

Contents

Foreword	xvii
Acknowledgments	xix
About the author	xxi
Image credits and permissions	xxiii

Introduction: Getting started guide 1

Usability is invisible	1
Users don't tolerate a bad user experience	2
U R usability	3
How to use this book	3
A lot can happen in a decade	4
What's new in the 2nd edition	4
How the chapters are organized	5
Special features you can use or skip	6
A few words about words	7
Check out the companion website	8

1 Establishing the essentials 9

Focus on the user, not the product	10
Start with some essential definitions	11
What is usability?	11
SIDEBAR: ISO 9241–11:2018 expanded definition of usability	13
What is usability testing?	15
SIDEBAR: Take a peek at a brief history of usability testing—then and now	16
What is UX (user experience)?	18
What is UCD (user-centered design)?	18
Know how and why to conduct small usability studies	19
Establish the user profile	20
Create task-based scenarios	20
Use a think-aloud process	20
Make changes and test again	21

Know how and why to conduct large studies	22
Use the same tasks or different ones	23
Gather metrics to quantify results—with or without a think-aloud process	23
Choose a method or combination of methods	24
Balance your goals and your budget	24
Get buy-in for usability testing	25
Get to know your stakeholders	25
Engage your stakeholders in your research from start to finish	25
Advocate for more (and earlier) usability testing throughout product development	26
Make the case for cost-justifying usability testing	26
SIDEBAR: Making usability a priority—advocating for the value of user research	27
Get in where you fit in	29
Agile development is fast and focused	29
The current approach to design thinking focuses on a 5-day sprint	30
Summary for Chapter 1	31

2 Exploring the usability and UX toolkit **35**

Opening the toolkit and seeing what's there	37
Analysis tools lay the foundation	37
Design/implementation tools build user research into development	40
Deployment tools provide feedback on actual use	42
Understanding which tool is the right one for the job	43
Choosing heuristic evaluation from the toolkit	46
Heuristic evaluation is review by experts	46
Heuristic evaluation has a clearly defined methodology	49
Expert review can mean different things to different people	50
An informal review may have no rules	50
SIDEBAR: Five steps to a (user-centered) expert review	51
Comparing the results from heuristic evaluation and usability testing	52
SIDEBAR: What the CUE-4 study tells us about both methods	53
Using a storytelling approach for heuristic evaluation	56
Putting both methods together: The 1–2 punch	57
Adopting a user-centered design process	58

Summary for Chapter 2	59
Sample report: Heuristic evaluation report using storytelling approach	61

3 Testing here, there, everywhere 69

Acquiring the basic equipment for usability testing	70
Extending your capabilities with specialized equipment and software	72
Mobile device testing uses specialized equipment and software	72
Eye-tracking equipment shows you where users look	74
Using a conference room or office	78
Investing in a dedicated lab	78
Evaluating the disadvantages of lab testing	82
Getting into the user's world with field testing	83
Advantages of field testing	84
Disadvantages of field testing	85
Reaching users anywhere and everywhere with remote testing	86
Moderated remote testing is synchronous	86
Unmoderated remote testing is asynchronous	88
Using other online tools to expand the scope of remote unmoderated testing	91
Choosing the right method	94
Summary for Chapter 3	95

4 Understanding users and their goals 99

People are goal-oriented	100
SIDEBAR: The psychologist's view of UX design: 10 insights	101
When people use the web, they bring their experience and expectations	102
People expect web objects to be in specific places	105
Make a good first impression. You may not get a second chance.	106
Users decide right away if a website can be trusted	106
People don't want to read. They want to act.	108
Generational differences matter when it comes to technology usage	108
Three-quarters of American adults go online daily	110
What we know about older users online	111
What we know about Millennials online	113

What we know about teens online	114
What we know about children online	116
Gender differences matter when it comes to Internet and social media usage	116
Gender affects website design	117
Gender affects technology and social media usage	117
Gender affects communication styles on social media	119
Generational and gender research sheds light on your users	120
Personas help you get to know your users	120
Personas are based on real information about real users	121
Personas are a creative activity, but don't get carried away	123
Personas should be a manageable number	123
Personas should be visible	124
Scenarios tell the story of your users' goals	125
Know the difference between a task and a goal	125
Know the difference between a use case and a scenario	125
SIDEBAR: Use case example	126
Know the difference between a user story and a scenario	128
Tell stories about your personas in a compelling way	129
Summary for Chapter 4	132

5 Planning for usability testing 135

Scheduling the planning meeting	136
Establish test goals	136
SIDEBAR: Accessibility goals are in everyone's interest	140
Determine how to test the product	143
SIDEBAR: Getting early feedback on paper prototypes using "The Wizard of Oz" technique	146
SIDEBAR: Testing faster, cheaper	148
Agree on user subgroups	150
Define the characteristics of a subgroup	151
Focus on user motivation	153
Mix some characteristics within a subgroup	153
SIDEBAR: How to ask inclusive gender questions	154
Combine characteristics in a user profile	156
Determine participant incentives	158
Draft the screener for recruiting participants	160
Create scenarios based on tasks that match test goals	171

SIDEBAR: Comparative/competitive testing requires special considerations	176
Determine quantitative and qualitative feedback methods	181
Set dates for testing and deliverables	183
SIDEBAR: How many one-hour sessions are optimal for a day?	184
Producing the test plan	187
Writing an informal test plan	188
Using other informal ways to document test plans	188
Writing a formal test plan	193
Summary for Chapter 5	195

