IMS564 | USER EXPERIENCE DESIGN

TRANSITION: FROM DESIGN TO DEVELOPMENT AND BEYOND

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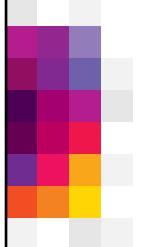
Concept Exploration

- Concept is generally the word used to describe an **abstract idea**, such as happiness, collaboration, or efficiency.

- In the field of UX design, concept is also used to refer to **design elements** that are meant to represent one or more abstract ideas to the project team or a potential user.

- A conceptual design element can be
    - visual (for example, a photo of a machine to represent the concept of efficiency) or
    - text-based (for example, a short collection of sentences written to express a company's focus on efficiency, using words such as timely and responsive).

- Concept can also mean the exploration of wireframes, visual design mock-ups, or rough prototypes that are meant to express the general messaging on the site.

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Concept Exploration

- Concept exploration typically happens **early in the design process**, after you've defined your user groups but before you've gotten into the detail of each page or screen.

- The research can provide inspiration for designers and reduce some of the risk of bringing a new product to market, because you'll be able to hear (and then plan for) the kinds of reactions you may get from potential users.

The primary purpose of concept exploration is to understand the kinds of responses and ideas that are elicited from your user groups when faced with a set of design elements.

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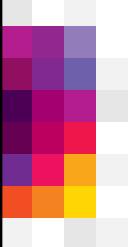
Concept Exploration

- Concept exploration may consist of **one-on-one discussions** or may take place **in a group but include some individual activities** aimed at gathering and discussing a variety of viewpoints. The latter can be set up like a focus group, with a portion of the time dedicated to concept-testing activities, followed by a group discussion.

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Visual Design, Development and Quality Assurance (QA)

- In some cases, working with a design or development team that receives your project-based work product is seamless.

- Sometimes, downstream work partners rely on you to answer questions, provide input, and help them with some of the design concepts they are working on. (This may even sound a lot like prototyping to you!)

- In these work environments user experience design is already being embraced, and the team probably has had the foresight to give you the time to perform these consultative tasks.

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Visual Design, Development and Quality Assurance (QA)

- In many organizations, however, the roles of user experience designers, information architects, interaction designers, and so on are still very new.

- How to manage these roles can be unclear, and the decision about how engaged you should be may fall upon someone who does not fully understand user experience design.

- There are other cases where you may find that the visual design or development team is the king of the company and their projects, and you may find it challenging to remain engaged.

- You may find yourself trying to break down walls just to be able to review the work and ensure compliancy.

Note : This is not always the case, but it does happen.

Visual Design, Development and Quality Assurance (QA)

- Many projects won't have the luxury of a quality assurance team.

- In a perfect world, every project would have such a team; however, in reality QA is not always available. Sometimes, developers are performing QA themselves, as they develop.

- In addition to making you cringe, knowing this should make you try even harder to work with developers.

- It is especially true in many small companies: QA is a luxury.

   QA is "performed by everyone, but especially the developer," says Troy Lucht, Founder of olive Tree Promise (http://olivetreepromise.com/).

Visual Design, Development and Quality Assurance (QA)

- Although your user experience design work product may not include creating test scripts, in some cases you can test against the wireframes and annotations you created to ensure that all elements are accounted for and all the defined calls to action are functioning correctly.

- This situation is not perfect, but it is an approach that can be useful when QA does not exist.

- The key takeaway here is that user experience design does not end just because you have turned over your work product and performed a knowledge transfer.

- Your role may temporarily assume more of a consulting nature, but you are far from done.

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Usability Testing

- The testing approach you take will affect the kinds of skills you need, the type of access to users that is necessary, and the space and software required to conduct your research.

- Include more than one approach if you have the time and budget—each will have its own strengths and weaknesses, and combining two approaches helps you create a full picture.

- There are many elements of your design you can test with users. However, if your goal is to understand and improve on a user's ability to successfully complete key actions in your product—like, say, adding a product to a shopping cart and then checking out—you'll want to focus on usability testing.

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Usability Testing

- Usability testing is one of the most frequently used UX design testing methods. It's also the most well known among those who aren't UX designers themselves, so your business stakeholders and project team may already be familiar with it.

- The concept itself is elegantly simple:
  - create a prioritized set of tasks for your site,
  - ask some users to perform them, and
  - note where they have issues and successes.

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Usability Testing

Usability Testing vs. User Acceptance Testing

Some people in your organization may have the misconception that usability testing only happens near the end of development or beginning of deployment, when there's a functioning version of the site or application—perhaps something in beta mode. This impression may also be related to the common practice of conducting user acceptance testing (UAT) at this later point. The similarity of the names can cause the two to be confused.

For applications that go through a formal QA process, UAT is one of the later stages of testing, and is rarely conducted on actual users. The main purpose of UAT is often to serve as a final check on whether the application has met the functional requirements set out by stakeholders; it can also catch any errors or bugs participants report.

