

## PARTICIPANT WORKBOOK

## **Complexity Thinking** Workbook: Prototypes



getflowtrained.com/playbook/prototypes/

### Prototypes

Through continuous testing and refinement processes, prototypes contribute to a better understanding of complexity.

Prototypes aid one's understanding and contribute to their ability to be understood.

Prototypes aid in understanding the whole by modeling the familiar.

Prototypes are also beneficial because the processes help develop shared mental models among the developers and customer. These processes help to build better customer relationships because the customer's input is highly valued.

As described by Kelley and Kelley (2013), "good prototypes tell a story" (p. 136).

Prototypes can consist of analytic or physical models, including "sketches, mathematical models, simulations, test components and fully functional preproduction versions of the product" (Elverum and Welo, 2016: 3007).

Using the steps provided to get started, begin developing your prototype for a new product or service. The items listed are those necessary to get you started with the process. You may need to move these items to a larger whiteboard or journal as space is limited here. For example, in the step for storyboarding, the sketches used to develop the story could be a few pictures to more than a dozen. Only three storyboard spaces are provided here. We suggest using digital tools to aid review.

A storyboard is a visual representation of how a story will play out, scene by scene. It's made up of a chronological series of images, with accompanying notes. A storyboard communicates a filmmaker's vision.

Prototype Storyboards	
Describe a specific product or service.	
Identify the customer(s).	
Identify any stakeholders.	

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### PROTOTYPE STORYBOARDS (CONT.)

# Select a scenario for your storyboard

Describe the stages that evolve the storyboard you are creating. Like a script, your storyboard visually guides you throughout the production process. Described each step to be visualized. If you need to create more steps continue on a separate sheet and attach it to this workbook.

Storyboard Stages to Realize the Scenario	
Stage 1	
Stage 2	
Stage 3	

Draw or visualize the stages from the previous table that maps your storyboard. Draw or sketch each step. The table below allows you to record the locations of these images if created digitally, otherwise attach them to this workbook.

Sketches for each storyboard stage	
Sketch 1 location (url/folder etc.)	
Sketch 2 location (url/folder etc.)	
Sketch 3 location (url/folder etc.)	

PRACTICE AND ITERATION	
Practice telling your story from start to finish. Fill in any gaps in the story and adjust the story until it is complete. Use the space to the right to make notes.	
Ask a number of participants (not associated with the project or service) to view the story (sketches and descriptions).	
Do not explain anything. Ask the participants to tell you the story that they understood from viewing the sketches and reading the descriptions.	
Document their version of the story here. Continue on a separate sheet and attach to the workbook if necessary.	
Make notes relating to any differences between the participant's story and your intended story.	

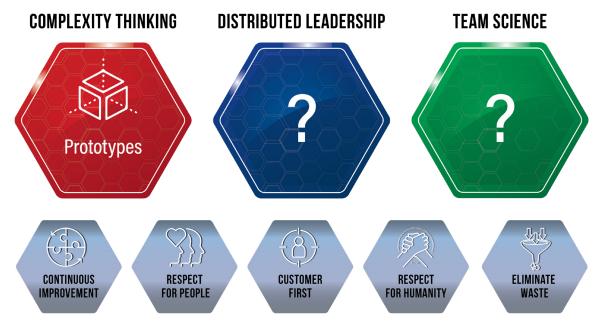
# PRACTICE AND ITERATION (CONT.)

Ask if their version of the story has changed and what could be changed to make the story clearer and easier to understand. Ask for feedback and recommendations. Make any necessary adjustments to the story (sketches and descriptions) and continue with a new stage of feedback from different participants. This process should be repeated until the prototype provides a clear description of what the designer (you) has intended.	Next, tell the story using the sketches and descriptions to each participant.
to the story (sketches and descriptions) and continue with a new stage of feedback from different participants. This process should be repeated until the prototype provides a clear description of what the	has changed and what could be changed to make the story clearer and easier to understand. Ask for
until the prototype provides a clear description of what the	to the story (sketches and descriptions) and continue with a new stage of feedback from
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### **Connect the Three Helixes:**

Flow can only be achieved when the three helixes are interconnected. To identify how this could occur, the next exercise requires the reader to identify examples of different methods from each of the other two helixes (distributed leadership, team science) that might work well with, or support, weak signal detection. Knowledge of all three helixes will be required to make these connections.



### **CONNECT THE HELIXES**

Select a scenario or problem that would include a benefit from prototyping.	
Identify three methods from distributed leadership that could work with prototyping and give a brief description about how they complement one another.	
DL Method 1:	
DL Method 2:	

CONNECT THE HELIXES	
DL Method 3:	
Identify three methods from the team science helix that could work with prototyping and give a brief description about how they complement one another.	
TS Method 1:	
TS Method 2:	
TS Method 3:	
Provide a description explaining which methods from each of the three helixes (with prototyping being the CT method) work best for the scenario/ problem identified earlier.	