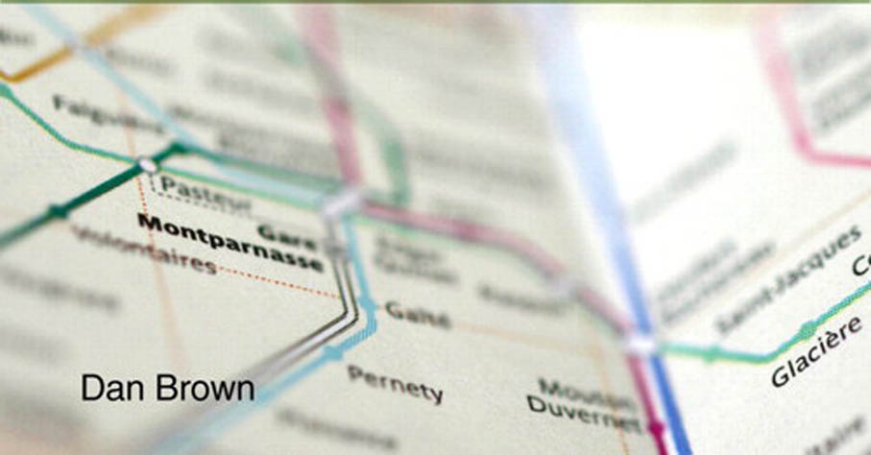


Communicating Design

SECOND
EDITION

Developing Web Site Documentation for Design and Planning

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Do your research

Flesh out your understanding of the domain by reading up on it. Nothing gives you more nouns and verbs to draw upon than a few comprehensive, detailed descriptions of the business.

When I started an 18-month contract at the wireless division of the Federal Communications Commission (FCC), it was clear I knew nothing about the business. While the FCC's web site was a good starting point, I also sought out other web sites that cater to the same target audiences. This afternoon of surfing gave me enough fodder to build up a model. Ultimately, the model was never shared with others, but was a good tool for me to become comfortable with the various players and underlying business model.

User research is even better. Transcripts of interviews are rife with concepts that are important and meaningful to users.

Look under the hood

If you're stuck, pick a node and ask yourself, "What else can I say about this concept?" Unpack the concept, forcing yourself to be as specific as possible. If you need more specific questions, pretend you're interviewing a person (not a circle) who knows about the concept or the domain.

One of the jargon words used in talking about comics is "mythology," which informally refers to a character's backstory. Because many popular characters have been around for decades, and have been subject to so many interpretations, there are multiple mythologies for some characters. This idea is difficult to model.

Some questions I asked myself about the "mythologies" concept in order to arrive at a more detailed model:

- What makes one mythology different from another?
- How do storytellers deal with multiple mythologies?
- What other concepts are affected by a character's mythology?

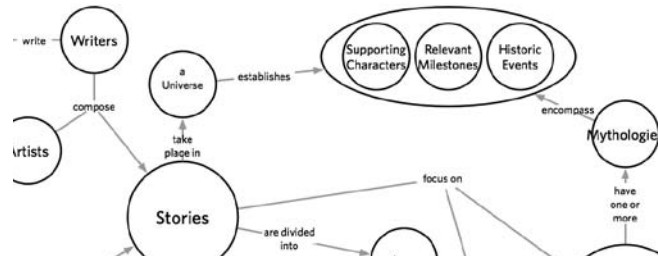


Figure 4.14: Some details emerge only after forcing yourself to unpack a concept. In this early version of the comics concept model, I elaborated on the concept of a "mythology". While it didn't make it into the final model, I did keep "relevant milestones".

FCC The organization in the U.S. government that regulates telecommunications and broadcasting

In elaborating on this concept, I knew there was a relationship to another key idea—a universe. In short, one way to resolve competing or conflicting backstories is to place different versions of the same character in parallel universes. (And people wonder why comics aren't more mainstream.)

It was difficult for me to think of a specific verb that created a relationship between Mythology and Universe, so instead I tried to think of concepts that "mediated" between them. This helped me flesh out this part of the diagram.

If you can't generate answers or find them through research, capture the questions in the model itself. When you get to interview an expert, these questions can guide your agenda.

