Domain Mapping Exercise #2 – Facilitator's Guide

OBJECTIVE: TO CLARIFY WHAT IS IN (AND WHAT IS OUT OF) THE SCOPE OF A FORESIGHT STUDY.

This is the second exercise of two for developing a domain map, a simple representation of a system. It helps participants develop a shared mental model of their subject and delineate the boundaries of their study. In about 40 minutes, a group of up to 25 participants can take a complex topic and turn it into a simple domain map using the affinity mapping process outlined below.

People:
- 1 facilitator
- 25 participants
- 1-2 assistants (optional)

Materials:
- Large sticky notes in one colour (estimate 6 per person)
- Large sticky notes in a second colour (about 30 total)
- Large sticky notes in a third colour (about 10 total)
- Large sticky notes in a fourth colour (about 5 total)
- 1 fine-tip marker per participant
- Projector/computer, internet connection (optional)

Post on the wall:
- A visual agenda (optional)
- Rules of engagement (optional)
- 2 headings on sticky notes (optional): What worked? What could be better?

Meeting Space:
A large room with a large wall to collect and rearrange sticky notes. The room should be spacious enough for participants to comfortably step back to review the wall and easily approach it to arrange sticky notes.

Agenda at a Glance

TIME	ACTIVITY
5 minutes	1. General meeting introductions (if needed)
35 minutes	2. Give context for the domain map exercise (3 minutes) 3. Provide activity instructions (2 minutes) 4. Generate elements of the domain (15 minutes) 5. Cluster related elements into categories (10 minutes) 6. Review the domain map (5 minutes)
10 minutes	7. Reflect on and/or evaluate the exercise (10 minutes)
EST. TOTAL TIME: 50 minutes	

BEFORE THE MEETING: WHAT KIND OF DOMAIN MAP PROCESS DO YOU NEED?

This domain map exercise uses affinity mapping, a method of making sense of brainstormed information by clustering according to theme. In the affinity mapping approach, participants generate many possible system elements by brainstorming, and then classify those elements under organically emerging headings and hierarchies. In a short time, this exercise can turn a complex subject (e.g. 80 elements) into a simple picture of about eight major headings.

It is especially useful when the domain includes many elements that are not easily organized. For instance, for Horizon's Future of Asia study, participants on the Social team defined the "Social Asia" domain (a broad, nebulous subject) using this clustering method (see example below). If project participants are expected to hold varied understandings of the domain, this exercise is also a good way to resolve those differences through discussion. On the other hand, if the domain is not too broad and project participants are likely to share a similar understanding of the domain and/or there are existing domain frameworks to draw upon, then domain mapping exercise #1 may be a better approach. It has participants draw a domain map starting with major headings rather than many small elements.

Example: Affinity-mapping the "Social Asia" domain

Build your own domain map

It is a good idea for the facilitator to prepare a preliminary domain map on the chosen topic before the workshop, for their "back pocket." This helps the facilitator to anticipate what topics are likely to arise and what challenges participants may encounter.

Prepare the room for the activity

- Participants can stand during this domain map activity; however, they may need seating if the systems map presentation will be delivered first.

- Each participant will need a few large sticky notes (4–5 of a single colour) and a fine-tip marker. Participants will need to be able to stand back and easily read a wall of these post-it notes, each with 2–4 words written on them. Ensure there are extra sticky notes of the same colour in the room.

- A smaller number of post-it notes in a second, third and fourth colour will be needed for participants to cluster and tier categories. Consider having an extra person or two to help distribute post-it notes to participants. Post in the room any visual aids that will be referred to during the meeting.

ANNOTATED AGENDA

TIME	ACTIVITY	NOTES
5 minutes	**1. General meeting introductions (if needed)** • Introduce facilitators • Provide context for the session (why are we here?) • Allow participant introductions if they are unacquainted • Consider adding a few minutes to the agenda to: ° build rapport through an ice-breaker activity ° review or develop a list of ground rules on the wall	• If this is one of several activities, consider using a visual agenda to situate this activity within the day's events. • A list of rules of engagement posted in the room during the meeting is a visual reminder of the group's commitment to support a good discussion.
2 minutes	**2. Give context for the domain map exercise** • Why and when we use domain maps: ° Very useful in building a common mental model of the domain. ° Helpful for framing and focusing a foresight exercise (what's in, what's out). ° Best used early in the process as it sets the stage for subsequent work (knowing where to scan, ensuring coverage of certain topics, etc.). ° Useful first step before developing a more complex system map where we explore the relationships between elements. ° Knowing the key elements of the domain is also necessary for developing scenarios later.	

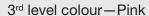|		
	• Consider providing an example of this type of domain map (on a different topic): 　° E.g. "Social Asia" domain map (see earlier photo): 　　- A group of about 15 people started with roughly 80 yellow elements that they expected this domain to include. In this case, the elements are social issues like childcare, immigration and conflict. 　　- Then the group clustered the elements thematically, and major headings were applied in pink (e.g. values, demographics, and socio-economics); a few in-between sub-headings were also added in blue (e.g. jobs, education, and health).	
2 minutes	**3. Provide activity instructions** • The group will build a domain map by first identifying elements, then clustering and labeling to categorize the elements into major groups. This will occur in a few rounds. • A possible way to handle a group of 25 is to make groups of 5 and give each group a specific section of subtopics under the main topic so that more elements can be covered and repetition can be restricted. This can reduce confusion and crowding at the walls. However, large groups tend to self-organize and a group can be very energized and creative doing this together in an unstructured way.	

