box UK

White Paper

Ten Common Usability Testing Mistakes

Providing you with:

- ✔ Common pitfalls to avoid
- ✔ Best practice advice
- ✔ Real-life examples and research

Introduction

Providing powerful insight into what is and isn't working for your users, usability testing is right at the heart of user experience design. Executed well, it can require relatively little outlay and deliver great return on investment. Executed badly costs can spiral with no conclusive results. So, what common mistakes should you avoid?

Recruiting unsuitable participants

Your setup is perfect, the test plan is well written and the client is happily drinking a cup of hot tea in the observation room. What could go wrong?

Well, perhaps most significantly, the quality of your results.

It's important that the right people are chosen for testing. You achieve this by conducting pre-testing research about the users of the site or app to be reviewed, from surveys and statistical analysis to call centre ethnography and user stories. All of these will help you identify the right demographics and write a better test plan.

Do not assume that an equal split of sex, nationality and ethnicity will suffice. It's unlikely your website audience is split this way and many usability problems are universal. For example, in a recent project of our own, using insights derived from research allowed us to more accurately define participant criteria:

Our research told us an estimated:

- 75% of the website's users were female

- 98%were based in the UK

- 85%were between 18 and 35 years of age

- 75%were regular internet users

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Which informed our recruitment criteria:

- 70% female and 30% male

- 3 participants aged between 18 and 24

- 3 participants aged between 25 and 29

- 3 participants aged between 30 and 35

- 1 participant aged 36 or over

Remember, your results are only as good as your participants and, if these participants are not representative of actual users, you could likely end up being led astray.

Tips

- Conduct pre-testing research to understand site/app users

- Map recruitment criteria to user demographics

- Save time and money by maintaining a participant database so you can ask suitable participants back in future

Not testing early and often during the project lifecycle

Usability testing, unfortunately, has a reputation for being expensive so it's tempting to run only a few laboratory testing sessions at the end of a project instead of conducting testing regularly, taking advantage of the various lightweight methodologies available to you.

Method	Cost	Description	Results
Guerrilla testing	*	Asking members of the public to complete tasks. Low cost. High number of tests	Quantitative & qualitative results. Unpredictable
Unmoderated remote testing	**	Participants have no contact with a facilitator and complete tasks in their home environment. Low cost. High number of tests	Quantitative results. Slightly unpredictable
Remote testing	***	Participants test remotely. Sessions are run by a facilitator. Similar costs to office-based testing. Sessions can be watched live	Qualitative results. Heavily reliant on network connection
Laboratory testing	****	Participants test in the office and sessions are run by a facilitator. They can be watched live	Qualitative results. Most likely to have more statistical validity

> ## "Fixing a problem after development rather than before is 100% more expensive."

IEEE, 'Why Software Fails'

Industry experts disagree on the exact number of participants to use for optimal accuracy and return on investment (see 'References') although, naturally, the more users that you are able to test, the more confidence you can have in the results.

Where the experts do agree is that even with just 5 – 10 users you can deliver incredibly valuable insights, at very low cost. Consider also that testing with even just a few users (rather than none!) will always be cheaper in the long-run than not catching errors or usability issues early in the development process.

Our own experience has shown that a mixture of quantitative and qualitative testing throughout the project lifecycle produces better results again due to the greater number of sessions conducted and more accurate deliverables from discovery, design, development and testing phases.

For example, in a recent project we tested:

HTML Prototype	Sessions	Setup
Early draft	5 facilitated sessions	Laptop, voice recorder, meeting room on client's premises
Version 2	10 unmoderated sessions	3rd party testing solution
Version 3	5 facilitated sessions	Laptop, meeting room, observer at Box UK's London office

As with all user centred design activity, the costs associated with testing are relatively one-off but deliver ongoing returns; so the more spent on testing the better the final product is likely to be, with a greater chance of success, user satisfaction and return on investment.

