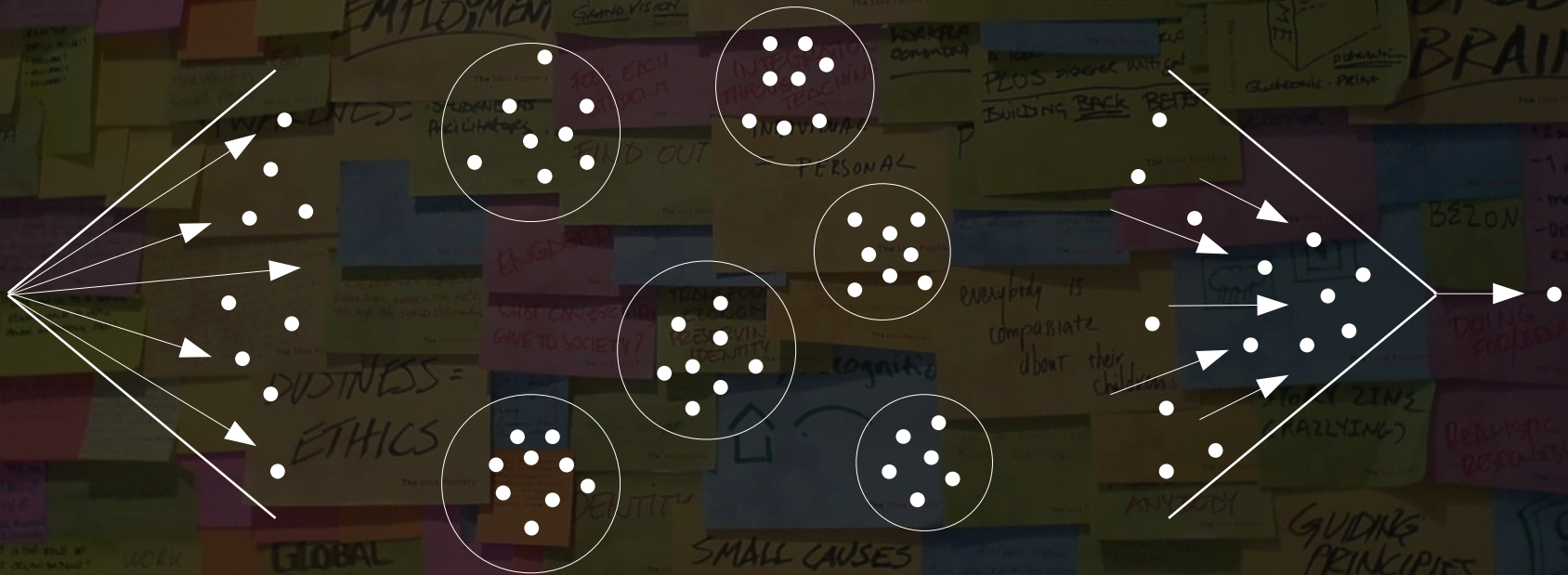| RESEARCH | IDEATE | IMPLEMENT |
| IDEATE | PROTOTYPE | PROTOTYPE |
| LEARN | LEARN | CHOOSE |

Generate lots of ideas!

Synthesize / sort through ideas

Make decisions / plan next steps

This makes a lot more sense if you just do it.

So we'll take an example problem and run through it.

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THE PROBLEM-TO-SOLVE

Cracked mobile phone screens.

We'll take on the problem of cracked mobile phone screens and apply design thinking to the problem to try to come up with innovative solutions to the problem.

Let's do some research about the problem.

Campfire
(~15 minutes)

QUESTIONS TO CONSIDER:

- How do the screens crack?

- How are the phones that crack used?

- What problems do cracks create?

- How do you fix a screen crack?

- Can the cracks be prevented?

RULES OF THE GAME:

- I'm going to start with a story about cracked phone screens. Write down any impressions the story gives you on a sticky note.

- Next, I will call for a volunteer. The volunteer will share a story; again, write down impressions you get from that story.

- Next volunteer's turn; repeat.

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Affinity Mapping Exercise

(~15 minutes)

RULES OF THE GAME:

- We just processed a lot of information in the last exercise. What problems-to-solve or ideas stood out the most to you?

- Fill out sticky notes with your impressions from the information we just processed and tack them up on the whiteboard.

- We'll go through all of the sticky notes and process them using the affinity mapping technique.