Move stuff around

If you have dozens of concepts, it may be challenging to find a central focus for the diagram. The best way to

elaborate on the model, focus it, and find insights in the relationships is to move the nodes around. This might seem like an oversimplification, and a very mechanical way of iterating on the model. By moving concepts around, however, you can test out new kinds of relationships, explore positioning relationships in a new way, and zero-in on gaps in the model.

Build up then tear down

Since it's difficult to picture the end state before you start a model, err on the side of too much information. Include concepts that may not be entirely relevant. Link a concept to as many others as you can. Your page will be covered with circles and lines, but starting with too much is part of the creative process, giving you more opportunities for insight. You'll have to cut things out ruthlessly when it comes time to clean up the model, but the pruning process can also lead to insights.

To **reduce links**, look for triangles (Figure 4.15). Three interconnected nodes can indicate that one of the relationships is redundant. Eliminate the relationship between the two less important nodes, focusing on the relationship between the important node and the ideas that support it. Alternatively, identify a chain of nodes that tells the simplest story.

To **reduce nodes**, eliminate words that are so common they are merely a convenient mechanism for bridging to other concepts. In an early version of the comics concept model, I used the concept “words” to encompass the different kinds of verbiage in a comic book—dialog, narrative, thoughts, and so on. Since I was already using the concepts “scripts” and “writers,” “words” felt unnecessary.

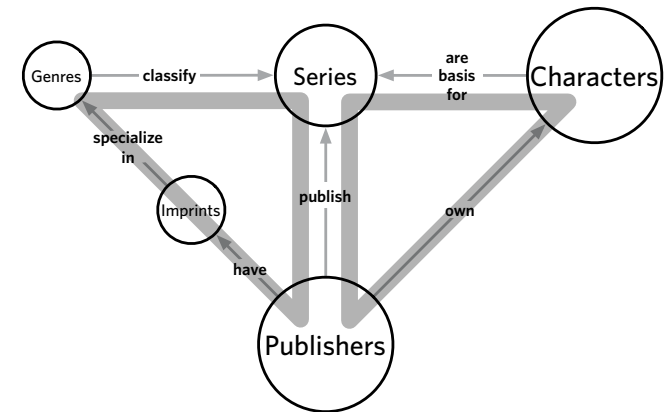


Figure 4.15: Reducing triangles from three connections to two can help clean up the model. Looking for triangles (like these from an early version of the comics concept model) can reveal opportunities to consolidate and focus the model.

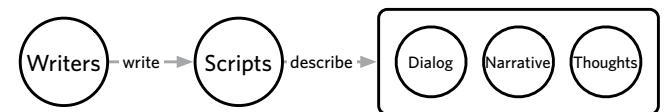


Figure 4.16: Redundant words make for good opportunities to simplify the model. Though writing a script is an accurate depiction of the comic authoring process, it may not be essential for planning the user experience. Of course, if one of the requirements for the project calls for allowing users to download scripts, it would be worthwhile to keep this concept in.

Level-Up Your Concept Model Skills

It can be easy to spin in circles (ha ha) with a concept model. Here are some things I watch out for:

Convergence: Everything wants to link to one concept

Though the hub-and-spoke model is a perfectly good way to represent how a central concept is the foundation for a series of interconnected concepts, the hub shouldn't be the

only concept everything links to. A model with a hub and one level of spokes without much more doesn't help readers understand the rich array of relationships that drive the concept.

If you find yourself wanting to make statements about the same concept over and over again, a concept model may not be the right tool to describe the domain. Then again, you can try a couple techniques to breathe some life into the diagram:

- **Take the central concept out.** I know: crazy, right? When I find myself unable to express any relationship without linking to the central concept, I take the concept out and treat it as an assumption for all the other relationships. This helps me focus on the relationships between the concepts.
- **Use a value proposition structure.** Value proposition links three or four concepts together in a sentence, like “**Concept models** are **diagrams** that describe **complex ideas**.” Treating this as your central theme (instead of the single concept) gives you more opportunities to explore detailed concepts.

Keep the concept in perspective

You may be tempted to define life, the universe, and everything with a concept model. Once you get the hang of noun-verb-noun, your inner 18th-century philosopher will be clamoring to be let loose on the world. Why shouldn't you be able to represent everything as interconnected circles?

Ultimately, you're trying to explain a domain. Serving only yourself, the concept model doesn't need to unearth the deepest assumptions. A model for readers will only be undermined by too much information.