Tips

- Always test! Even a sample size of 5 users can deliver valuable insight

- Combine quantitative and qualitative testing for best results

- Balance budget against accuracy required to determine appropriate sample size

Following too rigid a test plan

Usability testing sessions are notoriously unpredictable and relaxed participants will say what they think and navigate freely. This is natural; it mirrors their normal behaviour, so you should encourage it. For example, if someone starts talking about a competitor site you should take them there. Ask them why they do and don't like it, and how it compares to the site being tested. This 'extra' feedback can be highly insightful. Refrain from thinking, "I have three more questions to ask and not enough time". Yes, you may have to drop a question but it's worth it if the insight is unique.

So be flexible. Allow for additional questions and prioritise. You'll need to keep an eye on the clock and your test plan throughout the session and if you are running out of time or the participant has unwittingly answered an upcoming question you may need to skip it. Try not to stop the session temporarily while you study the test plan so as not to disrupt the session.

Also make sure you've included the following details in your test plan:

- Participant details–full names, session time and preferences
- Question priority ratings–high, medium and low. Low priority questions can be skipped if sessions are running over schedule
- Script–most facilitators will not read it word for word but it's a good reference aid

A well written test plan can be the difference between a great session and a stop-start session so be prepared.
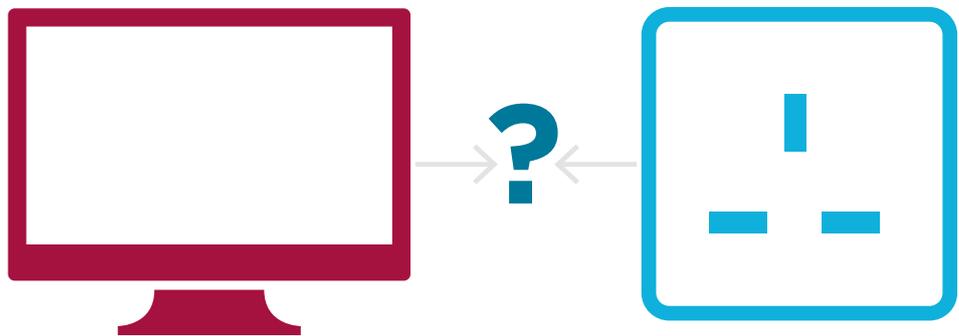
Tips

- Be flexible – non-scripted dialogue can add serious value to results

- Be prepared – your test plan is key to your success

Not rehearsing your setup

Failing to check your setup thoroughly is probably the most common mistake you can make so ensure you rehearse, rehearse, and rehearse again. It's easy to assume the setup hasn't changed from the last time only to discover a missing cable or a new PC without software (yep it happens!).

Tips

- Put your setup through a practice run two weeks before the testing sessions so serious problems can be rectified

- Check again a couple of days before hand – it's better to find a last minute glitch now than 30 minutes before the first session

- Test the first recording to ensure it has recorded correctly– recording all sessions without audio is bad news

5 Using a one-way mirror

One-way mirrors are used in usability labs so observers can watch without being seen. However, they often create an unnatural environment for participants and risk influencing feedback through the '**observer effect**'.

If you are using a one-way mirror setup, make sure you look out for the following behaviours and take time to reassure and relax participants:

- **Trying to please** – the participant struggles to use the website but their feedback remains positive
- **Becoming time conscious** – the participant wants to impress and rushes tasks
- **Making mistakes** – the participant feel sunder pressure and makes more mistakes
- **Looking at the mirror** – the participant is distracted and isn't fully focused

Tips

- Instead of a one-way mirror try relaying video and audio footage in a distant observation room – this distance allows observers to leave the room whenever they want and talk without being overheard or unnerving participants

Not meeting participants in reception

It's natural for participants to be a little nervous so it's a good idea to meet them in reception and make them feel welcome. Thank them for coming and ask them how they arrived or whether they'd like a hot drink. A friendly face will relax them and hopefully result in a great session.

