

**O**ne of the most important maxims in technical communication is “Know your audience.” But how can you be sure that you *really* know them? Whether you’re creating a Web site, writing a manual, or designing a user interface, you must be able to summarize the characteristics of your audience and understand what tasks they need to perform. It is important to conduct some basic user and task analysis to understand what format and content will work best for your users. If you follow that analysis with effective usability testing and make changes based on the results, you’re guaranteed to produce an effective product that both your users and your boss or client will appreciate.

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# How to Know Your Audience



Stephanie Carter/Stock Illustration Source

### Analyzing Users and Tasks

User and task analysis, audience analysis, and user-centered design are hot topics among technical communicators. Although we like to use these terms, it's difficult to define any of them precisely or even to discern the differences among them. Call your analysis whatever you'd like, but before you begin writing or designing, you should do enough research to know your user as if he or she were your best friend.

The "user" portion of the analysis means determining the common characteristics of your audience so that you can develop profiles of typical audience members. As a simple example, someone conducting user analysis for a washing machine manual might determine that 80 percent of the machine's users are women 30 to 50 years old who work outside the home. The "task" part of the analysis means determining that most users wash at least five loads of laundry each week, using the hot, warm, and cold temperature settings and sometimes presoaking the clothes.

### Asking the Right Questions

Before you start to research your users, take some time to consider all the questions you need to answer about them. The simple facts in the washing machine example typify the basic kinds of information that technical communicators glean from audience analysis. But you shouldn't stop there. If you dig deep enough, you will unearth invaluable information—the kind that will make your project a success.

In addition to the typical gender, age, and experience questions, research these areas.

#### User Profile

- Do your users have any biases against technology that will prevent them from using the product or reading documentation? Are they experts in other technologies who are reluctant to develop new specializations?
- Are they forced to use the product to accomplish their jobs? Would they opt to use it if given a choice?
- How long have your users been in their current jobs? What kinds of positions did they have previously?

- How many hours do they work each week? Are they salaried or hourly employees?

#### Task Profile

- What overall task are the users trying to accomplish with the product? Perhaps it doesn't have anything to do with the product itself; maybe the product simply allows them to get their jobs done so they can go home at the end of the day.
- What individual tasks do users *need* to accomplish with the product? What tasks would they *like* to accomplish with the product?
- In addition to using your product, what other tasks are the users responsible for during the day? Do they have to answer phone calls, research information, or perform other administrative duties that will reduce the amount of time they can use your product?
- What time and quality constraints are involved with the use of the product or the users' overall workday? How does each user's work environment affect the way he or she will use the product?
- How will your product affect existing work processes?

The answers to these questions are key to developing an accurate user profile and, eventually, the right product. For example, if your users have been in

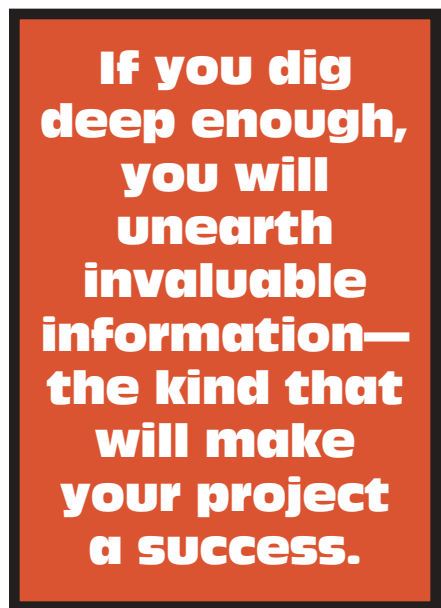
their jobs for a long time, they probably will be hesitant to change their processes and, unfortunately, to use your product. You might need to add some bells and whistles to entice them. In contrast, if your users are responsible for many additional tasks during the day, your main focus should be on functionality, ensuring that your product allows them to perform the required tasks as quickly as possible. Any common characteristics that you uncover about your users should affect design decisions later on.