Although UAT can bring out usability issues, it should not be relied on as the only method for catching them on a project. Because it occurs so late in the process, changes based on feedback from UAT are much more costly. It's far better to catch major issues earlier in the process, before much time is spent in development. Usability testing is designed to provide more true-to-life performance information earlier in the process.

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Usability Testing

- There are two general types of usability test:
  - A **summative test** looks at an existing system, either as a prelaunch check or an analysis of a site you'd like to improve. It can make for a great introductory exercise into UX, and forms the basis of the corridor test.
  - Main focus within the design process is on **formative testing**, conducted on an unfinished system to gain insight on how to improve the design. User feedback sessions give you the opportunity not only to conduct formative tests, but also to expand your knowledge of users.
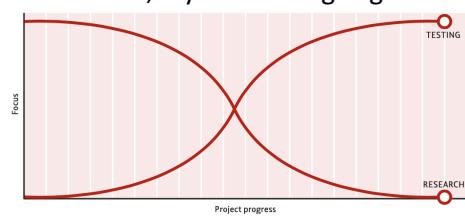
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Usability Testing

- If you didn't have much time to research in advance, try scheduling regular dual-purpose sessions throughout the project.

A *Use a dual-purpose user session to conduct extra research, phasing in usability testing as you generate designs.*

- Early in the project, use these sessions for extra research, then as you begin to generate designs to test, phase out research and phase in formative usability testing.
- By the end of the project, when your design is nearly complete and you're confident in your knowledge of users, use the session for usability testing alone.

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Usability Testing

1. WHAT TO TEST
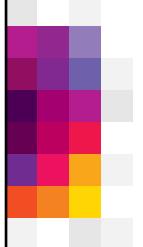
Note : What you test will depend on when you test.

- You might want to begin a redesign project with a summative test of the existing site, and as you start to develop the design, run formative tests with your prototype.

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Usability Testing

1. WHAT TO TEST

- Once you've selected the designs you want to test, write a test script containing the tasks you'll ask users to perform.

- Your tasks should be representative of real user activity and phrased in an unbiased way.

- In particular, watch your verbs. A biased task like "Search for the cheapest flight to Europe" will send users straight to the search box, while in real life they may prefer to browse through the site's navigation. If possible, read your tasks aloud to a friend to check that they make sense to a typical user.

- As a rule of thumb, allow three times as long for the test as it takes you to run through the tasks yourself.
    - This allows for administration time and the slower pace of your participants.
    - Aim for between 15 minutes and an hour in total.
    - Shorter tests aren't worth the hassle, but longer tests become tiring.
    - If in doubt, choose several short tests over a few long tests.

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Usability Testing
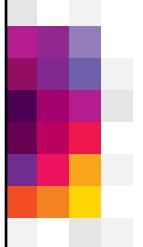
2. RECRUITMENT

- You can find usability test candidates in exactly the same way you found research participants.

- Existing customers make for excellent participants, and their opinions are usually of great interest to the business.

- If you spoke with customers in the research phase, see whether they are willing to return to test the system.

- Most will appreciate the opportunity, and can tell you whether the new site meets the needs they discussed during research. However, avoid asking research participants to take part in more than one usability test.

- Their familiarity with the prototype will skew your results and outweigh the convenience.

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Usability Testing

2. RECRUITMENT

- It can sometimes be tricky to schedule sessions with customers without asking for permission, so don't worry if you have to look elsewhere.

- Anyone broadly representative of the site's user base can offer valuable insight from the perspective of a first-time visitor.

- As with your undercover research, don't be shy to grab a friend or a member of the general public if you have to—just consider first whether you need a non-disclosure agreement.

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Usability Testing
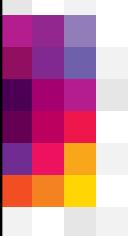
NOTE

A non-disclosure agreement, or NDA, is a legal document used to ensure that the participant doesn't reveal sensitive details about your prototype. Larger companies can be especially protective of their intellectual property, so you may have to ensure your participant signs an NDA. If in doubt, check with your legal team. They may already have a suitable form—if not, you'll have to seek legal clearance by explaining the business case behind testing and iteration. If the business withholds permission, you have no choice but to skip formative usability testing. Unfortunately it's difficult to introduce UX design to businesses with extremely restrictive legal attitudes.

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Usability Testing

Note: You should give an incentive to participants.

- Cash works well, but you might be able to offer something more useful to real customers.

- For example, if you're testing the purchase process on an e-commerce site, try watching your participants buying a gift of their choice (within a price limit) on a company credit card.

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Usability Testing

3. HOW MANY TESTS?

- Undercover usability tests are about getting quick feedback on the biggest problems on the site, not generating scientifically rigorous results.

- Even a single user test is better than none, but the more tests you run, the more likely you'll catch the main issues and eliminate freak results.

- For a single round of testing, five users will uncover most of the major issues.

- If you have access to more participants, schedule a second round of testing on an updated version of your site.

- Budget and time constraints will eventually dictate your testing limits.