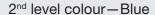|		
	• To keep the hierarchy of sticky note colours straight in the minds of the facilitator and participants, arrange a column of 4 coloured sticky notes on the wall. E.g. green at the top to represent the broadest categories and yellow at the bottom to represent the smallest elements. 4th level colour—Green (highest order/major categories of elements) 3rd level colour—Pink 2nd level colour—Blue 1st level colour—Yellow (lowest order/smallest categories of elements)	
15 minutes	**4. Generate elements of the domain** • Question: "What are some elements that you think should be included in this domain?" • Participants will each start with 4–5 sticky notes in the 1st level colour (e.g. yellow), with extra sticky notes in the same colour available at the side of the room. • Ask everyone to write one element per sticky and place it on the wall. Have them review the wall and keep adding missing elements. They can begin to cluster related ideas, but at this stage it is mostly about generating ideas.	• Depending on the domain, it may be necessary to clarify what is meant by "elements." E.g. for the "Social Asia" domain, the elements were social issues, and for the domain of "biotechnology," the elements were disciplines/innovations. Providing a first element on the map is one way to do this.

10 minutes	**5. Cluster related elements into categories**
	• Ask participants to review what has been added and cluster related topics, adding a higher order label.
	° Suggestion: use the 3rd level colour (e.g. pink) to leave room for a sub-group in between if it makes sense.
	• After participants have slowed in their clustering and categorization, guide them to revise headings for greater cohesion and clarity:
	° Looking at the pink labels, are they approximately the same level of importance?
	- Can some be upgraded to a green (4th level colour)?
	- Can some be downgraded to a blue (2nd level colour)?
	- At the green, pink or blue level, are there categories missing?
	• Participants may slow down after the initial clustering (pink), and this is fine. At times there may be a few participants who continue to cluster and label, while others stand back to assess and discuss what they see. This is normal.
	• If participants are no longer moving to the board, the facilitator could invite some discussion on the overall result to invite final alterations:
	° Ask participants if they have any other observations about the map. Is anything missing? Imbalanced? Ask participants to adjust the map accordingly by removing, adding or moving stickies.

	- If some pink labels stand out to the facilitator (e.g. as too high or low in importance), ask participants to comment on them and adjust them as needed. - If some groups of yellow notes seem to be without a category, ask participants what they think of it. - Ask if this is a good representation of the domain: should anything be left out of the project scope? ° A domain map could be revised infinitely, but wrap up the activity when participants seem happy with it or time is up.	
5 minute	6. **Review the domain map** • Highlight the iterative nature of this exercise—maps tend to get better over time: ° The involvement of subject matter experts can be helpful in refining the map. ° More elements can be added as understanding changes. ° Consensus on what is involved in the domain may evolve. • If the map will be revisited by project leaders or the full set of participants, indicate how and when. • Explain how this exercise connects to the foresight project: ° This domain exercise can help us decide where and what to scan for. ° Knowing the key elements of the domain is also necessary for developing scenarios in later stages of the foresight study.	• If time allows, consider adding a voting stage (see option below).

| 10 minutes | **7. Reflect on and/or evaluate the exercise**
• Give participants an opportunity to provide feedback on the exercise.
• This might take the form of:
  ° Q&A discussion
  ° Participant completion of an evaluation form
  ° Informal evaluation—On their way out of the room, participants are asked to post one comment on a sticky note for each of three wall headings:
    - What Worked?
    - What Could be Better? | • Provide evaluation forms or sticky notes as appropriate |

Add-ons/Modifications to the domain map exercise

OPTION A: After developing the map, get an early sense of the most important elements through voting

After generating domain maps, it is often helpful to evaluate which elements are the most critical for considering plausible futures of the system. This provides an idea of where participants might want to focus their attention, for example when scanning. At a later stage in the process, the facilitation team will need to decide which elements (tip sheet) will be used for scenario development. This optional activity does not answer that question, but it generates early insight that may inform it.

A short voting activity could be added at the end of the group mapping activity. In that case, give each participant 3–5 votes (they can use a marker or dot stickers) to distribute among the elements on the map as they wish. To determine importance, the questions to consider are:

• Which elements do participants expect to change the most?
• Which elements would be most disruptive for policy, should they change significantly?

After voting, the facilitator can briefly highlight a few of the most popular elements and remind participants that these are good topics to monitor when looking for signs of disruptive change affecting the system. Participants also may want to divide up responsibility for scanning by element.

Module 4

System Mapping   10

Building a Foresight Workshop: Complementary Activities to Consider

For facilitators with multiple objectives for a foresight workshop, below are a few suggestions for activities that would pair well with a domain map exercise.

Before the exercise:

- Deliver the Systems Mapping presentation.

After the exercise:

- To emphasize the domain mapping exercise as a learning experience, consider sharing and discussing the facilitator's "back pocket" domain map. (You may need a projector, internet access, etc. arranged ahead to display your map). How did you:
  - ° create the map (Google Docs, Post-its, Insightmaker, Visio, Simplemind, Mind42, etc.)
  - ° choose the elements
  - ° etc.
- Develop a polished version of the domain map. Print a large format, colour copy of the map. It is useful to be able to refer back to the map in subsequent sessions. Refer to the tip sheet on how to select elements for a final domain map.
- Deliver the system mapping exercise (module 4).
- Deliver the assumptions exercise (module 2).