Tips

- Relaxed and comfortable participants will deliver the best results – make sure they feel at home

7 Asking leading questions

Good facilitators will ask the right questions, follow up on an insightful comment and observe the participant's body language.

It's easy to ask "Was that easy?" or "Did you not click that button because it's hard to see?" and hear "Yes, I think so" so beware the leading question. The response would be more accurate if you asked more open questions such as "How did you find that?" or "Was it how you expected?" It's also common for participants to ask "Am I doing it right?" or "Am I in the right place?" so, again, make sure not to lead them by switching focus and asking "What do you think?"

Finally, remember that body language can be as insightful as a comment. Common displays of emotions include frowning or grimacing, fidgeting, excessive mouse movement, sweating and hand to mouth gestures. To ensure these emotions are not misinterpreted you should follow up with questions or ask if they'd like a break.

Tips

- Be conscious of tacit behaviour such as body language and question this for added insight
- Ask open, non-leading questions for optimum results

Interrupting the participant

We've all done it. You think the participant has finished talking or doesn't know what to say and you interrupt. Try and give the participant time to think and remember that you aren't learning if you are talking. Don't forget, it also gives you time to review your test plan and keep an eye on the clock!

Tips

- Silence is golden – give participants the space to vocalise their thoughts

Undertaking two roles in a testing session

It's very difficult to run a successful usability testing session if you're both facilitator and observer. A facilitator should be fully focused on the participant, test plan and clock while the observer should be making notes, monitoring analytics, and, if necessary, identifying improvements for the next session. Without this you run the risk of:

- **Fatigue** – facilitating more than four hour - long sessions in one sitting is tiring and can impact results. Having two people on the tester's side enables alternation between roles and keeps them fresh

- **Unnecessary delay** – not being able to analyse results as you go (as you can when both roles are covered at the same time) can cause a delay in the presentation of final results

- **No real - time interaction between facilitator and observer** – observers will see things the facilitator won't which can add value to your results

Tips

- Make sure to use two different consultants in the role of facilitator and observer wherever possible

- If it is absolutely necessary for one person to undertake both, use a voice recorder or webcam so you can do the observation after facilitating rather than attempting both at the same time

Not considering external influences

You should try to avoid the following external factors so as not to detrimentally affect results:

- **Building work** – such as installing technology, repairing the roof or moving office furniture
- **Loud office music** – office speakers may be in close proximity and picked up by the microphone
- **Noise from the observation room** - laughing and talking may get picked up by the microphone or be overheard by the participant
- **Movement in the observation room** - in a one-way mirror environment turning on an observation room light can make the observer visible
- **Interruptions** - whether colleagues mistakenly interrupting sessions or noise from mobile phones (yours or the participants')
- **Double booked testing/observation rooms -** for example, rooms not being formally booked

Tips

- Inform your office manager a few weeks before testing to prevent double bookings and avoid any pre-scheduled office maintenance work
- Send out an office email before testing to prevent interruptions and noise
- If you use a one-way mirror, ask a colleague to sit in the observation room beforehand to test the impact of noise and light to ensure there won't be disruptions.

Conclusion

The benefits of usability testing are consistently demonstrated through industry research, making it a crucial consideration at the outset of any project. With a wide variety of approaches, tools and techniques available, usability testing is accessible to all, regardless of budget or project size. It can be employed at every stage of the product lifecycle to improve results, from a review of an existing system that may be underperforming to the tree testing of early category and navigation ideas. By avoiding the mistakes highlighted in this white paper you'll be better placed to take advantage of the insights and opinions of real users, helping you produce higher quality products that support your business goals.

At Box UK we understand the importance of regular testing; adopting an incremental and iterative approach that integrates tightly with our Agile software development culture. Applying Lean techniques through short sprints not only allows us to continually improve the product, but also ensures that what's delivered is closely aligned with what users want, expect and need. To find out more visit our **Usability Testing** page, and **get in touch** with a member of our team to discuss how we can help you and your business.

References

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