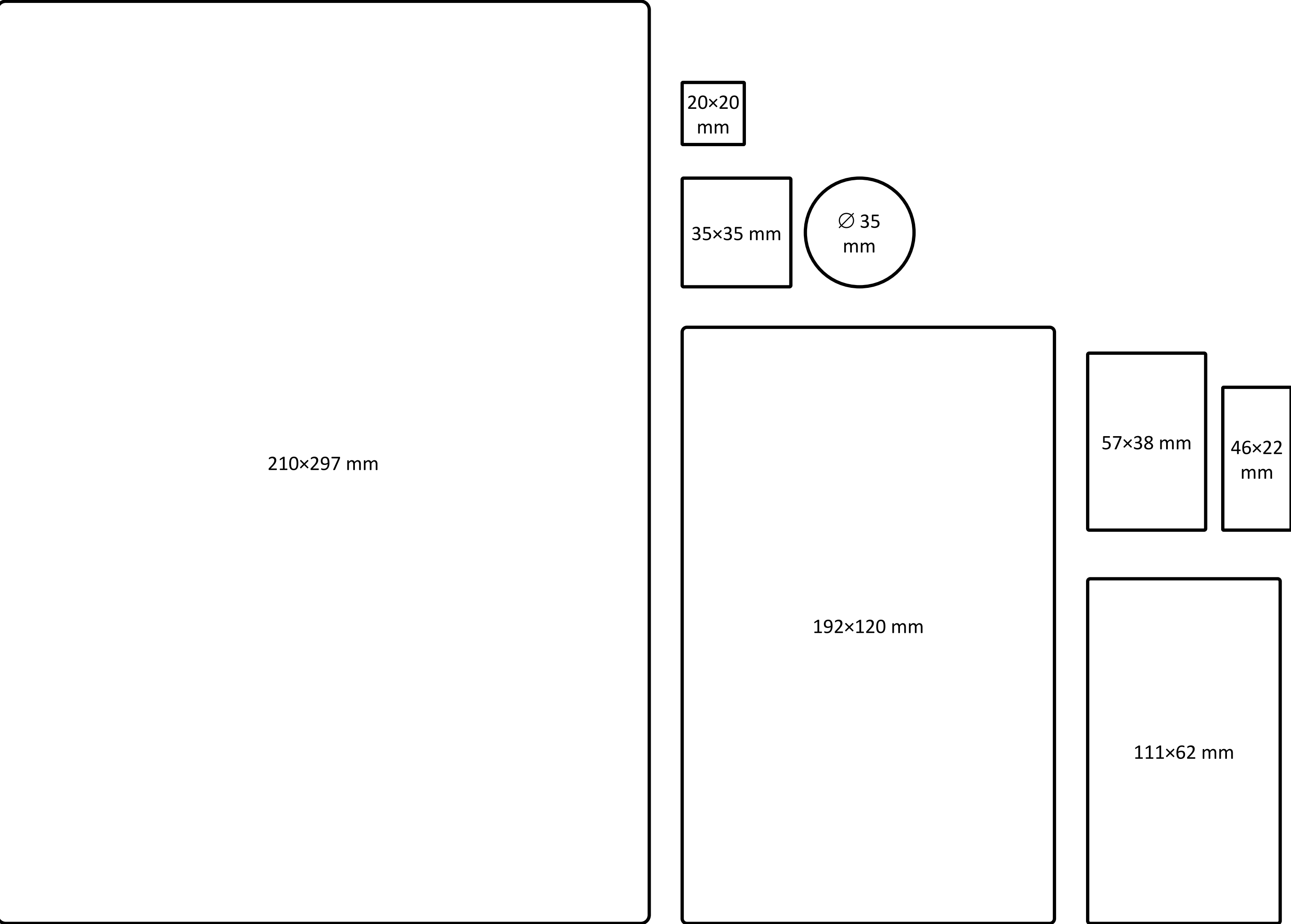


W1. Food Bank & W2. Office Climate

Sketching Material Form Factors



Workshop

Duration 1–2 hours

Small group (4–6 people)

Sketch ideas for situated visualizations at preselected locations (3-5) on magnetic whiteboard sheets in different form factors and attach the sketches to surfaces in the environment.

