



Communicates  
poorly

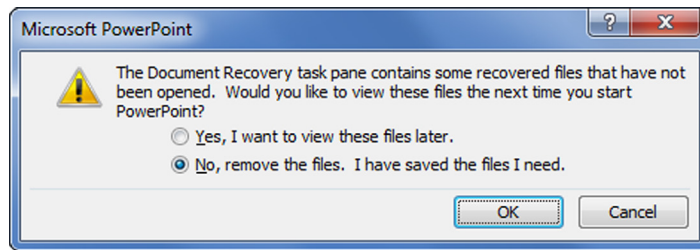


FIGURE 1.58

In contrast, I can't possibly answer without seeing the files in question.

Unintuitive UIs often ask questions or present choices that are unnecessary or poorly presented. Well-designed UIs ask the right question once, at the right time and place, and provide enough information for users to answer intelligently and confidently.

## A MODEL FOR USERS

**You need to understand your target users with enough detail so that you can make good design decisions on their behalf.** Ideally, your team will do plenty of user research and create models, called *personas*, for your target users; I describe these in detail in Chapter 5. Unfortunately, it isn't always practical to build these models based on research. Many teams don't have the time, budget, research talent, or even customer access.

**In this section, I will build a general model for users, to give you a better understanding of how real users are likely to behave. Understanding this model will help you design for that behavior.** Yes, all target users are different and have different knowledge, needs, and preferences. But instead of focusing on their differences, let's now focus on their similarities. These user attributes are fairly safe bets. Your target users' characteristics might be different from what I have outlined here, but unless your research shows otherwise, don't bet on it.

### What users know

- Users know their goals but not how to achieve them. They know the task destination but not the starting point or the steps to get there.
- Users know what to choose at a high level but not necessarily the specific details. Assume that they know only the most essential data from memory and need help with everything else.
- Without prior knowledge or experience, users don't know what your program does, what tasks it performs, how it works, or that they can trust it. They have questions and concerns that you take for granted.

- Users are smart, but they might be focused on other things. “Dumbing down” your program is disrespectful and not likely to solve any real problems.
- Unless they have been trained or already know what to do based on prior experience, users know only what your program tells them. If your program fails to communicate important information, users will have to discover the information through experimentation, research, or training.
- Unless you are designing features clearly targeted at experts or novices, assume that your target users are efficient beginners in terms of computer experience, domain knowledge, and vocabulary. That is, they know the basics and want to work efficiently, but they don’t have much experience and have very little memorized.
- Unless they use your product frequently, assume that your target users will routinely forget their username (unless it is their email address), account number, and password. They might not even remember whether they have an account and may sign up for a new one unnecessarily.

**Bottom line:** Make it clear what your program does, how to do its tasks, and what the options are. Don’t assume that users have anything beyond the essentials memorized. Don’t take users’ trust for granted; show that your program will achieve their goals. Make it easy for users to sign in and recover forgotten account information.

## User motivation

- Users are motivated by value—where the benefit of a task clearly exceeds the time and effort required. If that is not the case, nothing else matters, because users won’t be sufficiently motivated to perform or complete the task.
- Different target users have different levels of motivation:
  - If users have high motivation, they will do whatever it takes to get the task done. Users are likely to be highly motivated if a task is required for their job or there is financial incentive to complete the task.
  - If users have low motivation, they will make a modest effort to perform the task but abandon it if they can’t figure it out easily and they don’t believe it is worth continuing.
- Unless you have research data to the contrary, assume that your target users have low motivation for most tasks.

**Bottom line:** Users are motivated by value, so always take the user’s motivation into account. Make using your UI worth the time and effort.

## Top questions users have when looking at a UI

- What does this UI do? Am I even in the right place?
- What am I supposed to do here?

- Is this going to do what I want? Will it meet my needs? Can I trust it?
- What is the difference between these options? Which one should I select?

Bottom line: Design your UIs so that users can easily answer these questions quickly and confidently.

## How users figure things out

- Users will assume that your program has design patterns and interactions that are standard for its environment.
- If users are familiar with a similar task from another feature or other program, users will assume that the current feature has a similar interaction.
- Unless they perform a task frequently, users won't remember exactly how to perform it from memory and will have to relearn it each time. If your UI is well designed, that relearning will be trivial and hardly noticeable. If the UI is nonstandard or inconsistent, users won't remember the next time and will have to relearn it.
- If an action is discoverable, looks relevant, and has a clear affordance, users will try it right away.
- If an action doesn't have affordance, users will try it only after eliminating all obvious alternatives first.
- If an action isn't discoverable, novice users won't find it.
- If users discover an unusual interaction or control, they will form a hypothesis as to how it works and perform a quick experiment to confirm. If their hypothesis is correct, they will consider interaction intuitive (and will be delighted that they figured it out). If not, they will consider the interaction unintuitive and poorly designed.
- Only the most motivated users bother with online help and only after exhausting all other possibilities first.

**Bottom line:** Simple, standard, intuitive, self-explanatory, and consistent works best. Good help can't save a poor UI.

## What users will and won't do

- As Steve Krug points out in *Don't Make Me Think!*, users don't read, they scan. That is, they don't read UIs completely for comprehension; rather, they scan to find what they are looking for quickly.
- Users don't read large blocks of text or long instructions. They do read control labels for clicking on them.
- Users don't optimize, they satisfice (again, from Krug). That is, given many options, users act on the first promising option they find.

- Users will scroll long pages, but only if they have a reason to. (Mobile UIs are an exception because users are used to scrolling them.) Users won't scroll to see if there is anything worth scrolling for—so the motivation to scroll needs to be visible without scrolling.
- Users won't memorize anything.
- Users don't learn how things work, they muddle through. (Another one from Krug.)
- Users won't reveal sensitive information without a good reason. Nor should they. They are likely to abandon a task if sensitive information is required without a clear justification.
- Users won't register, create an account, or sign in unless they are really, really motivated. This is doubly true when users are typing on a touch keyboard.

**Bottom line:** Users are focused on their work, not on learning how to use your UI. They are in a hurry and don't want to take the time to learn, memorize, or perform unnecessary steps.

## What users dislike doing

- Creating accounts, signing in, and retyping CAPTCHAs.
- Waiting or other forms of wasting time.
- Unnecessary typing or other interaction.
- Reentering previously entered information.
- Providing apparently unnecessary information, especially if sensitive.
- Unnecessary repetition.
- Having to start completely over.
- Making easily preventable mistakes.

**Bottom line:** Users' time and effort is precious, so don't waste it—especially on mobile devices.

## How users lose confidence

- Users need to gain confidence as they perform a task and are reluctant to proceed with a task or make commitments without building sufficient confidence. Without confidence, users may restart a task or look for alternatives.
- Users need to know where they are at each step in a task. They need clues to confirm that they are in the right place.
- Users need to know how to make the next step confidently. The likely next step should always be obvious.

- Users lose confidence if:
  - They can't find what they are looking for.
  - They don't understand the instructions, options, or other UI text.
  - They aren't clearly making progress toward their goals.
  - The results don't meet their expectations.
  - They feel like they are being taken advantage of, such as with poorly chosen defaults and opt-out options, along with unreasonable costs (shipping and handling or "convenience" fees).
- After performing an interaction, users need clear feedback that the action was successful or unsuccessful.

**Bottom line:** Users won't complete a task if they lack confidence. Don't take users' confidence for granted; instead, make sure your UI builds it.

Again, these are pretty safe bets for most users. It's surprising how often user research boils down to discovering these basic observations about users.

Use this general model as a starting point to evaluate your assumptions about your target users—whether explicit or implicit. Any discrepancies suggest a problem.