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Usability Testing

4. VENUE

- Although a spare meeting room at the office is an easy venue for usability testing, unfamiliar corporate surroundings can be intimidating for participants.

- The undercover alternative is to arm yourself with a laptop and head to a local coffee shop.

- Scout around for a place nearby, not too quiet, not too busy, where participants will be comfortable. If your tasks involve personal information or sensitive behavior (disclosing medical history, for instance), avoid public venues altogether.

- Ensure you can access your prototype from your chosen venue. You can bring it with you on paper or the laptop, or you can upload it to a password-protected server, in which case your venue needs reliable Internet access.

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Usability Testing

5. TAKING NOTES

- Moderating usability tests demands concentration, so it's difficult to take good notes in a test.

- If you record a video of the test, you needn't worry about missing important details.

- Ideally you want to capture screen activity along with video and audio of the test participant.

Usability Testing

5. TAKING NOTES

- To record tests conducted on a screen-based prototype, there are several software options:
  - Mac users should check out Clearleft's Silverback , an inexpensive guerrilla usability testing tool ($70, www.silverbackapp.com).

B *A usability test recorded by Silverback—a Mac-based application we developed at Clearleft.*

Usability Testing

5. TAKING NOTES

- PC users can turn to TechSmith's Camtasia Studio ($299,www.techsmith.com/camtasia.asp) to record screen activity and video from either a built-in camera or a cheap webcam.
- Other options include Snapz Pro (for Mac, $69; www.ambrosiasw.com/ utilities/snapzprox) and Screencast-o-matic (web-based, free;www.screencast- o-matic.com).
- The gold standard for usability testing is Morae (for PC, $1495; www.techsmith.com/morae.asp), but at the price it's an unlikely undercover tool.

- If your organization won't let you run unfamiliar software, you can record the session with a camcorder and tripod. Failing that, you'll have to resort to hand-written notes or an audio recording.

- If you're conducting a test on a paper prototype, you'll be scrabbling around for the right piece of paper and have even less time for note taking. Ask a colleague to operate the prototype while you direct the test and the participant.

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Usability Testing
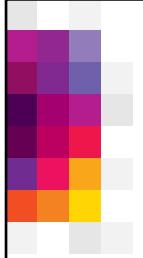
6. GUEST OBSERVERS

- Inviting observers to usability tests can help you show the importance of UX, but if you're an inexperienced moderator you should gain confidence alone first.

- If you do invite guests, insist that they only ask questions at the end, in a neutral, non-leading way.

- Unless you have dedicated observation facilities—such as a one-way mirror, or software that can stream the test to another computer—never invite more than two observers.

- Any more and you risk creating an intimidating test environment where the participant may be uncomfortable about speaking his mind. If you're unable to accommodate observers at a session, send them the recordings and invite them to a future session instead.

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Usability Testing
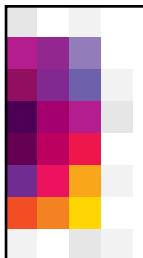
7.   ON THE DAY

- Print off the relevant paperwork beforehand, such as a list of attendees (including a phone number if possible), a receipt for the incentive, and a non-disclosure agreement if required.

- You should also provide a consent form—a template explaining the participant's role in the test. Download a sample consent form at www.undercoverux.com/resources.

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Usability Testing
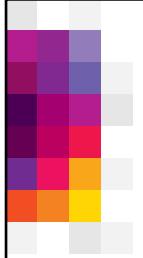
7.   ON THE DAY

- Arrive early to set up and run a quick trial, leaving enough time to fix any problems.

- Once your participant arrives, greet her and offer a drink before you explain the purpose of the session and what will happen.

- Pay the incentive before the test starts, so the participant doesn't feel she has to earn it by pleasing you, and ask for permission to record the test.

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Usability Testing

7.   ON THE DAY
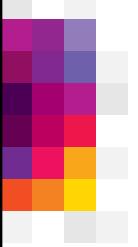
- Once you're all set, start your recording, give the user her first task, and observe quietly.

- Encourage your participant to think aloud, explaining what she's doing and what's going through her head.

- If your participant is struggling, try not to intervene immediately; instead, ask for her opinions so that you can understand the cause of her confusion.

- If she's still nowhere near the right path, make a note and then step in and help.

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Usability Testing

7.   ON THE DAY

- You'll find some participants are more useful than others, uncovering dozens of issues, while others will breeze through the test.

- Some you'll barely be able to get a word out of; others will talk endlessly.

- Use open-ended "why," "what," and "how" questions like "What do you think this page is telling you?" to encourage quieter participants to talk, and avoid subjective leading questions such as "Do you like this page?" or "Does this button need to be bigger?"

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Usability Testing
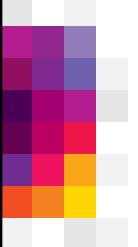
7. ON THE DAY

- At the end of the test, ask the participant for her general opinions in a quick debrief.
    - Did she enjoy the experience?
    - Was the site easy to use?
    - Did she struggle at any point?