Procedure

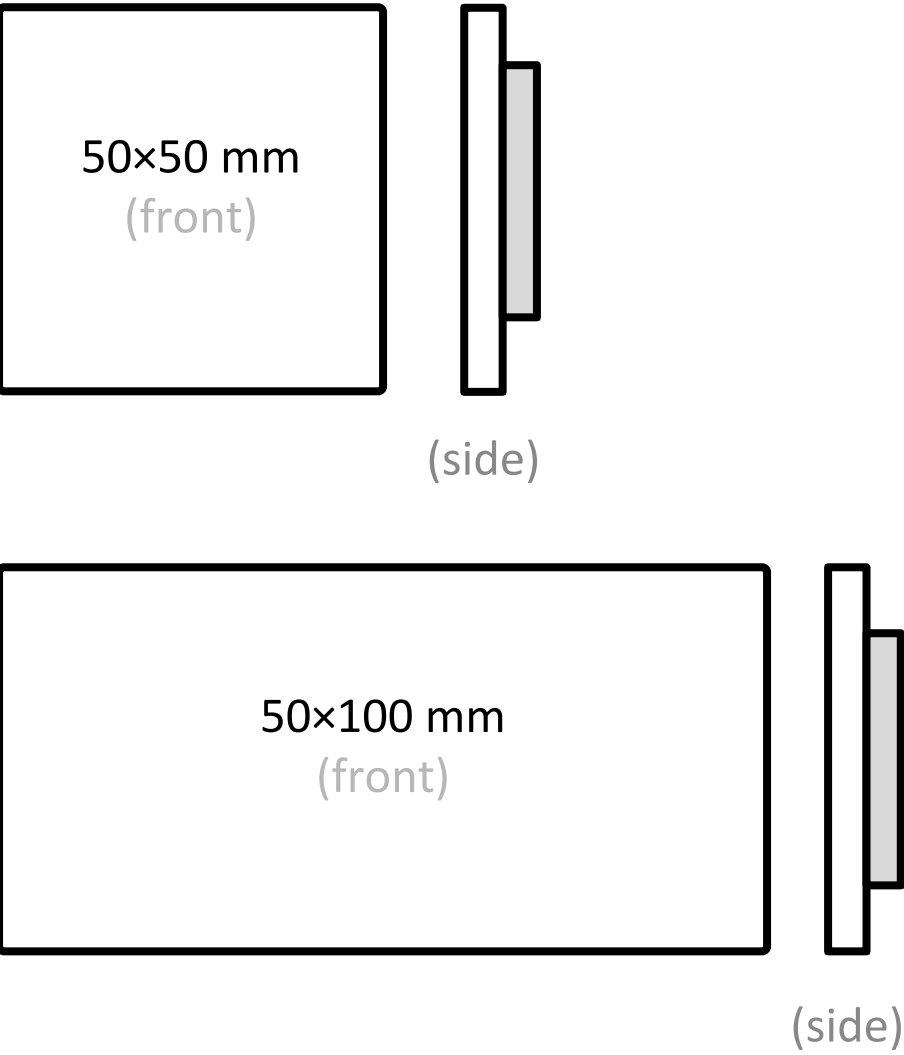
- 1. Introduction:** Explain the sketching material and the procedure.
- 2. Sketching:** At each location
 - Sketch individually and place sketches in the environment.
 - Present sketches to the group.
 - Discuss presented sketches and possibly refine the ideas or create new ones.
- 3. Discussion:** Summarize and discuss all ideas and pick the best ones.

Materials

- Magnetic whiteboard sheets in different form factors. Multiple sheets for each form factor should be available.
- Adhesive putty.
- Colored whiteboard markers.
- (Optional) physical prototypes and technology probes to show to participants at the beginning of the workshop.