### Gathering the Facts

Once you know what your questions will be, the hard part is over. There are many methods for gathering the answers to these questions—surveys, interviews, and site visits are just a few. This doesn't have to be a time-consuming process. You *can* fit this research into your schedule.

If you are a technical writer working for a software company, you're familiar with the early stages of application development—that period when there isn't much to document. Instead of wasting your time creating volumes of fiction about a product that you've never seen, e-mail surveys to members of your potential audience, or interview them. If there is no way you can speak to your audience directly, talk to product managers, customer service employees, or anyone else in your company who has direct contact with your users. You may only have time to meet with a few product managers, but that's a start. Maybe you'll be able to expand on that research the next time around.

If you have the opportunity, you can acquire a wealth of information from site visits. Observing your users in their work environment is the best way to understand how they interact with technology and to learn exactly what their needs are. If you have a technical support department in your company, another option is to "shadow" support calls to learn what problems your users are having with current products and thereby understand your audience better. After you hear users' voices on the phone, it's hard to dismiss a design issue or an unclear procedure as a "stupid user error."



### Adding It All Up

If you have the time to create a formal user and task analysis report, go for it. You can use the document later to support your design and writing decisions. The report is also a handy reference throughout the project and can be a great resource the next time you want to do user and task analysis.

There are no real rules for organizing your analysis document. Just make sure that you include a thorough description of the research that you conducted and your conclusions based on those findings. Try to incorporate as many statistics as possible—for example, the number of people you surveyed, how many responded, and the categorized results. If you don't have time for a formal report,

you'll still be able to use this knowledge to think about your project from a completely new perspective.

### Continuous Validation

If you conduct a thorough analysis of your users, you will feel comfortable with the product that you create. But validating your work through usability testing provides further assurance that your creation suits its users. Usability testing also helps to pinpoint any design or textual issues that are confusing to users.

The timing of your test is critical to its success. Usability testing is gaining popularity and is accepted as standard practice among many companies. But, unfortunately, most people conduct the test after a product design is frozen. Problems found during the test are then ignored or serve as catalysts to stop a project or initiate a redesign, at a huge cost to the company.

A better approach to usability testing is to integrate tests into the design and development process right from the start. Your product should not be completely designed before you begin usability testing. If possible, create generic prototypes and test them out on potential users. These prototypes can be as simple as some paper sketches of a help file or Web site structure. Another idea is to ask users to categorize your information for you. You can do this by writing categories on index cards and then asking users to group the cards into the piles that make the most sense to them. This method is great when you're trying to determine the correct categories for a table of contents or a homepage.

As your design develops in complexity and begins to take shape, continue to "ask" users for their opinions, and be willing to change your product based on the results.


### It Really Works

One of my past projects was to design an application to deliver work-related news to customer service representatives. I conducted user and task analysis and, as a result, gained a thorough understanding of the communication methods and hierarchies in the service department. By watching the representatives perform their daily tasks, I learned how hectic

their days were and how important time and quality were to them. Through surveys and interviews, I also learned that most of the representatives were comfortable with the mainframe and their former processes and were reluctant to trust Web-based technology.

Armed with facts from the analysis, a co-worker and I designed a simple application that was well received by users. We first created paper, then HTML, prototypes and showed them to representatives from our user group, making changes based on their feedback. When we had an operational prototype, we worked with our in-house usability lab staff to conduct a formal usability test. We made some changes based on the test results, but because we had involved the users early on, the testing revealed only minor problems.

### Taking the Plunge

Regardless of the medium in which you are working (paper, the Web, or interface design), any usability techniques you can incorporate into your development process are steps in the right direction. Each time you bring a user into your work processes, you'll become more confident and learn new techniques. Eventually, when you ask yourself, "Do I *really* know my audience?" you'll be able to respond with a confident "YES!" 

### SUGGESTED READINGS

Hackos, JoAnn T. and Janice C. Redish. *User and Task Analysis for Interface Design*. New York: Wiley, 1998.

Rubin, Jeffrey. *Handbook of Usability Testing*. New York: Wiley, 1994.

Salant, Priscilla and Don A. Dillman. *How to Conduct Your Own Survey*. New York: Wiley, 1994.

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