

Value Network Mapping Basics

Overview

The basic technique used for mapping a value network was first developed in the early 1990s as the *HoloMapping*® method. This business modeling method describes the value creation dynamics for any type of organization, business unit, or business web. It serves as an analysis tool for assessing patterns of interaction. It can be used to map core business activities and processes, and also the supporting activities. The purpose of the value network map is to identify key Roles, Deliverables, and Transactions for an activity. The network diagram is used as the foundation for a Value Network Analysis (VNA).

When to do it

Before you begin the value network map, the basic project management elements should be completed:

- Project Context Assessment is complete.
- Project Stakeholder Analysis has been completed.
- Purpose Statement Development is complete.
- Project team has been assembled.
- Representatives of all key Roles are involved.

How to do it

Step 1. Preparation

Review the Purpose statement and Project Context Assessment.

Step 2. Define the boundaries

To keep the level of detail manageable it is important to define the boundaries of the mapping activity. The value network mapping works for a ground-level view, a rooftop view, or a helicopter view. Think carefully about what level of detail you would like to capture. You may need to create maps at several different levels and convene somewhat different group of people each time. The level of detail depends on what your focus question is. Some questions are at the workgroup level, others address managerial-level relationships, and others might look strategically at the whole business. See also the Help Library topic Defining Scope and Boundaries.

Step 3. Determine who needs to participate

Once you have determined the core issue or question, then you can identify those individuals who have the greatest understanding of the Roles and activities. It is impossible for any one person to fully understand a complex system. So the greatest success in this approach is achieved when “the whole system is in the room.” This means that the mapping exercise (whether face to face or virtual) needs to involve people who can represent every key Role in the network. An ideal number for a working group is 8-12 people, or at least one person per key role. In value network mapping there is a cognitive boundary around no more than 8-12 roles that works best for a mapping exercise. You can merge maps to generate a larger map but the visuals can be overwhelming for new users.

Step 4. Materials and room setup

If you are going to do the mapping exercise as a group activity it works best to facilitate the mapping process with a small group of people working together in real time to complete the diagram. Working as a whole group leads to far greater accuracy and more powerful insights than if one person generates a diagram and circulates it. Much of the value in the mapping comes from the conversations it evokes. Working with the whole group together allows people to reach a level of shared understanding that is simply not possible working as individuals. The mapping activity surfaces the different mental models and assumptions about how things are working that people need to explore.

There are two ways to prepare the mapping surface: on the wall or a table. For the wall setup you will need a large wall that is either whiteboard or of sufficient size to tape up large sheets of 4' wide paper. For a table setup you will need a large work surface that can take sheets of 3-4' wide paper running to about 6 feet. You may use sheets of flip chart paper taped together. You want lots of space so the diagram can go where it needs to.

You will need mid-size sticky notes and a variety of colored markers. It is also good to have a few “fun” sticky notes such as stars, arrows, and hearts. It is helpful to have an additional flip chart available to record insights, questions, and observations as you go along. The mapping conversation is so rich that written notes are very helpful for follow up actions.

Step 5. Begin the value network map

You will need to allow two to four hours for the mapping, depending on the complexity of the issues and the scope of the activity.

The basic diagram is created from just three simple elements: Roles, Transactions, and Deliverables. Ovals represent the contributing Roles. Roles generate and send Deliverables. Roles are played by real people (Participants) and have the capacity to execute Transactions and make decisions. Arrows represent the direction the Deliverables are moving and define the origin and endpoint of each Transaction.

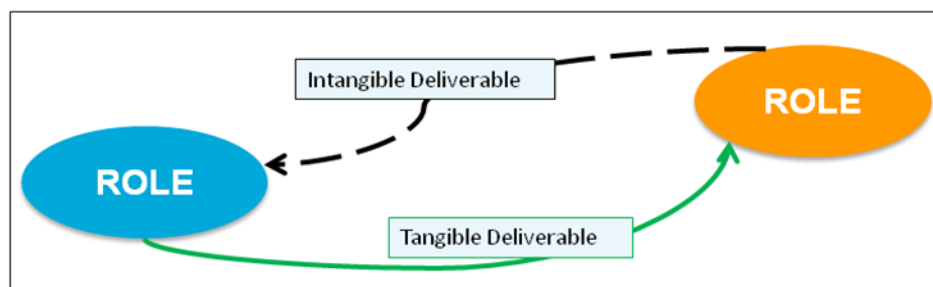


Figure 1: The mapping elements

- Nodes represent Participants (real people) in the **Roles** that they play.
- Solid lines show **Tangible** (formal, contractual) Deliverables being provided.
- Dashed lines show **Intangible** or informal Deliverables being provided.
- The arrow represents a completed **Transaction** or delivery.
- The label shows the **Deliverable**.

Roles

Roles are represented as a node in the network, by an oval or circle surrounding the name of the Role. Roles are filled by real people or groups of people who can generate transactions, send messages, engage in interactions, add value, and make decisions.

As a general rule a Role would not be a database, a software program, or other technology. Technologies are enablers to support a particular Role that is needed in the network. Technologies can also be used as channels or mechanisms to execute a Transaction or transport a Deliverable. Roles are always filled by real people. You can learn more in the Help Topic on Roles and Participants.

Roles can be filled by:

- Individual Participants
- Teams or subgroups
- Business units
- Organizations
- Collectives or aggregates
- Communities
- Cities or regions
- Nation-states
- Other networks

Transactions

Transactions are represented by a one-directional arrow that originates at one Role and ends at another. The arrow represents direction and denotes the movement of a Deliverable from one Role to another. Transactions are transitory in nature. They have a start, middle, and completion.

