

PROTOTYPING ECOSYSTEMS AND BUSINESS VALUE

DESKTOP SYSTEM MAPPING (AKA BUSINESS ORIGAMI)

Desktop system mapping is an approach which helps us to understand complex value networks using simple paper cutouts representing key people, locations, channels, and touchpoints.

Duration	Approximately 2–3 hours (depending on group size)
Physical requirements	Space, Business Origami kits, scissors, pens, tape, camera, a set of new service concepts that need to be explored
Energy level	Medium
Researchers/Facilitators	1 or more
Participants	5–15 people who have a sound knowledge of your current service system or want to explore a future service system around new concepts (select a good mix from all levels of your organization to capture the service system holistically)
Research techniques	Participant observation, co-design
Expected output	Wireframes, insights, ideas, questions, documentation

Prepared paper cutouts representing key people, locations, channels, and touchpoints can be quickly placed, moved, and reconfigured on a table or horizontal whiteboard until the team are happy with the model. Relationships and value exchanges can be easily visualized by grouping or drawing connections between different elements directly on the whiteboard. Since most systems are not static by nature, many projects will also look at the development of the model over time (the “service system journey”) or compare alternative systems.⁰¹

The interaction with the Business Origami setup is straightforward and invites everybody into the process – without any prior technical knowledge. Due to the businesslike look and feel of the cutouts, this is a great tool to introduce. The simplicity of the components and the ability to rapidly experiment with different setups is key here. It triggers focused conversations among the participants, quickly uncovering

⁰¹ See Hitachi Ltd. (n.d.). Experiential Value: Introduce and Elicit Ideas, at http://www.hitachi.com/rd/portal/contents/design/business_origami/index.html. See also McMullin, J. (2011). *Business Origami*, at <http://www.citizenexperience.com/2010/04/30/business-origami/>.



assumptions and contributing to a shared understanding of the inner workings of the complex service ecosystem. It is important to remember that the critical deliverable is not the model itself, but the experience of modeling the service system in the team.

As a technique, Business Origami can be applied throughout the service design process. During research, it can be used to map and understand the existing business or service system. Later, during ideation and prototyping, it can help to continually explore what kind of business system your newly created future service concepts might imply.

“Business Origami creates a miniature movie set, with props and actors to tell stories,” says Jess McMullin.⁰² In that sense, Business Origami is to system mapping what the desktop walkthrough is to journey mapping, though the boundaries can sometimes be blurry (i.e., you can simply use elements of the Business Origami kit to do a proper

desktop walkthrough). We suggest you keep the methods separate, though. Use a desktop walkthrough to focus on the experience of a stakeholder over time. Use Business Origami to look at a more holistic service system and how its different parts play together (over time).

Step-by-step guide PREPARATION

- 1 Review scope and prototyping questions:** Review the scope and the prototyping questions for this activity. What do you want to learn? Do you want to test the whole system or just a part? How detailed do you need or want to get?
- 2 Split into groups:** Split the participants into teams of 2–3 people. Each team chooses a new service concept to explore using Business Origami.
- 3 Set up workspace and materials:** Each team get their own set of Business Origami materials and a

whiteboard. For convenience, the whiteboard can also be replaced by laminated plotter paper or static-cling dry erase sheets.

- 4 Briefing:** Brief the participants on what service system or which part of a given service system they need to model.
- 5 Create the key elements:** Ask the teams to create, cut out, fold, and label the key elements of their service system using the paper: Who are the important people or groups of people? Which channels or communication tools/devices do they use? What locations are important?

Step-by-step guide USE/RESEARCH

- 1 Create a first draft of the service system:** Ask participants to place key elements onto the map. Add the prepared elements for important

⁰² McMullin, J. (2011) “Business Origami - UX Week 2011 Workshop.” Retrieved January 4, 2016, from <http://de.slideshare.net/jessmcmullin/business-origami-ux-week-2011-workshop>.

people or organizations, channels or communication tools, and important locations.

Then, connect them.

Reflect on relationships, value exchanges, (inter)actions, or basic material/money/information flows. Add those connections as arrows between the respective elements. Make sure to label the arrows as you draw them.

If necessary, group elements using boxes or circles. Again, do not forget to label each group.

- 2 Improve:** Is the model complete? Ask the teams to add missing elements and update the relationships and/or groupings if necessary.
- 3 Keep a bug list/idea sheet:** Remind the teams to keep a bug list and an idea sheet to note their insights and ideas as they explore the service system.

- 4 Feedback:** Do a short presentation round. The groups get two minutes each to present their work in progress. After each presentation, they receive feedback from the other groups. Use red/green feedback.⁰¹ Make sure the teams capture the feedback on their bug lists/idea sheets. Give the groups some time after the presentations to consolidate their models.
- 5 Simulate the service system over time:** Service systems are dynamic. Ask the teams to choose a meaningful time frame and walk the system through this system journey: Who or what has to move at each step in the journey? How stable are the relationships? Do they have to change over time? What are the critical moments in this service system? Does everything fit together?
- 6 Document:** Ask the teams to finalize and document their models.

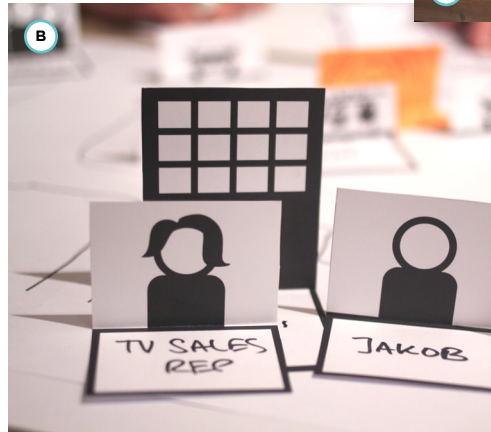
Ask them to use annotated photo storyboards, stop motion video, or video “fly-throughs” to document.

- 7 Present:** Let the teams present their models. Remind them that it is not about the static system, but how the different elements play out over time – the journey of the service system. Ask them to use a storytelling approach to talk the group through their model. Optionally, you can also capture the presentation and the final feedback rounds on video.
- 8 Reflect:** In the plenary, give some more time to reflect. Let the whole group identify elements or relationships within any of the models that should be worked on in the next steps. Ask the participants to add potential next steps on sticky notes (e.g., doing further research, prototyping, testing of specific elements, etc.).

⁰¹ See *Red and green feedback* in #TISDD 10.5, *Methods*.

Method notes

- **Doing, not talking:** Watch out for talking in the groups – the method can quickly trigger deep discussions. Instead of just talking, encourage the teams to simulate their talking points using the models on the table. ◀



- A** Business Origami first looks at the whole system, taking a holistic approach. Like with many other service design tools, the critical deliverable is not the model itself but the experience of modeling the service system in the team.
- B** The setup of the workspace is not predefined and follows the structure of the service system. The clear set of preprepared elements are helpful if participants are new to the method.
- C** Paper cutouts are the playing figures in Business Origami. There are prepared elements for stakeholders, things, channels, places, and more.