

Identify Stakeholders: These are the people that will interact with or be affected by the product that you design. Your design will affect all of these people's lives, and you need to consider them all in your design. Take the time out to make sure you know who these people are. This list can get you started:

- Who will use the product?
- Who will buy the product?
- Who will sell the product?
- Who will manufacture the product?
- Who will transport the product?
- Who will store the product?
- Who will maintain the product?
- Who will recycle or dispose of the product?
- Whom else the product will affect?

\mathcal{S} ME450: Information Gathering Worksheet

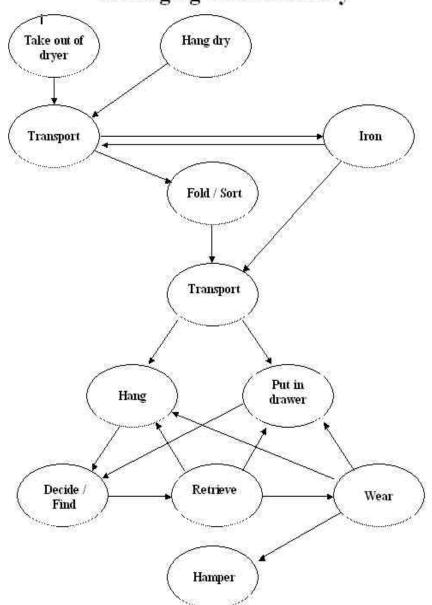
User: The person who uses your product probably has the most to lose or gain from your design. Remember that the user is often not like you, and s/he probably does not see the product from your point of view. You need to understand your users wants and needs as well as possible. Be systematic about it. Write down everything you know about your users. This list can get you started:

- What is the user's lifestyle and background?
- What are the user's expectations?
- How will the product be used?
- When will the product be used?
- How often will the product be used?
- What is the user thinking about while using the product?
- Is it possible to use the product in a way that was not intended?
- What are the user's limitations (cognitive, physical, etc)

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Environment: The environment that your product is used in can have a huge impact on design requirements. Often it is difficult to know a priori which aspects of the environment might affect your design. Temperature? Noise level? User distractions? You want to understand the environment as much as you can. Get some personal experience in the environment if possible. You want to be able to think like the user in the user's environment so that you can identify potential issues early in the design process. Talk to people involved, and get a sense for what the environment is like. Visit the place where the product might be used.

- Make an outline of the activities surrounding the environment where the product might be used. An example is shown below for a product that was designed to help with managing clean laundry:



Managing Clean Laundry



Outline of activities surrounding the use of your product:



Product Domain: You should understand what other products are available to people, what needs those products meet, and what needs are still unmet. Go to the store and look for other products that address your problem or similar problems. Take other products apart and see how they accomplish their functionality. What does your product need to offer to be competitive?

- Market survey
 - o List other products on the market that meet similar needs.
 - o How does the product fit in with these surrounding products?

- Reverse engineering
 - o List other products that have similar or analogous functionality.
 - How do similar products accomplish functionality?
 - o How do other products perform analogous functions in other domains?

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Information Gathering: By now you should have an idea of what kind of information you don't yet know and you need to find out. Make a list of how you intend to get that information. You may want to draw up a Gantt chart or a task list for each of the team members. How can you get the information that you need? Where can you look? Who can you talk to? Who can you talk to to find out whom you need to talk to?

- **User interviews**: Talk to people who could represent potential users (and other stakeholders) of your product. Who will you talk to? What kinds of questions will you ask?
- **Expert interviews**: Talk to people who know more about the product domain, environment, etc than you do. You may get questions answered quickly this way. Who will you talk to? What kind of questions will you ask?
- **Focus groups**: You may want to get a group of potential users together and discuss their needs and other issues as a group to save time and to bring out new information. Videotape the interaction. Look for problems and issues that people don't mention.
- **Study users**: Where can you go to watch users in their environment? Remember the IDEO video? Where do you plan to go to watch users at work? What things will you look for?
- **Personal experience:** What kind of personal experience do you plan to gain? Can you spend some time in the user's environment? Can you go through the processes in the problem environment and encounter the problem yourself? What kinds of notes will you take?
- **Product domain:** How will you find out what other products are out there? How will you compare products?