

Task Analysis

 usability.gov/how-to-and-tools/methods/task-analysis.html

Task analysis is the process of learning about ordinary users by observing them in action to understand in detail how they perform their tasks and achieve their intended goals.

Tasks analysis helps identify the tasks that your website and applications must support and can also help you refine or re-define your site's navigation or search by determining the appropriate content scope.

Purpose of Task Analysis

In their book *User and Task Analysis for Interface Design*, JoAnn Hackos and Janice Redish note that performing a task analysis helps you understand:

- What your users' goals are; what they are trying to achieve
- What users actually do to achieve those goals
- What experiences (personal, social, and cultural) users bring to the tasks
- How users are influenced by their physical environment
- How users' previous knowledge and experience influence:
 - How they think about their work
 - The workflow they follow to perform their tasks

When to Perform a Task Analysis

It's important to perform a task analysis early in your process, in particular prior to design work. Task analysis helps support several other aspects of the user-centered design process, including:

- Website requirements gathering
- Developing your content strategy and site structure
- Wireframing and Prototyping
- Performing usability testing


Types of Task Analysis

There are several types of task analysis but among the most common techniques used are:

- **Cognitive Task Analysis** is focused on understanding tasks that require decision-making, problem-solving, memory, attention and judgement.
- **Hierarchical Task Analysis** is focused on decomposing a high-level task subtasks.

How to Conduct a Task Analysis

Your task analysis may have several levels of inquiry, from general to very specific. In addition to market research, competitive analysis, and web metrics analysis, you can identify top tasks through various user research techniques.

UXPA's Usability Body of Knowledge  breaks down the process for decomposing a high-level task into the following steps:

1. Identify the task to be analyzed.
2. Break this high-level task down into 4 to 8 subtasks. The subtask should be specified in terms of objectives and, between them, should cover the whole area of interest.
3. Draw a layered task diagram of each subtasks ensuring that it is complete
4. Produce a written account as well as the decomposition diagram.
5. Present the analysis to someone else who has not been involved in the decomposition but who knows the tasks well enough to check for consistency

It's important to note that you need to decide to what level of detail you are going to decompose subtasks so that you can ensure that you are consistent across the board.

Examples

At a bare minimum to identify tasks, you can simply ask users what overall tasks they are trying to accomplish or how they currently accomplish the task.

What overall tasks are users trying to accomplish on our website?

- Trying to find a nursing home near you for an elderly relative.
- Trying to get information about options for treatment for skin cancer.
- Trying to sign up to receive an email notice when a payment is due.

How are users currently completing the task? People are completing that task using:

- Using a search engine
- Navigating through your site
- Using another site
- (Through some other means)