- Keep an eye open for any trends, and if you're after some quantitative data, ask the participant to rate her experience on a post-test numerical questionnaire.

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Usability Testing

8. UNDERCOVER USABILITY TESTING DO'S AND DON'TS

Do's

- Charge your laptop battery. Running out halfway through is a disaster, since you'll probably lose your recording too. Bring a charger if you have access to a power socket.

- Conduct a thorough trial run. It's embarrassing to find out too late you can't access your prototype outside your company's firewall.

- Turn off alerts and clear your browser cache and history between tests, particularly if you're using your own laptop. You don't want a participant to read your incoming email, and visited link colors and search auto-suggestions from a previous participant can ruin a test.

- Have a backup plan. If your prototype doesn't work, turn the session into a research interview. If you're holding a dual-purpose session as outlined above, you can move smoothly into the other phase of the session.

- Keep a sense of humor. Things will go wrong. Maybe the coffee shop will be unbearably noisy, or the Wi-Fi will go down. Take any setbacks in your stride. You're after quick input, not perfection.

Don'ts

- Don't follow your test script too tightly or too loosely. You might need to watch the clock, so allow some flexibility without discarding your prepared tasks altogether.

- Don't over-test. Moderating usability tests is surprisingly hard work. Running more than five tests in one day is pushing it; try to spread your tests over a couple of afternoons or perhaps over a few lunch breaks.

- Don't be afraid of rejection. Participants regularly don't turn up, and if you're approaching strangers they may prefer to be left alone. Rejection is a peril of the undercover moderator. If you find yourself with a gap between sessions, review the recording of your previous test.

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Usability Testing
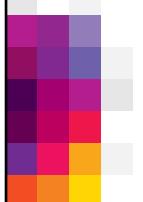
9.   AFTER THE TEST

- Immediately after the test, note any important issues while they're still fresh in your mind, but don't worry about creating a comprehensive list.

- To analyze the tests in detail, set aside some time to run through your recordings, looking for moments when the user struggled to use the site effectively.

- Listen carefully to what your participants said as well as what they did.

- Many usability experts advise against this since people's words can be surprisingly dissimilar to their actions, but if you ignore the subjective comments, you can often glean useful insight into your participants' mental models of how the site works.

- An inaccurate model can indicate that your design doesn't communicate the site's structure and function well, although users need only understand these well enough to get the job done.

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Usability Testing

9.   AFTER THE TEST

- During your run-through, make a note of whether the participants were able to complete each task, the number of errors they made (perhaps splitting these into minor and major errors), and how long each task took.

- You can easily compile this information into a short quantitative report (see "Presenting Findings,").

- Finally, spend a few minutes evaluating your technique.
  - Did you interrupt the participant?
  - Did you ask leading questions?
  - Should you have allocated more time for a particular task?

- Make a mental note for next time. As your moderation skills improve, so will the results you get from usability testing.

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Usability Testing
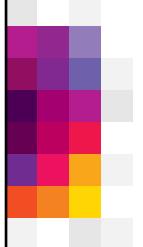
OTHER UNDERCOVER TESTS

- A usability test is a simple way to test your design with users, and it's easily adapted to undercover work.

- You can combine it with other testing methods to get a range of user feedback.

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Usability Testing

1. Rapid Iterative Testing and Evaluation (RITE)

- Normally you will wait until you've conducted a full round of usability tests before amending your prototype.

- However, if you're very short on time and need to be more responsive, try RITE, an accelerated usability test method. RITE encourages you to amend the prototype between tests, as soon as you notice a usability issue.

- This way you can immediately test your improvement with your next participant.

Note : RITE is an advanced technique.

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Usability Testing

1. Rapid Iterative Testing and Evaluation (RITE)

- Although it allows you to test multiple solutions and improve your prototype quickly, it demands strong technical knowledge, a keen eye for spotting issues during a test, and an appreciation of how to resolve these issues fast.

- RITE also lacks the balance and rigor that multiple participants offer, making the method susceptible to freak results.

- However, once you're comfortable with standard testing and confident about pushing your boundaries, RITE is an outstanding way to get more value from undercover usability tests.

- If you're testing an HTML prototype and aren't confident in your ability to make rapid changes, partner with a friendly developer who can update the prototype between sessions.

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Usability Testing

2. Test Tree

- A tree test examines the structure of your site and how easy it is to find information within it.

- Like its cousin, card sorting, it's a straightforward yet surprisingly powerful method.

- Simply write ten or so representative user tasks on index cards. Then write your primary navigation items on separate cards, and the corresponding secondary navigation on the reverse.

