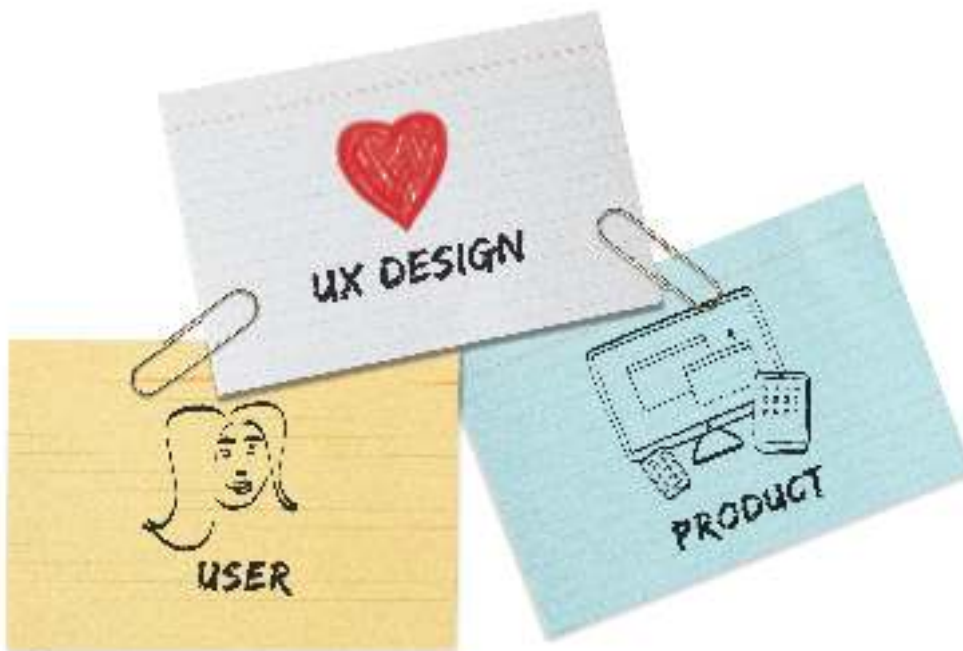


KILLER UX DESIGN

BY JODIE MOULE



CREATE USER EXPERIENCES TO WOW YOUR VISITORS

KILLER UX DESIGN

BY JODIE MOULE

Killer UX Design

by Jodie Moule

Copyright © 2012 SitePoint Pty. Ltd.

Product Manager: Simon Mackie

Editor: Kelly Steele

Technical Editor: Diana MacDonald

Cover Designer: Alex Walker

Expert Reviewer: Matt Magain

Indexer: Fred Brown

Printing History:

September 2012

Notice of Rights

All rights reserved. No part of this book may be reproduced, stored in a retrieval system or transmitted in any form or by any means, without the prior written permission of the publisher, except in the case of brief quotations embodied in critical articles or reviews.

Notice of Liability

The author and publisher have made every effort to ensure the accuracy of the information herein. However, the information contained in this book is sold without warranty, either express or implied. Neither the authors and SitePoint Pty. Ltd., nor its dealers or distributors will be held liable for any damages to be caused either directly or indirectly by the instructions contained in this book, or by the software or hardware products described herein.

Trademark Notice

Rather than indicating every occurrence of a trademarked name as such, this book uses the names only in an editorial fashion and to the benefit of the trademark owner with no intention of infringement of the trademark.



Published by SitePoint Pty. Ltd.

48 Cambridge Street Collingwood

VIC Australia 3066

Web: www.sitepoint.com

Email: business@sitepoint.com

ISBN 978-0-9871530-9-8 (print)

ISBN 978-0-9872478-0-3 (ebook)

Printed and bound in the United States of America

About Jodie Moule

Jodie Moule is co-founder and director of Symplicit, an experience design consultancy based in Australia that focuses on research, strategy, and design services. With a background in psychology, her understanding of human behavior is central to helping businesses see their brands through the eyes of customers, influencing the way they approach the design of their products, systems, and processes.

About SitePoint

SitePoint specializes in publishing practical, rewarding, and approachable content for web professionals. Visit <http://www.sitepoint.com/> to access our books, blogs, newsletters, videos, and community forums.

To my best friend, business partner, husband, and father of our wonderful children, Blake and Darci. This is for you Steve, because without you, it would not have been possible. Love you lots.

To Blake and Darci, I wonder what the future holds? Hold on tight and make the most of every moment. Love Mummy.

Table of Contents

Preface	xv
----------------------	----

Chapter 1	You Are Not Your User	1
------------------	------------------------------------	---

A Broad Perspective	1
Embracing Multidisciplinary Teams	3
What makes an experience?	4
You've Got to Have a Method	4
The Cost of Overlooking Your Users	5
A Balanced Approach to Solving Problems	7
Put Yourself in the User's Shoes	8
Involving Users Helps You to Perfect Your Product	10
Good and Bad User Experiences	12
Impacts on Customer Loyalty	15
What makes a great experience?	15
Experience of a Lifetime	15
Recap of What You Need to Know	16

Chapter 2	Understand the Business
------------------	--------------------------------

Problem	17
----------------------	----

Research Phase	18
The Business Context	18
Collaborate and Communicate with Other Stakeholders	19
A Framework	19
Business Offering	21
Customer Relationships	21
Business Infrastructure	22

