

About this activity:

Modeling involves formalizing research data and insights in a concise, systematic and visual manner in the form of a model.

Before starting this activity:

Activity Details:

Required: Participants must have conducted a research activity, such as a contextual inquiry, and have transcripts from the full inquiry or session.

Define Roles and Conduct an Interpretation Session

Roles include:

- Interviewer: Describes what happened
- Recorder: Takes notes of ideas and key points
- Modelers: One for each type of model



Is a group activity



Takes 8+ hours



Materials required (per model):

- Transcript
- Sharpies
- Large piece of butcher paper (at least 36" x 60") OR Large whiteboard

1 Setting up an Interpretation Session

In an interpretation session, an inquiry/research session is visualized in its entirety. The research team (and any other interested parties) go through the research transcript step-by-step, drawing work models, recording breakdowns and ideas and asking questions.

a Prep for Work Models

Set up large sheets of paper on the walls, one for each model. A large whiteboard can work, as well.

b Distribute Transcripts

Be certain that each person participating has a copy of your full transcript.

c Review your Focus & Approach

Restate to the full group the focus of your research, and discuss how you went about conducting your research. Where did you go? What did you see?

d Assign Roles

Each person participating in the session should have a role.

Interviewer	Modelers (5)	Recorder	Participants
Describes what happened (reads transcript)	One each for Flow, Physical, Sequence, Artifact and Cultural Models	Takes note of any design ideas, breakdowns and key points	Listen to the story and ask questions
Answers questions			Propose interpretations to the team

2 Create Work Models

Patiently, go through each line of the transcript and document all activity in the appropriate model or models. (See specific instructions for each model on the following page).

Images below show AC4D students and faculty doing an Interpretation Session. Notice the fidelity of the drawings - this is a very rough process. Final models on the following page represent 2-3 iterations of refinement.



The Flow Model

How work is divided and coordinated, without regard for time

Making a Flow Model:

- Individuals who do the work are drawn as circles
- Groups (sets of people) are also drawn as circles
- Flow of communication are drawn as arrows and lines between individuals or groups
- Communication topics are written as labels on the flow lines
- Artifacts are drawn as small boxes on a flow
- Places are drawn as large boxes
- Draw breakdowns in communication or coordination as a red lightning bolt and annotate them

Sequence Model

The order of work tasks over time

Making a Sequence Model:

- Write Triggers as sentences or blurbs
- Write Intents as sentences or blurbs
- Write Actions as sentences or blurbs
- Draw breakdowns as a red lightning bolt and annotate if necessary

Cultural Model

The influencers which define expectations, desires, values and the overall approach people take to their work

Making a Cultural Model:

- Influences are drawn as circles - the size of the circle illustrates the extent of their influence
- The influence is drawn as an arrow pointing from one influencer to another, and described in text
- Breakdowns in cultural influence are drawn as a red lightning bolt and annotated if necessary

Artifact Model

The tangible items people create and use to help them get their work accomplished

Making an Artifact Model:

- Draw or find a photo of each object used
- Make sure that all key physical and informational characteristics are shown
- Breakdowns are drawn as a red lightning bolt and annotated if necessary

Physical Model

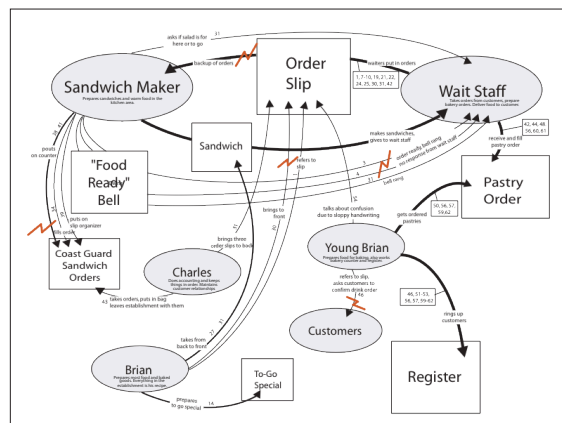
The physical environment in which work is accomplished

Making a Physical Model:

- Draw a birds-eye/plan view of the places that work occurs and annotate them
- Draw physical structures that define the space as geometric shapes
- Draw hardware, software and tools that are present as appropriate
- Draw movement throughout the space as arrows and annotated lines
- Breakdowns in the physical space are drawn as a red lightning bolt and annotated if necessary

3 Iterate and Refine Models

Remove redundant or irrelevant items - begin to make judgements about what's important based on the patterns that present themselves. Put your model into a digital medium after refining once again either on a white board or large piece of paper.



Trigger	Intent	Action	Line #
Morning routine	To Cook the Bacon	Places bacon on fry	2
The boxes are in the wrong place	To move to-go boxes	Stands on top of box to move them	3
Morning routine	To make use of sausage that was precooked	Removes sausage from the line	5
To get dish ready for opening	To add to pre-existing portion of the dish	Cooks peppers and onions daily	6
Delivery arrives	Take them out of the boxes before deli opens	Placing meats into case	7
Out of 2% reduced fat milk	To add milk to the delivery order	Calls supplier and requests milk order	8
Friday delivery arrives	To put all delivery items away before opening	Hurries to put delivered items away	9
He is finishing slicing peppers	To clear space	Moves sliced peppers	10
Needs to get hamburgers ready for day	To thaw out frozen burgers	Puts patties in refrigerator containers	13
Easy access to meats cooked that day	To save time	Moves pre-thawed meats to refrigerator	14
Desire to keep food in containers fresh	To keep from spoiling food	Putting things in the same place everytime	16
Desire not to confuse employees and to keep customers happy	To maintain organization within deli	Washing piled up dishes	24
Desire to keep from retraining employees	To make organization individual	Used toaster	25
So many dishes build up that they have to be washed	To be able to use the dishes that were dirty	Fried walks over and asks Dave how to make salad	27
Order is placed	To meet customer's specific requests	Storage underneath station is utilized	29
Fred forgets how salad is made	To find out how to make a greek salad	Places food on the line	30
The food has been prepared	To make order accessible to person delivering	Sweep crumbs into trash can	33
Crumbs are left from making sandwich	To keep counters and cutting boards clean		