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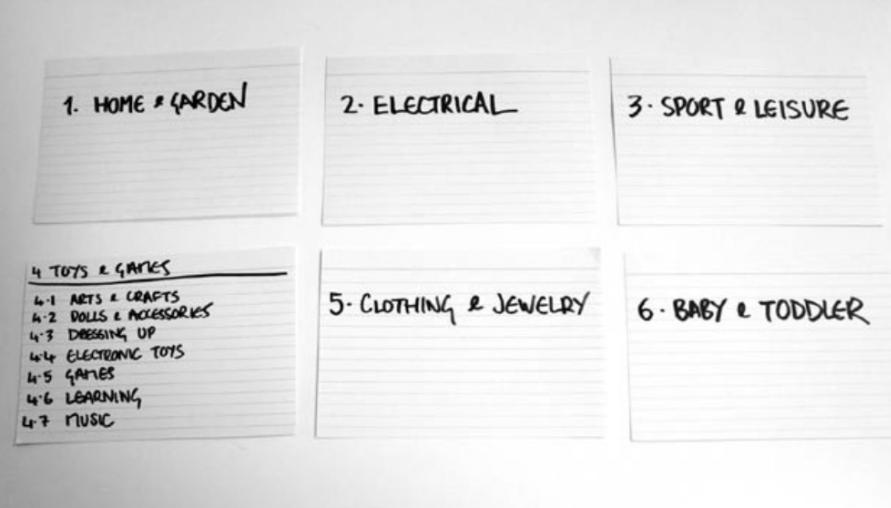
Usability Testing

C *Use a tree test for a quick assessment of your site's navigation.*

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Usability Testing

2. Test Tree

- To conduct the test, lay your primary navigation cards in a row and ask your participant where he would go to perform the given tasks.

- When he/she chooses a primary navigation card, turn it over to reveal the secondary navigation and let him choose again.

- Tree tests are an excellent way to learn if items are well placed in the site's structure and if users follow your intended route to particular resources.

- The method is extremely quick and also lends itself well to remote tests (see section below).

- It can even help you demonstrate why one site structure is better than another: simply test both versions and compare the proportion of users who find the given information on the first attempt. IMS564

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Usability Testing

3.   Standardized Usability Questionnaires

- A questionnaire is a form designed to obtain information from respondents.

- The items in a questionnaire can be open-ended questions, but are more typically multiple choice, with respondents selecting from
  - a set of alternatives (e.g., "Please select the type of car you usually drive") or
  - points on a rating scale (e.g., "On a scale of 1 to 5, how satisfied were you with your recent stay at our hotel?").

- For information about those techniques, see references such as Parasuraman (1986), Kuniavsky (2003), Courage and Baxter (2005), Brace (2008), Tullis and Albert (2008), or Azzara (2010).

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Usability Testing

3.   Standardized Usability Questionnaires

- Current standardized questionnaires designed to assess participants' satisfaction with the perceived usability of products or systems during or immediately after usability testing.

- A standardized questionnaire is a questionnaire designed for repeated use, typically with a specific set of questions presented in a specified order using a specified format, with specific rules for producing metrics based on the answers of respondents.

- As part of the development of standardized questionnaires, it is customary for the developer to report measurements of its reliability, validity, and sensitivity—in other words, for the questionnaire to have undergone psychometric qualification (Nunnally, 1978).

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Usability Testing

3. Standardized Usability Questionnaires

- Advantages of Standardized Usability Questionnaires
    - Objectivity: A standardized measurement supports objectivity because it allows usability practitioners to independently verify the measurement statements of other practitioners.
    - Replicability: It is easier to replicate the studies of others, or even one's own studies, when using standardized methods. For example, research on usability measurement has consistently shown that standardized usability questionnaires are more reliable than nonstandardized (ad-hoc, homegrown) usability questionnaires (Hornbæk, 2006; Hornbæk and Law, 2007; Sauro and Lewis, 2009).
    - Quantification: Standardized measurements allow practitioners to report results in finer detail than they could using only personal judgment. Standardization also permits practitioners to use powerful methods of mathematics and statistics to better understand their results (Nunnally, 1978). Although the application of statistical methods such as t-tests to multipoint scale data has a history of controversy, our research and practice indicates that these methods work well with multipoint scale data.

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Usability Testing

3. Standardized Usability Questionnaires

- Advantages of Standardized Usability Questionnaires
    - Economy: Developing standardized measures requires a substantial amount of work. However, once developed, they are very economical to reuse.
    - Communication: It is easier for practitioners to communicate effectively when standardized measures are available. Inadequate efficiency and fidelity of communication in any field impedes progress.
    - Scientific generalization: Scientific generalization is at the heart of scientific work. Standardization is essential for assessing the generalization of results.