6 Preparing for usability testing 197

Recruiting participants	198
How to do the recruiting yourself	199
SIDEBAR: Guerilla recruiting using the intercept technique	200
How to recruit through a recruiting company	202
How to recruit through an online recruiting company	203
How to recruit through an online testing platform	203
How to plan for no-shows	204
Assigning team roles and responsibilities	205
Developing team checklists	207
Writing the moderator's script	210
Writing the moderator's script for in-person testing	212
Writing the moderator's script for remote testing	217
SIDEBAR: The effect of thinking out loud on timed tasks and other considerations	215
Writing the moderator's script for remote testing	217
Preparing or using other forms	219
Preparing a video consent form	219
Preparing a special consent form for testing with minors	220
Using a nondisclosure agreement	220
Preparing an observer form	221
Creating questionnaires	222
Creating a pretest questionnaire	222
Creating posttask questionnaires	226
Creating a posttest questionnaire	227
SIDEBAR: Writing good questions	230
Using standard posttest questionnaires	232
Using the SUS (System Usability Scale)	233
Using the CSUQ	235
Using the NPS (Net Promoter Score)	236

Creating or using qualitative feedback methods	237
Using product reaction cards	238
Ending with an interview	239
SIDEBAR: Retrospective recall is an in-depth review of the testing session	240
Testing the test	241
Conducting the walkthrough	241
Conducting the pilot	242
Managing all this test preparation	244
Summary for Chapter 6	244
Sample report: Moderator's script for usability study of betterworldbooks.com	246

7 Conducting a usability test 249

Setting up for testing	250
Being an effective and unbiased moderator	250
SIDEBAR: What makes a good moderator	251
Monitor your body language	254
Balance your praise	255
Ask "good" questions	255
SIDEBAR: Methods for successful engagement with participants	257
Avoid asking "bad" questions	260
Know how and when to intervene	261
Administer posttest feedback mechanisms	263
Managing variations on the theme of testing	265
Testing with two or more participants	265
SIDEBAR: Partial script for co-discovery usability test	267
Testing with two or more moderators	268
Testing remotely with a moderator	269
Handling observers	270
Observers with you and the participant	271
SIDEBAR: Understanding the impact of the observer effect	273
Observers in the executive viewing room	274
Remote observers	276
Providing help or customer support	276
Logging observations	278
Working solo	278
Summary for Chapter 7	279
Sample log: Log from cruise website usability study	281

8 Analyzing the findings **287**

What did we see?	288
Gather input from everyone	289
Collect the top findings and surprises	289
Choose your organizational method	290
SIDEBAR: Affinity matching tips and tricks	293
What does it mean?	296
Determine who should do the analysis	296
Collate the findings	296
Present quantitative data	298
Know how and when to work with statistics	299
Analyze the questionnaires	302
Use qualitative feedback from the think-aloud process	304
Collate responses from product reaction cards	305
What should we do about it?	306
Triangulate the data from findings	306
Characterize findings by severity	307
Determine global and local findings	309
Make recommendations	310
Summary for Chapter 8	313
Sample findings: Partial findings from Holiday Inn China website study	315

9 Reporting the findings **321**

Following Aristotle's advice	323
Preparing the message for the medium	324
Writing an informal report	324
Preparing a formal report	328
SIDEBAR: CUE-10 Ryanair.com website study—review of reports	328
Planning for a document-style report	330
Writing the executive summary	332
Organizing the rest of the report to match your audience needs	333
SIDEBAR: Development of the Common Industry Format	336
Planning for a presentation-style report	337
Presenting the findings	339
Using tables	340
Using screenshots	343
Using charts and graphs	345
Embedding video clips	348
Ordering the findings	349

Presenting posttask and posttest results	351
Presenting survey responses	351
Presenting SUS results	353
Presenting qualitative responses	353
Making recommendations	354
Delivering an oral report	359
Planning your presentation	360
Preparing video clips	360
Practicing your presentation	361
Delivering your presentation	362
Knowing how and when to ask for questions	362
Advocating for more UCD	363
Summary for Chapter 9	365
10 International usability testing	367
Learning about your international users	368
Some international users are here	368
Other international users are “there”	369
Understanding cultural differences	369
Books to learn more	369
Articles to learn more	370
Applying the work of Hall and Hofstede to your understanding of international users	379
Hall’s concept of high-context and low-context cultures	380
Hofstede’s concept of cultural dimensions	380
Creating personas of your users	383
Focus on specific cultural characteristics	383
Keep other considerations in mind	384
Set up a research plan	386
SIDEBAR: Creating Chinese personas for a study of China’s Holiday Inn website	387
Planning for international testing	389
Where to test	389
SIDEBAR: Working with an interpreter	394
How to test	395
Structuring the test protocol	396
Localizing the scenarios	397
Localizing the questionnaires	398
Scheduling single sessions or co-discovery sessions	401
Choosing think-aloud or retrospective recall	402

Selecting the moderator	402
Anticipating other aspects of international testing	404
What if the participant arrives with someone else?	404
Should more time be set aside for meeting and greeting?	405
Should breaks be longer between sessions?	406
Can you interpret nonverbal communication cues?	406
Summary for Chapter 10	407
Sample report: Analysis of the UPS Costa Rica website	409
References	411
Index	433