There's no litmus test to see if you've gone too far, but practice shows that most of my models include no more than a couple dozen concepts.

Keep the model practical

Stay three or four steps ahead as you're constructing the model. You don't want to censor yourself to the point of eliminating every concept. But you also don't want to take your concepts down to the building blocks of life. Ask yourself these questions as you put the model together:

- Is this concept relevant to the target audience?
- How important is this concept to the business?
- Which relationships would the target audience prioritize?
- Can I imagine how these concepts will be turned into elements of the interface?
- Can I imagine some user research that would help me validate these concepts?

Answer “no” to any of these questions and you might be pushing into the realms of the impractical.

A concept model in the design process is like salt in a recipe: it sets the stage for a broader palette of flavors. Too much, and you'll overwhelm the rest of the ingredients. To remain practical, a concept model has to just provide a foundation for inspiring, informing, and establishing context in the design process.

PRESENTING CONCEPT MODELS

First things first: Ask yourself, “Do I need to share my concept model with team members or stakeholders at all?” If you're using it as a tool to get things straight for your own purposes, or with a small team, this may not be a formal deliverable: It will never see the light of the conference room. It may be more responsible to shield your stakeholders and other team members from this kind of document if it operates at a level of abstraction that would be difficult for them to comprehend without concrete examples.

If you decide that the concept model includes ideas that are essential for understanding the overall approach, think

about whether you need to show the entire model. Is there an abbreviated version you can put together that boils the ideas down to just what's needed as prerequisites for the rest of the design? Alternatively, if the model yielded an insight or specific conundrum, you might assemble a separate diagram describing just the small piece.

Presenting a concept model means telling a story, putting the concept model into a context that team members and stakeholders can relate to. Your story needs to be grounded in reality, and this section describes several ways to do this.

Establish a Purpose for Meeting

The presentation should be driven by the purpose. With concept models, there are usually only two reasons why you'd present them: to prepare participants for more in-depth design discussions, or to hash out the model itself.

Preparing for design

One reason for presenting a concept model is to lay a foundation for the design, prepping the meeting participants for a more detailed discussion about the user experience. These meetings usually start out with, "I know you're eager to dig into the design, but there are some basic concepts we need to clear up before we do."

We could use our comics concept model (or a portion of it) to describe the design team's assumptions in designing the web site's interface. Those assumptions include answers to these questions:

- What are the most important categories of content?
- How do other types of content relate to those most important categories?
- What kinds of functions might users expect?

These kinds of meetings have at least one of these three key messages:

- **This is a useful exercise because....**: Be sure you understand how the concept model fits into the design process and where you're going with it next. Prepare a simple rationale for doing the concept model, and refer to it when the meeting loses focus.
- **Some initial design principles or requirements**: Pull out a few of the insights and use these as themes or talking points throughout the discussion. These insights should be positioned as design principles or guidelines: They are boundaries and constraints that help the design team focus their efforts.
- **Some remaining questions about scope**: Highlight the areas of the model that remain unclear, or which called into question the scope of the project. The model may have revealed dependencies that would make the established scope challenging. The model may have identified additional requirements not yet incorporated into the thought process.

Analysis of the concept model may have yielded some initial ideas about design—which content will get its own templates, what the information priorities are, a metadata model. If you're confident about your design decisions, you can use these as themes in the meeting. Otherwise, use them in the Communicate Implications section of the agenda.

Modeling together

The other reason to put a concept model in front of team members and stakeholders is to collaborate in its construction. In this case, rougher models are better because they lend themselves to feedback and discussion. It's important to come to a consensus about the underlying structure that supports a web site's user experience because it drives so many subsequent design decisions.

As described previously, concept models can help at any point in the design process. Building them collaboratively does not change this. You may come to an impasse in the

design process, a clue that there's disagreement about the underlying assumptions, and use that as an opportunity to take a step back and facilitate a brainstorming meeting to flesh out the basic concepts.

In these meetings, establish three key themes:

- **Our focus is the scope:** That is, the purpose of the exercise is to establish the boundaries of the domain. We want to get our arms around everything that may be relevant to the design problem. We can always remove concepts later.
- **Our interest is in what's missing:** Participants should focus less on what's there and more on what's not there. They need to help identify concepts that may be important—even tangentially—and contribute to the overall picture of the domain.
- **Abstract thinking is hard:** Reassure participants that thinking about an information space in this way is not easy to do. We're thinking about the web site not just as a series of building blocks, but as a series of templates. Some templates can represent so many different things that their structures look so far removed from the actual content as to be of questionable value. This is OK, and it can be hard to wrap your head around.