W3. Tiles at Office & W4. Tiles at Home

Sketching Material Form Factors



Tile Creation

1. Use kitchen tiles that are the size and weight you would like
 - Note: Try to avoid tiles with a mesh back as this is typically made of fiberglass (otherwise wear gloves when handling).
2. Apply whiteboard paint to the tile surface.
 - Note: Whiteboard paint typically consists of two solutions which must be mixed before application. Once combined, they must be applied within a short period of time and can take up to 3 days to cure.
3. Attach magnets or other adhesive material to the back of the tiles.

Workshop

Duration 1-2 hours

Small to Medium group (3-15 people)

Explore the environment in groups of 2 or 3, until members of the group find a physical location they are inspired by. Sketch and place visualizations around the space. Take photos, trying to capture the visualization and its context.

Procedure

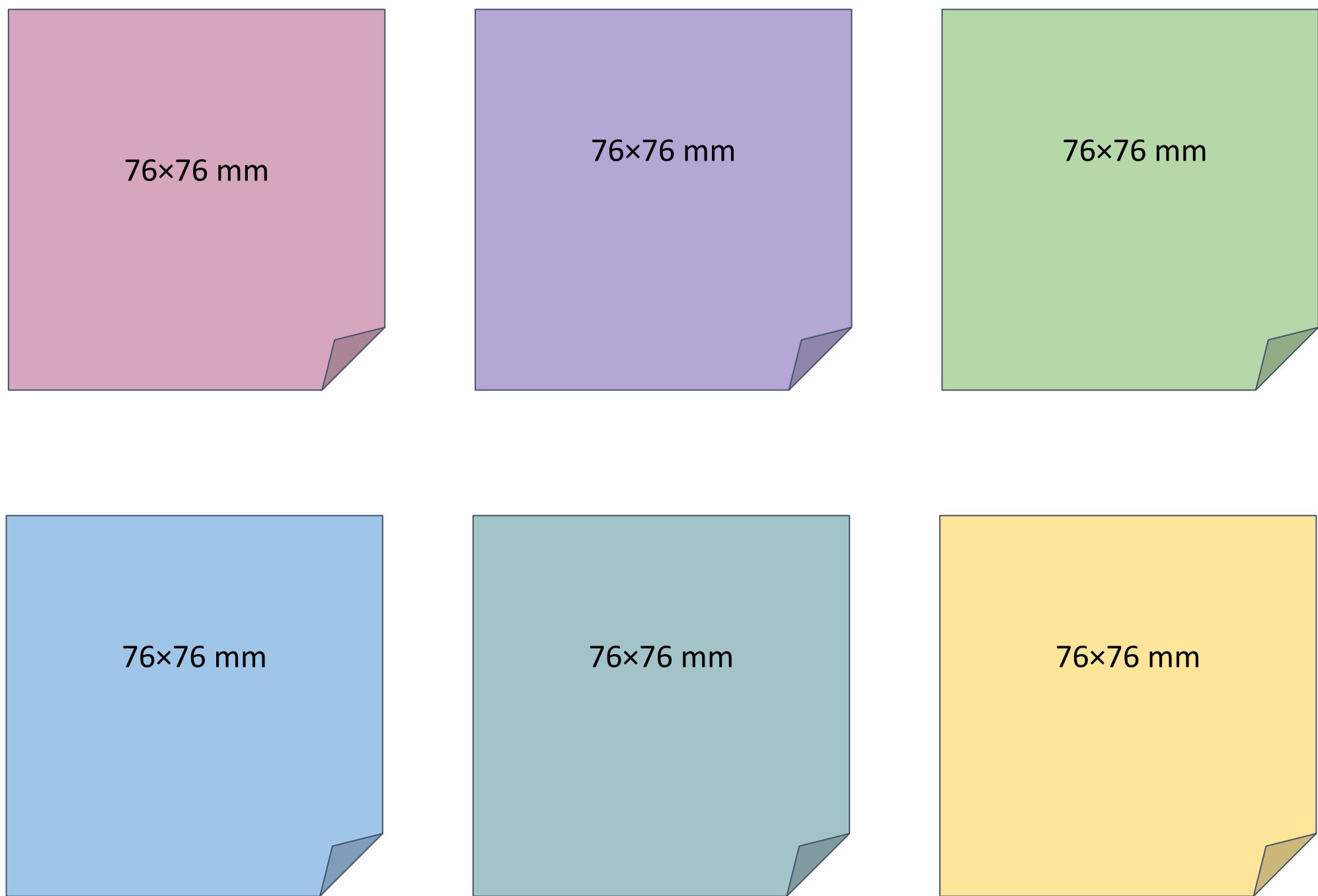
1. Introduce participants to the sketching material and the procedure.
2. Allow the groups to wander and explore various locations. Set a time to meet back up.
3. Reconvene as a group and share the ideas, photos, and visualizations imagined. Create an affinity diagram. Discuss trends and outliers.