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Usability Testing

3. Standardized Usability Questionnaires

- What Standardized Usability Questionnaires Are Available?
  - The earliest standardized questionnaires in this area focused on the measurement of computer satisfaction (e.g., the Gallagher Value of MIS Reports Scale and the Hatcher and Diebert Computer Acceptance Scale), but were not designed for the assessment of usability following participation in scenario-based usability tests (see LaLomia and Sidowski [1990] for a review of computer satisfaction questionnaires published between 1974 and 1988).
  - The most widely used standardized usability questionnaires for assessment of the per- ception of usability at the end of a study (after completing a set of test scenarios) and those cited in national and international standards (ANSI, 2001; ISO, 1998) are the:
    - Questionnaire for User Interaction Satisfaction (QUIS) (Chin et al., 1988)
    - Software Usability Measurement Inventory (SUMI) (Kirakowski and Corbett, 1993; McSweeney, 1992)
    - Post-Study System Usability Questionnaire (PSSUQ) (Lewis, 1990a, 1992, 1995, 2002)
    - Software Usability Scale (SUS) (Brooke, 1996)

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Usability Testing

3. Standardized Usability Questionnaires

- What Standardized Usability Questionnaires Are Available?
  - Questionnaires intended for administration immediately following the completion of a usability test scenario include the:
    - After-Scenario Questionnaire (ASQ) (Lewis, 1990b, 1991, 1995)
    - Expectation ratings (ER) (Albert and Dixon, 2003)
    - Usability Magnitude Estimation (UME) (McGee, 2003, 2004)
    - Single Ease Question (SEQ) (Sauro, 2010b; Tedesco and Tullis, 2006)
    - Subjective Mental Effort Question (SMEQ) (Sauro and Dumas, 2009)
  - Recommended Questionnaires
    - For Poststudy, try the SUS;
    - For Post-task, the SEQ or SMEQ

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	The Post-Study Usability Questionnaire Version 3	Strongly agree						Strongly disagree		NA
		1	2	3	4	5	6	7		NA
1	Overall, I am satisfied with how easy it is to use this system.	0	0	0	0	0	0	0		0
2	It was simple to use this system.	0	0	0	0	0	0	0		0
3	I was able to complete the tasks and scenarios quickly using this system.	0	0	0	0	0	0	0		0
4	I felt comfortable using this system.	0	0	0	0	0	0	0		0
5	It was easy to learn to use this system.	0	0	0	0	0	0	0		0
6	I believe I could become productive quickly using this system.	0	0	0	0	0	0	0		0
7	The system gave error messages that clearly told me how to fix problems.	0	0	0	0	0	0	0		0
8	Whenever I made a mistake using the system, I could recover easily and quickly.	0	0	0	0	0	0	0		0
9	The information (such as online help, on-screen messages and other documentation) provided with this system was clear.	0	0	0	0	0	0	0		0
10	It was easy to find the information I needed.	0	0	0	0	0	0	0		0
11	The information was effective in helping me complete the tasks and scenarios.	0	0	0	0	0	0	0		0
12	The organization of information on the system screens was clear.	0	0	0	0	0	0	0		0
13	The interface* of this system was pleasant.	0	0	0	0	0	0	0		0
14	I liked using the interface of this system.	0	0	0	0	0	0	0		0
15	This system has all the functions and capabilities I expect it to have.	0	0	0	0	0	0	0		0
16	Overall, I am satisfied with this system.	0	0	0	0	0	0	0		0

*The "interface" includes those items that you use to interact with the system. For example, some components of the interface are the keyboard, the mouse, the microphone, and the screens (including their graphics and language).

FIGURE 8.3

The PSSUQ Version 3.

Table 8.3 PSSUQ Version 3 Norms (Means and 99% Confidence Intervals)

Item	Item Text	Lower Limit	Mean	Upper Limit
1	Overall, I am satisfied with how easy it is to use this system.	2.6	2.85	3.09
2	It was simple to use this system.	2.45	2.69	2.93
3	I was able to complete the tasks and scenarios quickly using this system.	2.86	3.16	3.45
4	I felt comfortable using this system.	2.4	2.66	2.91
5	It was easy to learn to use this system.	2.07	2.27	2.48
6	I believe I could become productive quickly using this system.	2.54	2.86	3.17
7	The system gave error messages that clearly told me how to fix problems.	3.36	3.7	4.05
8	Whenever I made a mistake using the system, I could recover easily and quickly.	2.93	3.21	3.49
9	The information (e.g., online help, on-screen messages, and other documentation) provided with this system was clear.	2.65	2.96	3.27
10	It was easy to find the information I needed.	2.79	3.09	3.38
11	The information was effective in helping me complete the tasks and scenarios.	2.46	2.74	3.01
12	The organization of information on the system screens was clear.	2.41	2.66	2.92
13	The interface of this system was pleasant.	2.06	2.28	2.49
14	I liked using the interface of this system.	2.18	2.42	2.66
15	This system has all the functions and capabilities I expect it to have.	2.51	2.79	3.07
16	Overall, I am satisfied with this system.	2.55	2.82	3.09
Scale	**Scale Scoring Rule**			
SysUse	Average Items 1–6.	2.57	2.8	3.02
InfoQual	Average Items 7–12.	2.79	3.02	3.24
IntQual	Average Items 13–15.	2.28	2.49	2.71
Overall	Average Items 1–16.	2.62	2.82	3.02

Note: These data are from 21 studies and 210 participants, analyzed at the participant level.

Usability Testing
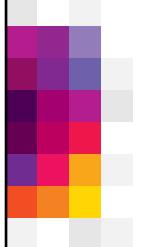
REMOTE TESTING

- The straightforward setup of **face-to-face testing** is ideal if you haven't had much experience, but the recent growth in remote online testing offers UX designers new ways to **test a site without the need to drag users into the room**.