The meeting structure following assumes you're preparing for design, not modeling together. If the purpose of your meeting is to present a skeletal structure for the concept model and engage participants in fleshing it out, you might skip steps 5 and 6. In these portions of the agenda, you provide details (you don't have any yet) and communicate implications (which would be premature).

Adapt the basic meeting structure

The basic meeting structure from the introduction is ideal for concept models. As you delve further, you are uncovering more details. Keep an eye on meeting participants; they

may start to lose the thread if you get too abstract. In this case, you've reached the end of the useful life of this meeting. Wherever you are in your agenda, transition to soliciting feedback and defining next steps.

Refresh your memory on the timing of sharing diagrams (Table 2.2 in the Diagram Basics chapter). With concept models (perhaps more than any other diagram) timing is important because stakeholders' unfamiliarity with the models may add unnecessary challenges to the rhythm of your story.

1. Establish context

For concept models, which may occur early in the project, set the stage by explaining how this technique contributes to the design project. You can use this time in the meeting to clarify the parameters and boundaries you considered in putting the model together. Also provide a high-level description of your process—what sources you used, what it took to put the model together, and what you were attempting to capture in the model.

You can show the model, or the high-level version of it, when you conclude your context-setting introduction. This will set you up for the visual conventions, coming up next.

2. Describe visual conventions

Describe the model at a high level, first. The fact that the diagram consists of circles connected by lines may be self-evident, but it sets the stage for you to dig into the specifics.

If you've kept your model simple, limiting the range of styles for nodes and links, you may not need to say much more. If you've used a more elaborate set of styles, describe the types of contrasts those styles are meant to show.

3. Highlight major design decisions

It's now time to dig into the model. There are three broad descriptions you can offer before getting too deep into the details:

- **Overall structure:** Indicate the three or four main concepts that constitute the main pillars in the concept model. Describe the relationships between them, and how they form the main structure that supports everything else.
- **Unifying theme:** Describe the underlying story in the concept model. For example, the theme for the sample concept model is the two sides of the comics business. Models using the “value proposition” structure (see Table 4.9) have their theme stated clearly.
- **What's in and what's out:** Distinguish the boundaries of the domain. This description is especially useful if you're trying to zero-in on scope, and you need to clarify that you've left some things out of the concept model on purpose.

Before moving on, this is a good opportunity to show the value of the model by describing insights that came from creating it. Some of these insights might include:

- **New concepts essential to the experience:** Through your research or brainstorming, you might have identified a concept that is a useful piece of information for users, or is a category that unites several other concepts together.
- **New relationships between concepts:** Concept models represent your priorities very clearly. Through modeling a domain, you make specific choices about what concepts to connect, and some of these links may represent a new spin on the information space.
- **New perspectives on the experience:** In creating the concept model, you may have stumbled upon a new idea

for structuring the overall user experience. This may be a new navigation scheme or a new way to arrange the content templates.

4. Offer rationale and identify constraints

Meeting participants might still be noncommittal about the concept model, not sure why they're talking about circles and lines when (clearly!) there are bigger issues at stake. Use this portion of the meeting to reiterate the purpose of the model, how it fits into the project, and what you hope to get from the conversation.

Use this time during the conversation to describe research you did to feed the model. Indicate what sources you used to generate lists of concepts and identify potential connections between them. Such discussion may trigger ideas from participants on other places you can look to flesh out your understanding of the domain.

5. Point out details

Describing concept models in excruciating detail is useful only if you expect to get meaningful feedback at those deep layers. There's no need to hit every circle in the diagram unless you only have about a dozen concepts. Otherwise, use this time to point out a few of the detail areas:

- **Novel concepts:** If you've added any concepts that stakeholders might not expect to see, dig into these and be explicit about where the concept came from and why it's important.
- **Insights:** Assembling the concepts in this visual format may have yielded unexpected insights. Describe these areas of the concept model.
- **Challenges:** To transition to the next part of the agenda, you can draw participants' attention to areas of the model that imply difficult design challenges.