Materials

- Magnetic whiteboard tiles. Several tiles should be available to each participant.
- Colored whiteboard markers and erasers.
- (Optional) Cameras to take photos of the visualizations in context. (Participants may also use their cell phones.)

W5. Agriculture

Sketching Material Form Factors



Workshop

Duration 1-2 hours

Small to Medium group (3-15 people)

Explore the environment in groups of 2 or 3, until members of the group find a physical location they are inspired by. Sketch and place visualizations around the space. Take photos, trying to capture the visualization and its context.

Procedure

1. Introduce participants to the sketching material and the procedure.
2. Allow the groups to wander and explore various locations. Set a time to meet back up.
3. Reconvene as a group and share the ideas, photos, and visualizations imagined. Create an affinity diagram. Discuss trends and outliers.

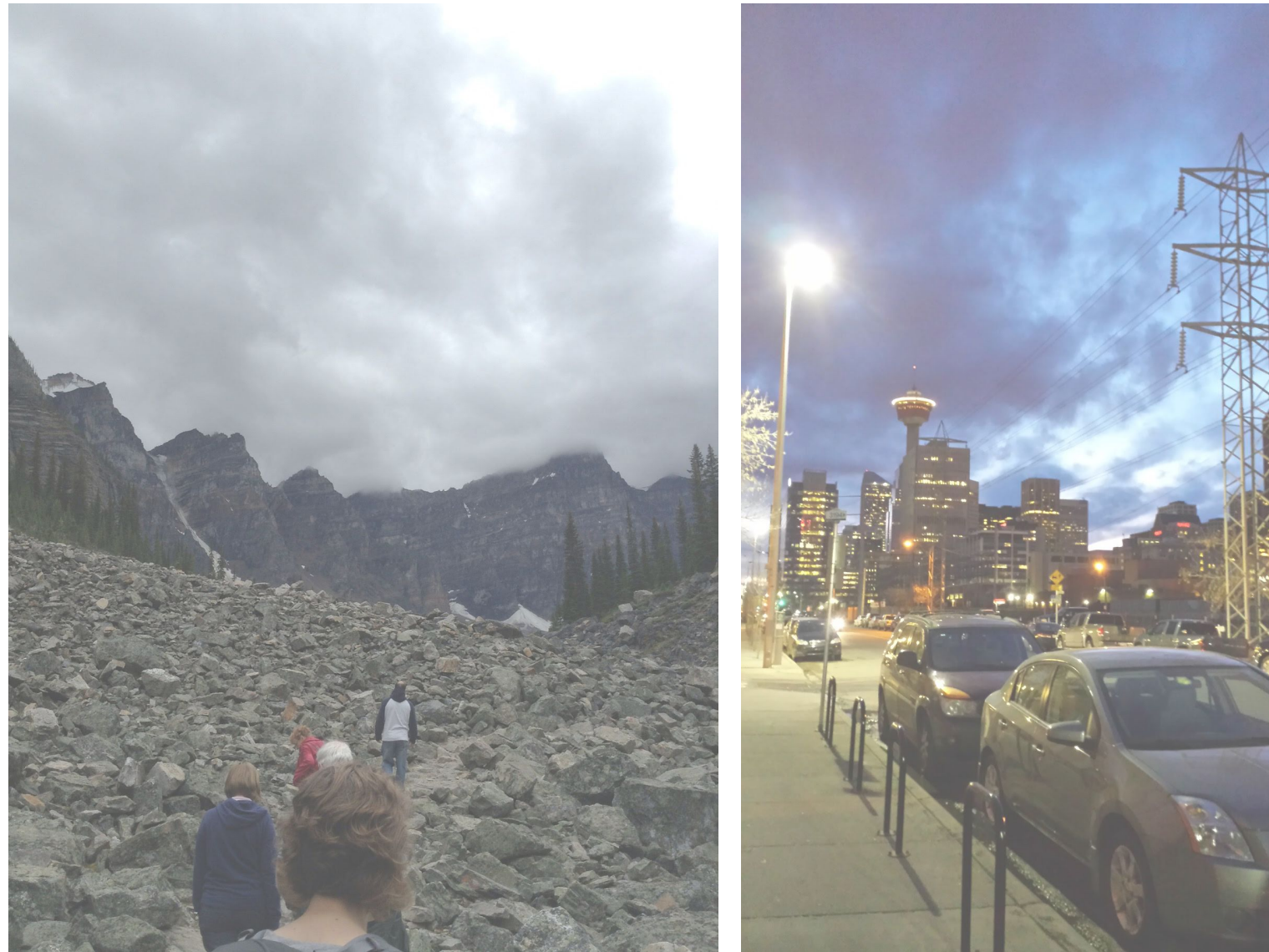
Materials

- Sticky notes. (Try to give each person a different colour.)
- Colored pens.
- (Optional) Cameras to take photos of the visualizations in context. (Participants may also use their cell phones.)

W6. Photo Annotations

Sample Photos

(We used several dozen photos, each printed on an A4 sheet with ~20 mm margins.)



Workshop

Duration 1-2 hours

Small to Medium group (3-15 people)

Hand out photos of different scenes, technology prompts, and motivational prompts. Have participants sketch and annotate the photos.

Example Prompts

Technology:

- Cellphone
- Small embedded display
- Large embedded display
- Augmented reality headset
- Physically embedded information displays

Motivation:

- Recollection
- Reflection
- Decision making
- Persuasion
- Planning

Procedure

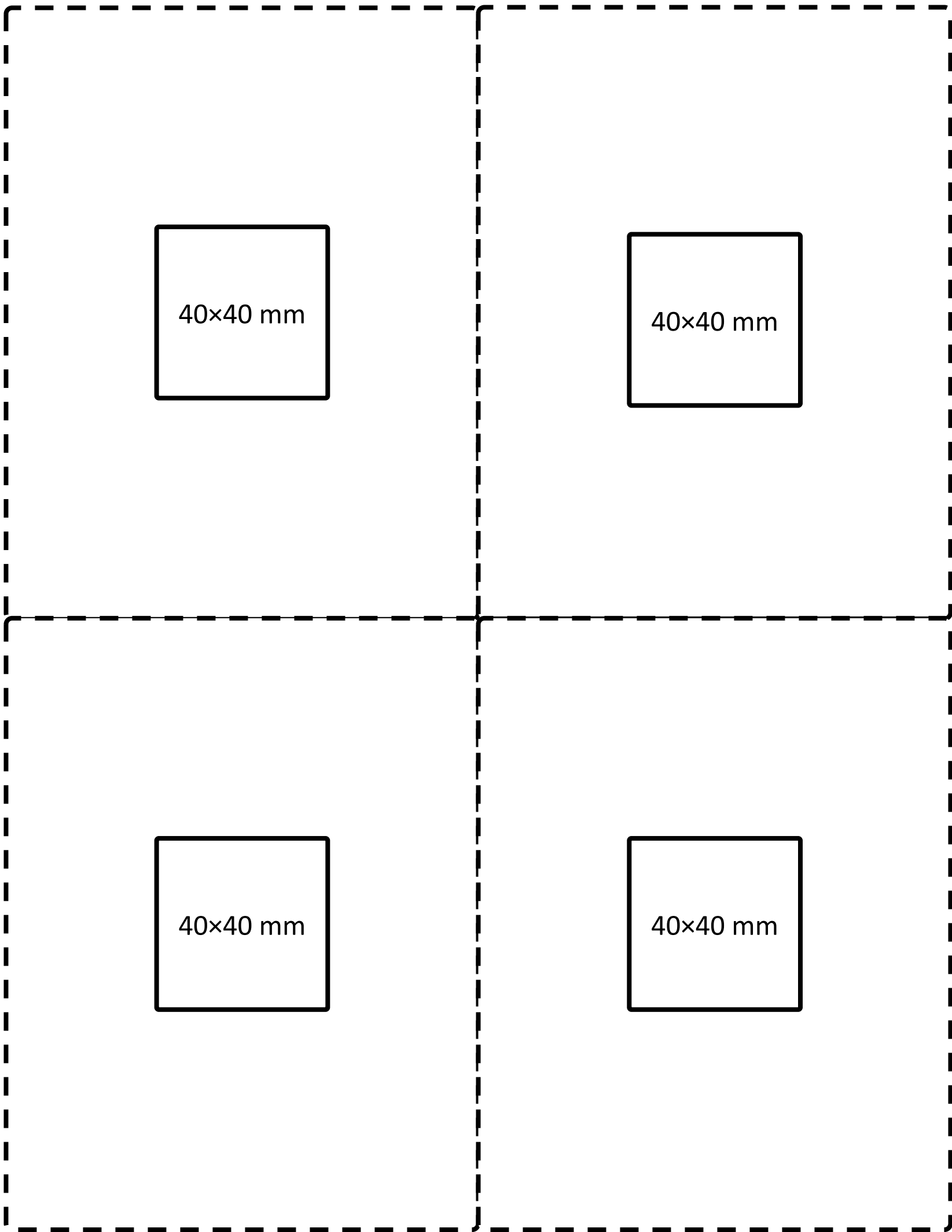
1. Introduce participants to the sketching material and the procedure.
2. Allow the participants time to sketch individually.
3. Create small groups to discuss ideas and build on concepts.
4. Initiate a full group discussion, where interesting ideas are shared and discussed further.

Materials

- Photos. (We recommend increasing the image brightness so that colored pens will be more visible.)
- Colored pens.
- Additional prompts to constrain the design space of ideation.

W7. Self-Tracker

Sketching Material Form Factors



Example Prompts

1. You have just bought the most beautiful potted plant for your living room. This particular plant needs water every 3 days. You set up a situated visualization next to your plant to track every time you have watered it.
2. You have recently fallen and broken a bone. You have to manage your pain medication carefully. If you don't take enough you will be in pain and if you take too much you could damage your liver. You place a situated visualization near your pill bottle to track when you take your medication.
3. You are a new parent and you want to monitor your baby closely to ensure all is well. You are primarily concerned with your baby's sleep schedule. You place a situated visualization next to your baby's crib to keep track of the time and duration of sleep.
4. You want to prove you love your dog more than your sibling does so that when you move out you can take the dog with you. You place a visualization above the dog food to show who cares for the dog more.

Workshop

Duration 1-2 hours

Small to Medium group (3-15 people)

Handout template sheets and prompts.
Sketch ideas for situated visualizations on paper.

Procedure

1. Introduce participants to the sketching material and the procedure.
2. Pass around physical prototype of the self-tracker. Describe its functionality and constraints.
3. Several rounds of short sketching periods, each with a different prompt. Conclude this segment by sharing designs and rationales.
4. A longer sketching period where participants imagine their own use-cases for the system and design for them. Again, finish this segment by sharing and discussing ideas.

Materials

- Template sheets (with room around the display constraints for participants to add annotations).
- Prompts.
- Colored pens.
- Technology probe of a small e-ink display with buttons for input.