- Some purists say **remote testing loses the nuances of face-to-face interaction**, but it offers several advantages for undercover work.

- Remote tests are **fast and inexpensive**, allowing you to gather large amounts of user data with little effort.

- For international or hard-to-reach users, remote testing may be your only viable option.

Usability Testing

REMOTE TESTING

- Remote testing tools range from the trivial to the sophisticated, with price ranges to match.

- Fortunately most remote tools offer a free trial period, allowing you to try before you buy.

- Remote tests fall into two main groups:
  - synchronous and
  - automated.

Usability Testing

1. Synchronous remote tests

- Synchronous tests involve live moderation.

- How to do it:
  - You give the participants access to your prototype on their computer and use screen-sharing software to watch them interact with the site.
  - You can talk to participants either through the screen-sharing software or by telephone.

- The test is run in the same way as a face-to-face test: participants step through a number of predefined tasks, while you note how they use the site and ask for their thoughts as they go.

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Usability Testing

1. Synchronous remote tests

SCREEN-SHARING SOFTWARE

Screen-sharing software allows you to run synchronous remote tests by display-ing in real time what's happening on the participant's computer. Commonly used software includes:

■ *Skype (www.skype.com)*

■ *Adobe ConnectNow (www.adobe.com/acom/connectnow)*

■ *GoToMeeting (www.gotomeeting.com)*

■ *LiveLook (www.livelook.com)*

■ *Cisco WebEx (www.webex.com)*

Most screen-sharing software will ask the participant to install a small program or browser plug-in. Although the software will guide the process, this can make synchronous testing an intimidating option for participants. Allow extra time for synchronous remote tests in case of technical problems, and avoid synchronous testing altogether if your participants are novice web users.

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Usability Testing

1. Synchronous remote tests

- You need to recruit participants forsynchronous tests yourself.

- Fortunately, you can cast your net wider since geography isn't an issue.

- For a truly responsive test, try live recruitment using a service such as Ethnio (www.ethnio.com).
    - These services place a short recruitment screener on your site as a pop-up, allowing real users to sign up to participate in a test.

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Usability Testing

2. Automated remote tests

- Automated (or unmoderated) remote tests don't need direct moderation: you simply set them up and let them run in the background.

- Automated testing tools vary.

- Many adopt the familiar model of asking participants to step through representative tasks, more experimental tools look specifically at navigation, users' reaction to aesthetics and brand, findability of information, and so on.

- Some provide videos, some provide written reports of user feedback, and others provide heat maps of user activity.

- Many automated services will handle recruitment for you, although this could mean that participants are not sufficiently similar to your intended user base.

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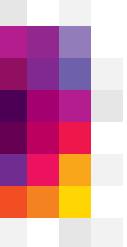
AUTOMATED TESTING

Automated testing services are exploding in popularity, and even now there are too many to list in full. Some popular services are listed below—explore them for yourself and see which best suits your needs.

- *Chalkmark (www.optimalworkshop.com/chalkmark.htm)*
- *CommandShift3 (www.commandshift3.com)*
- *Feedback Army (www.feedbackarmy.com)*
- *FiveSecondTest(www.fivesecondtest.com)*
- *IntuitionHQ (www.intuitionhq.com)*
- *Loop11 (www.loop11.com)*
- *Navflow (www.navflow.com)*
- *OpenHallway (www.openhallway.com)*
- *Treejack (www.optimalworkshop.com/treejack.htm)*
- *TryMyUI (www.trymyui.com)*
- *Usabilla (www.usabilla.com)*
- *Userlytics (www.userlytics.com)*
- *UserTesting (www.usertesting.com)*
- *UserZoom (www.userzoom.com)*
- *Webnographer (www.webnographer.com)*
- *WhatUsersDo (www.whatusersdo.com)*

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Usability Testing

MIXED TESTING

- Given the benefits and deficiencies of each testing method, it's a good idea to run several different types of test.
- You can combine some corridor testing with some remote automated testing, or conduct some guerrilla usability testing to add context to site analytics
- Whatever tools you use, testing will not only help you **improve the site but also develop your UX design skills**.
- By seeing how users react to designs, you learn to anticipate problems in advance.
- Testing makes for a better site both now and in the future.

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Usability Testing

PRESENTING FINDINGS

- Unless your tests were completely undercover, you should let your stakeholders know how the sessions went.

- An email or short presentation is better than a hefty usability report.

- Open with headline quantitative data:
    - task completion rates,
    - number of errors,
    - scores from automated tests, and so on.

- This data gives a snapshot of the state of the current design and can help make a tangible business case for testing.

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Usability Testing

PRESENTING FINDINGS

- Explain, for instance, that a test uncovered usability issues that prevented 40 percent of participants from completing their purchase, and stakeholders will be keen to run further tests.

- Don't exaggerate the importance of this data, however, as undercover usability testing isn't exactly a rigorous exercise.