You may use the arrows and labels to describe either Tangible or Intangible Deliverables. Tangible Deliverables are all those contractual activities that go into providing a product or service. Intangibles are the “little extras” such as knowledge exchanges or benefits and favors that keep things running smoothly, help build relationships, and motivate people to participate.

Deliverables

Deliverables are the actual “things” that move from one Role to another. A Deliverable can be physical such as a document or a chair. A Deliverable can also be non-physical, such as a message or request that may only be delivered verbally. It is the “what” that is most important, not the form that it takes. As communication and Internet technologies reduce our dependency on paper and “hard copy,” the physical forms become less important.

Here again it is important to think of technologies as enablers of different activities and focus first on the Deliverables that are moving between Roles. You can learn more in the topics on Transactions and Deliverables and Tips for Naming Intangible Deliverables.

Step 6. Facilitate the mapping to completion

Focus the activity

It is helpful to think of this mapping as a way you are going to:

- Map people (Roles) to the network
- Map process (Tangibles) to network
- Map value (Intangibles) to the network

To map process to network ask people to shift their thinking about the focus area from “process” to “activity.” The mental shift immediately expands the viewpoint to encompass people interacting around the process. Instead of process “steps” invite people to think of the different process “deliverables” happening between people. What do people actually provide to each other during this activity?

Identify the key Roles

Mapping people to the network begins with identifying the Roles in the activity. Ask the group to identify the key Roles or contributors in the value network. See if you can identify three to five of these to start with. (You can add more at any time.) Mark a sticky with the name of the Role and post it on the working board. Five to eight Roles is an ideal total number to work with. Using fewer, you might miss some of the key players. More than eight increases the level of complexity and makes the mapping more difficult. Many activities extend to as many as twelve Roles. If you get into trouble back up to step one and rethink the boundaries of the system or try to more narrowly focus the activity. Sometimes similar Roles can be combined to simplify the map.

Try to think ahead to how many interactions you might anticipate between different Roles. Keep the nodes small and arrange them so there will be clear open areas or “pathways” where at you can draw the arrows. As you place each Role on the page ask whether that Role will have many or a few interactions.

Place those Roles with a lot of interactions closer to the center of the page and in proximity to each other. If there are only a few interactions place those Roles closer to the edge. It will take a little practice but after you have done a few maps you will see how a little thinking ahead will help you create much neater diagrams.

Identify Deliverables and Transactions

Tip: Make the nodes quite small and space them out so you have lots of “white space” for the arrows and labels. Remember the value network focus is on the interactions between the Roles and that is where you need the most room to draw. Using a sticky for the Role name helps you keep the nodes small and allows a bit of shifting around as you organize the Roles.

Caution: Try to avoid the red/green color combination as that is most common color challenge for those who are color blind. You are usually safe with green and blue but ask the group if anyone is having difficulty and adjust color use if needed.

Now you are going to begin to map value to the network. Pick a pair of Roles and ask people what Deliverables pass between them? Identify the Sending Role and the Receiving Role. Connect the two Roles you identified with a one-directional arrow from the Sender to the Receiver. To distinguish between Tangible and Intangible deliverables you may use two different colors for the arrows.

Now write the name of the Deliverable on the connecting arrow. (See Figure 2.) Be as specific as possible. For example instead of *money* use more specific terms like *payment*, *commissions*, or *fees*. The same holds true for terms like *knowledge* or *information*. Knowledge about what? What kind of information? Is it *strategic plans* or is it an *audit report*? If you personally had to be accountable for the Deliverable would the label help you know exactly what you need to provide?

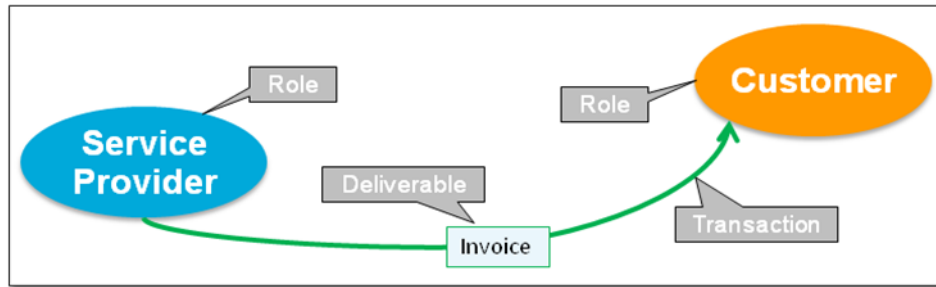


Figure 2. Depicting Roles, the Transaction, and the Deliverable name.

Continue until all the Roles, Deliverables, and Transactions have been mapped.

- Each Role appears in only one place on the diagram. Combine like Roles where possible to save needless repetition.
- Deliverables are the finished, correct “thing.” Leave out any verification or correction transactions unless you are specifically addressing the issue.

Keep control of the mapping by making sure that there is general agreement with the group before any change is made to a Role, a Transaction, or a Deliverable. (It is helpful to have only one person handling the marker.) Be sure the group is working as a whole group and not fragmenting into side conversations.

Validate the map by sequencing

You may number each Transaction in the order in which they would happen in a typical scenario. Placing a small number next to the arrowhead will be helpful. When all Transactions are complete you should be able to use the sequence to tell the “story” or network narrative. For more on this next step see the Help Library topic Sequencing.