

# USABILITY TESTING WITH

CAN I  
USE  
THIS?

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**I**nspired by my wife while she was working as a usability analyst, and by “Test Mobile Applications with I SLICED UP FUN!” [1] by Jonathan Kohl, I have developed a mnemonic for usability testing: CAN I USE THIS?

Developing test ideas represents the essence of our profession. When faced with unfamiliar contexts, it can be difficult to come up with ideas. I created this approach to help foster idea generation when undertaking usability testing.

When using this mnemonic approach, the order of the letters and their corresponding ideas has no particular importance other than making an acronym that is easier to recall. So let’s break down each letter of CAN I USE THIS? into specific test ideas.

## Dissecting Each Letter of CAN I USE THIS?

### C: COMPARABLE PRODUCTS

A very good source of test ideas is a comparable product or products. A fabulous explanation of what’s comparable has been written by Michael Bolton. [2] These ideas can be particularly valuable for usability testing.

When testing a new online banking solution for a client, I would often refer to solutions used by other banking institutions. It is worth researching competitors and then using their solutions as a benchmark. It can be as simple as comparing the number of clicks it gets for a particular process with the number your product gets.

If you are testing a product that is new to the market and you cannot determine another that is comparable, don’t get hung up on the product as a whole. Break it down to comparable features, functions, and themes.

Other Cs worthy of note:

- **Compatibility:** While issues with compatibility may not be technically defined as usability issues, I have heard many a user complain about the difficulty in navigating on a website, filling out a web form, or issues relating to a specific version of a browser.
- **Context:** Be aware of the project environment and technical environment. How quickly are your deadlines approaching and how important are they? How much importance is put on usability issues in your project? What platform is the product being developed for? These are all questions that will assist your testing.

### A: ACCESSIBILITY

Usability and accessibility are two different things, but they do complement each other. The accessibility of a software product is extremely important. For example, government software products have to conform to legislation that governs how accessible software needs to be to its users.

The intended user base also will drive the accessibility requirements. A website for a particular blind society would be a good example of one that should meet certain accessibility needs. Can a user expand the size of the text? Are there audio recordings for areas of lengthy text? These are just some of the ques-

tions you will likely ask yourself while testing for accessibility.

There’s one more A I’d like to mention:

- **Accuracy:** When conducting testing or evaluating the software while others are, it’s a good idea to note overall user accuracy. How many mistakes did you or the users make? Were these mistakes serious and to be avoided at all costs? This information can help drive product improvements.

### N: NAVIGATION

Navigation is typically the most important when assessing usability.

There are many different elements to navigation, including movement through a particular flow and being able to know where you are at any point in time. For example, when testing websites, make sure there are no orphaned pages that require the use of a browser’s back button.

Think about how your users will be utilizing common computing devices. Does the product work best via mouse clicks or do the links need to be emphasized for finger taps on a mobile device? And if a user wants to leave the current web page, is there a simple way to return to the site’s home page?

Other Ns you may wish to consider:

- **Needs analysis** is a formal process that focuses on the human elements of product requirements. This is a valuable exercise to undertake when attempting to understand a user’s needs and can be an excellent way to create usability test ideas.
- **Nielsen, Jakob:** [3] If you’re looking for more ideas and lessons about usability, research Jakob Nielsen. Known as the guru of web page usability, his work spans more than twenty years of research and is well worth investigating.

### I: INTUITIVE

Intuitive is often used as a synonym for easily learned. For example, stakeholders often ask if the product is intuitive or whether a product is intuitive enough.

We all learn in many different ways, so testing intuitive behavior is difficult. Instead, focus on intended user demographics and use this information to drive your perspective on how to test the product. While this seems obvious, you would be surprised how many times it is forgotten during the early design phase of a product. Identifying intuitive product issues late in a project lifecycle usually results in scheduling disasters!

### U: USERS

This is where the whole process begins, and focusing on user demographics is critical. Just like the importance of the one ring in *The Lord of the Rings*, this is the one letter prompt to rule them all. How can you test the usability of a product if you don’t know who the users are? Short answer: You can’t. And knowing the users is merely the beginning—you need to understand them, as well. How large are those input buttons used on mobile applications for weightlifting programs? I hope

those big fingers can tap them easily!

Know your user, understand your user, and practice testing personas. [4]

## S: STANDARDS

You might not be aware of usability standards, but included in the International Organization for Standardization's requirements for the ergonomics of human-computer interaction is ISO 9241-11, [5] which attempts to explain how to identify necessary information for specifying or evaluating usability in terms of measures of user performance and satisfaction.

The best thing a standard in usability can provide is consistency in use of products and features. It is far more enjoyable and easier to use a product that is consistent with its previous version or other similar products. Microsoft and Adobe have gone to great lengths to ensure that applications that are part of a suite operate similarly. This consistency can reduce technical support costs and improve user satisfaction.