DEFINE
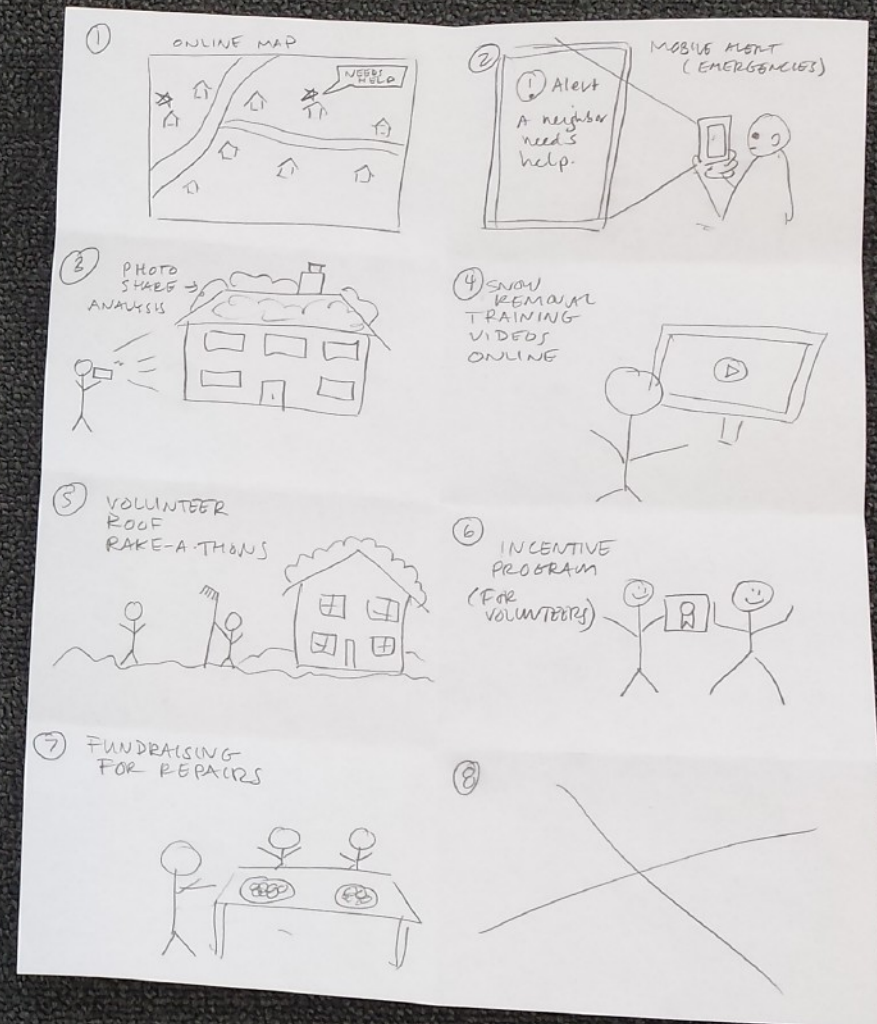
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6-8-5 Brainstorm
(5 minutes)

RULES OF THE GAME:

- QUANTITY not quality!

- Silly ideas make great brain food!

- Don't worry about the details.

- Quick sketches – not fine art!

- Stick figures are awesome.

Share Your Ideas

- Which ideas seem most promising?

- What could make them better?

- Are there existing products / services you could draw inspiration from?
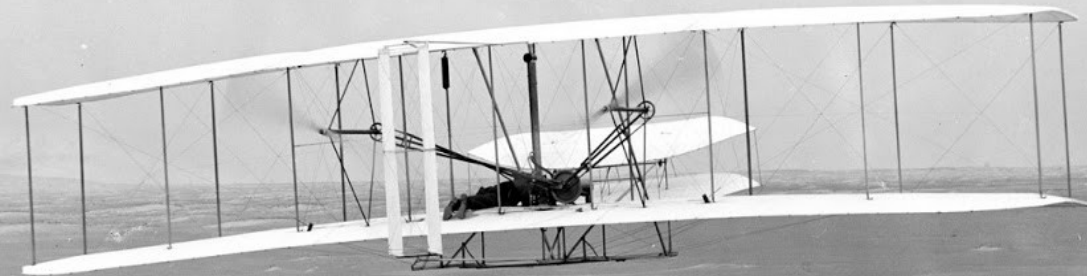
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PROTOTYPE

(the next step)

"A rough proof-of-concept to see if an idea is worth it to (continue to) pursue."

Photo Credit: Public Domain image, US Library of Congreess.
First flight of the Wright Flyer I, December 17, 1903, Orville piloting, Wilbur running at wingtip.

DEFINE

RESEARCH

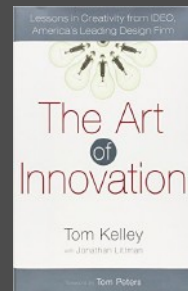IDEATE

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LEARN MORE / RESOURCES

Gamestorming **by Dave Gray, Sunni Brown, and James Macnufo** is a great resource and all of the exercises we did today are covered in this book (along with many others!)

Gamestorming.com is run by the book authors, covers many of the same exercises as the book and several new ones!

The Art of Innovation **by Tom Kelley with Jonathan Littman** is a good primer on design thinking in general, written by one of the founders of the IDEO design firm.

Design Thinking for Educators is a free toolkit offered by IDEO; it's focused towards educators but is honestly applicable to anybody. It has a step-by-step instructional booklet as well as a workbook you can fill out as you plan out projects. The materials are CC licensed and provided in a printable PDF format.

designthinkingforeducators.com

Questions?