- Briefly discuss both the major issues and areas of the site that were successful.

- Use short video highlights to demonstrate these moments—a frustrated or delighted user is more persuasive than any words.

- Finally, wrap up with a sentence or two on how you plan to improve the design.

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Usability Testing

PRESENTING FINDINGS

Masculine	⭕━━❌━━━━⭕	Feminine
Calm	⭕━━━━❌━━⭕	Excited
Traditional	⭕━❌━━━━━⭕	Modern
Economical	⭕━━━━━❌⭕	Luxury
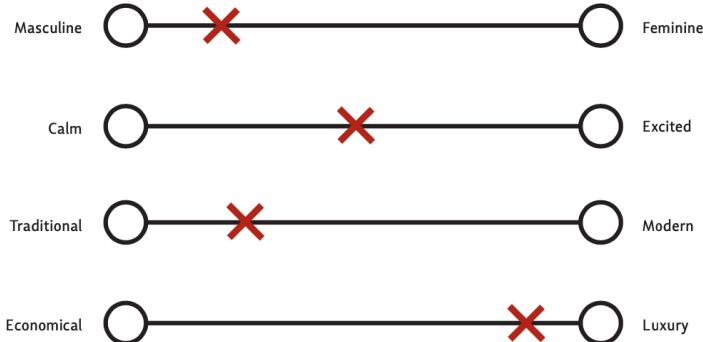
E *Use sliding scales to reveal a stakeholder's perceptions of the brand.*

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Postlaunch Activities

POSTLAUNCH ACTIVITIES

- These are interesting times that we're living in: so many companies are launching with themselves—or their products—in a "beta" state.

- A beta launch typically means that real, unfiltered users are the audience for live testing of the website to help identify bugs, errors, crashes, or any other problems.

- At one time betas were typically offered up only to developers, but it has now become a common practice to open betas up to the user community as a whole.

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Postlaunch Activities

POSTLAUNCH ACTIVITIES

- During a beta phase, it is imperative that communication methods are set up to record and report any issues that users may have.

- Any type of system malfunction that occurs must be recorded and made available to the project team.

- There must also be a mechanism in place to let users report issues they encounter to the appropriate members of the project team.

- If this kind of communication doesn't happen—if the user experience designers, visual designers, and developers don't know what's going on during the often rigorous and fast-paced beta phase—the website may be updated and redeployed to users without much of the strategy implemented.

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Postlaunch Activities

POSTLAUNCH ANALYTICS

- After you've launched your site, one of the first things you should do is begin to accumulate data on site usage.

- The best source for this is your site's log file.

- Unfortunately, user experience designers probably aren't at the top of the list to receive or review this information, so seek out whoever is in charge of hosting the site and apply those negotiating skills of yours.

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Postlaunch Activities

POSTLAUNCH ANALYTICS

- Website analytics can give you some insight into the visitors to your site.

- Among other aspects, you can get an understanding of
  - Who new site visitors are
  - Who repeat site visitors are
  - Number of page views
  - Page view duration
  - Page depth
  - Where visitors exit the site (which pages)
  - session duration
  - Advertising impressions
  - Search terms used, results, and re-searches

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Postlaunch Activities

POSTLAUNCH ANALYTICS

- This information can help you understand where users are having problems by highlighting trouble spots on the site.

- Although analytics may come across as dry and numbers heavy, the data and insights will help you put together appropriate questions when you do your postlaunch testing.

- **Note :** For more information on website analytics, Avinash Kaushik's Web Analytics: An Hour a Day (Sybex, 2007) is a good place to start.

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Postlaunch Activities
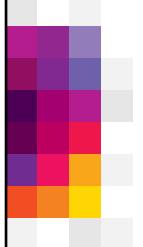
POSTLAUNCH DESIGN TESTING WITH USERS (AGAIN, AGAIN)

- After you accumulate data from your website analytics and gather information from customer support or other departments interacting with users, you can begin to compile a list of questions to use in another round of design testing with users.

- In other words, use the data you have collected to create a new set of questions to ask users of the site, and use the skills you learned.

Postlaunch Activities
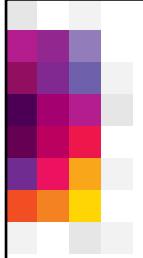
POSTLAUNCH DESIGN TESTING WITH USERS (AGAIN, AGAIN)

- One of the benefits of this round of testing is that you have an opportunity to test the same batch of users that you worked with previously to determine if their opinions have changed after launch and more usage of the website.

- This can be quite helpful: if you retest the same batch of users (or a portion thereof) you can re-ask some of the original questions (opinions about functionality, ability to achieve specific tasks, and so forth) and analyze the variance in responses over time.

Postlaunch Activities

POSTLAUNCH DESIGN TESTING WITH USERS (AGAIN, AGAIN)

- This potential for variance can help you uncover new areas for improvement in the site, as well as gain some insights into the users' learning curve, based on previous rounds.

- As an added benefit, analyzing the differences in responses may also help you identify new questions that were not considered previously.

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