## E: EMOTIONAL RESPONSE

This is a very important element of usability. It can make or break a product, especially in the world of mobile applications.

Imagine your friend has just downloaded a new application to his mobile device and his emotional response is one of anger and frustration. Would you then download the same application? Would your friend recommend it to others? I think not.

A good practice is to map out the product and its features against areas of use, and within those areas, the types of emotions that users would commonly have. For example, bidding on online auction sites can create user anxiety, especially if it's with an unfamiliar seller. To test the usability of that process, you may wish to simulate that anxious feeling, which could assist in your evaluation of its usability.

You will never be able to anticipate all emotional responses, but at the very least keep the idea in the back of your mind while testing.

Other Es worthy of note:

- **Efficiency:** How efficient is the product at achieving what it was designed and developed for? Achieving a goal is one thing, but achieving it in a fast, clear, and efficient manner is another. You can compare the time it takes users to complete a task with other users and other products.
- **Errors:** Along with accuracy, how many errors do you or the users make while trying to execute a particular process or flow within the product? Are the errors handled well by the product? Are they easily understood by the user?
- **Ethnography Research:** This is a qualitative research design that explores cultural phenomena. It has become more common in user experience design methods in recent times.

## T: TRUNK TEST

[Taken from Steve Krug's *Don't Make Me Think: A Common Sense Approach to Web Usability*] [6] A trunk test

specifically relates to the navigation of a web page, but it can also be used as a tool within other products by simply adjusting the user elements you are assessing.

The title comes from the analogy of being blindfolded and stuffed into the trunk of a car, being driven around for a while, then being freed. The task is to assess where you are by asking a series of questions. For the usability test, choose a web page within the site you're testing and print it. Hold the paper at a distance of approximately an arm's length away and try to locate the following:

- Site ID (What site is it?)
- Page name (Where am I?)
- Sections (Are the site's main sections outlined?)
- Local navigation (What can I do next?)
- Where you are (Is there a "You Are Here" label?)
- How you can search (generally for larger sites)

Once you are satisfied that all the elements can be located and your questions can be answered at a glance, you can be reasonably comfortable that the web page has a workable and user-friendly navigation system.

Other Ts you'll want to consider:

- **Training:** How much training are the users going to need and how complex will that training be? Training can require a significant amount of energy, time, and money.
- **Tools:** There are many sophisticated tools that can assist with your testing. For web applications, I have used Firebug's and Chrome's element inspection to make quick updates to HTML tags in order to change page headings, button names, and so on.

## H: HEURISTIC EVALUATION

A heuristic evaluation is an inspection method that assists you in identifying potential usability issues so they can be addressed as part of the iterative process. [7] While testing, you examine the product against a pre-defined set of usability principles (also known as heuristics).

The most common set of usability heuristics was developed by Jakob Nielsen. [8] Nielsen's ten usability heuristics should provide you with all the coverage you need to get started:

- Visibility of system status
- Match between system and the real world
- User control and freedom
- Consistency and standards
- Error prevention
- Recognition rather than recall
- Flexibility and efficiency of use
- Aesthetic and minimalist design
- Help users recognize, diagnose, and recover from errors
- Help and documentation

Yet another H to consider:

- **Hallway Testing:** This method is particularly good early in the design process to highlight critical issues. This pseudo-random approach is analogous to picking

people to test your product as they pass by you in the hallway. Select a few random people to use the product and only provide them with basic instructions. This may be the best way to truly test how new users will react to the product under development.

## I: INSTRUCTIONS AND HELP TEXT

Product instructions in the form of user documentation or help are a valuable element to any product. It is vital to assess if this content is usable and has a positive impact on a user's experience.

When instructional aids are too complex to understand, the result can be worse than a product without them. By putting yourself in a user's shoes and demographic, you'll be able to assess if the instructional content meets the needs of the intended audience.

## S: SATISFACTION

Once you have spent some time testing the product, stop and reflect. How satisfied are you with your use of the product? Would you want to use the product if you were a potential user?

Particularly with e-commerce sites, a user's level of satisfaction with the buying process can be just as influential as the level of satisfaction with the actual product being bought. Satisfaction drives return traffic and the building of positive reputations. Alternatively, a bad user experience can spread like wildfire doing more harm than good.

## Questions

The question mark is officially a part of this mnemonic. Questions are the cornerstone of our profession, and, as testers, we should be constantly questioning. Make sure any questions you encounter are asked—and subsequently answered—by the appropriate people. When using this mnemonic, use the question mark as a reminder that there are no stupid questions. Even the simplest of questions can save extensive amounts of energy, time, and money.

## Summary

This is in no way an exhaustive list of areas to focus on when testing a product for usability. The use of a mnemonic is simply a tool for test idea generation and can be expanded or simplified as needed. Take it with you from project to project and use it as a reminder of potential usability issues even if your focus is not solely on usability. **{end}**

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Sticky  
Notes

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