Revenue Streams	22
Cost Structures	23
Why does this project matter to the client?	23
Understand the Target Segment	24
Understanding Human Behavior	26
Technology as a Tool to Change Behavior	26
A New Focus for Designers	27
What behaviors are you hoping to change?	28
Consider the Entire Journey	30
How will your product make life easier for users?	30
Dissecting the Workflow	34
Contemplate the Design Problem	35
What research approach will you use for the project?	36
Setting a UX Project Vision	37
What about a strategy?	39
Case Study: Creating a Recipe App	40
The Idea that Sparked the App	40
Starting Our Plan	42
Putting a Team in Place	43
Ten Questions to Kick Off this Project	44
Behavioral Change	45
A Project Vision	46
The Bottom Line	47
Recap of What You Need to Know	47
Chapter 3 Understand the User Context	49
Moving into the User's World	50
Users Aren't Designers	50
Combining Methods for Best Effect	52
Choosing Your UX Method	52

Formulate Your Questions	53
Preparing for Research	54
Method Types	55
Some Quick and Dirty Options	64
Recruiting the Right People	66
What does the client's business have that can help?	67
UX Research Is Not Market Research	67
Making a List of Potential Users	68
Going Left of Center	69
Case Study: Understanding the User Context	70
Clarifying Questions	71
Who are our recipe app users?	72
The Recipe Game Plan	75
The Scene Is Set	79
Recap of What You Need to Know	79

Chapter 4 **Making Sense of What You've**

Found

What to Do with All That Data	84
Where to start?	85
Get Your Stationery On	86
Creating a Common Project Space	87
Reviewing Your Notes	88
Process of Affinity Mapping	88
Invite Others into Your Process	90
Insights into Opportunities	90
Using Sketching to Explore Possibilities	90
There Are No Bad Ideas Right Now	91
What to Be on the Lookout For	92
Identifying Unexpected Opportunities	92

Moving into Ideation	93
Analysis Paralysis	94
Communicating Your Outcomes to Others	95
Understanding Behavior Design	96
Fogg Behavior Model	96
Putting Hot Triggers in the Path of Motivated People	100
So how does this all fit together?	102
Case Study: Collecting the Ingredients	104
Collating the Data after Research	107
What themes or patterns were observed?	108
What were our insights and design ideas?	110
Knowledge Is Power	114
Recap of What You Need to Know	115

Chapter 5 **Sketching to Explore the Design**

Concept	117
How the Concept Phase Works	118
Sketching to Help You Think	119
What are the benefits for my final design?	119
The Evolution of Sketches	120
Exploring Interactions	122
Learn from Good Examples	123
Add to Your Wall of Information	123
Injecting the User's Voice	124
Scenarios as a Design Tool	125
Sketching from Your Personas' Point of View	126
Ways to Approach Your Sketching	128
Sketching with Others	134
Come Together to Critique Designs	134
Collaborate to Nut Out a Design Problem	136

Musing on How Your Users Think	138
Perception Is Reality	140
Using Metaphor to Communicate Intent	141
Using Social Media to Ask Questions	142
Case Study: Designing a Recipe App	144
A Place to Be Inspired	144
Thinking about Cooks	146
Considering the First-time Use of the App	149
Going to Our Users Again	150
Sketching Ideas on Our Own	150
Sketching and Workshops with the Team	151
Collaborative Design Sessions	152
What was this product shaping up to be?	153
Draw Together	154
Recap of What You Need to Know	155
Chapter 6 Prototype the Solution	157
We Are Still in the Concept Phase	158
Selling the Dream	158
Prototypes: Part of an Iterative Process	159
The Main Reasons to Prototype	160
Save Time and Prototype	161
Prototype to Learn	161
Where did we leave off after sketching?	162
Different Types of Prototypes	162
Think of This Stage as an Experiment	167
Factors Your Prototype Should Address	168
When to Resort to Cowboy Coding	173
Why do we throw it out?	174
Simulate It, Don't Overbake It!	174

Tools for Your Consideration	175
Mind the Time: Build a Good Prototype	176
Case Study: Designing a Recipe App	177
Moving from Sketches to Wireframes	177
What's your tool of choice?	178
Visualizing Task Flows and Scenarios	179
What about the information categories?	182
What were some of the design problems?	182
Exploring the Interactions in a Hacky Way	185
Interview: Developer's View of the UX Process	186
In Embryo	188
Recap of What You Need to Know	188

Chapter 7 **Test, Learn, Tweak. Iterate**

Concept Phase: Iterative Testing	192
Validating Our Planned User Experience	192
Bringing the Users Back	193
Inviting People to Watch	194
How do I set up a test environment?	194
Choose the Type of Test	197
Session Script and Running the Session	200
Measuring Success of the Design	205
Iterate the Solution	206
What does the process look like?	207
Making Sense of What You Observe	207
Deciding When You're Done	209
Having Clear Measures in Place	210
Case Study: Designing a Recipe App	210
Setting Up the Lab	211
What We Focused on across Iterations	211

Setting Measures in Place	212
Major Learnings	213
Build Up to Something	215
Recap of What You Need to Know	215

Chapter 8 **Launch to Learn About**

Behavior	217
The Design Phase	218
Finalizing the Design	218
A Continuous Design Process	219
You mean UX and agile are friends?	219
Tweaking and Adjusting the Design	221
Beta Testing to Help You Tweak	221
It's All in the Fine Print	223
Final Checks and Balances	226
How are you feeling about your product?	227
Uncover Habits to Change Behavior	228
Learning about Behavior	229
Pre-launch Assumptions	229
What makes a habit?	231
How do you measure a habit?	232
Evolution, Not Revolution	234
Observe the Early Adopters of Your Product	235
What does a habitual user look like?	235
Model Your Top Users' Habits	236
UX Is Critical to Habit Measurement	236
Modify Based on What You Learn	237
Case Study: Cook the Recipe App	238
The Name Game	238
Where did we start out and then end up?	240

Review of the Design Process	240
UX and Agile ... Yup! It Works	245
Focusing on "Wow" Moments	246
Beta Testing the App	247
What documentation was useful?	248
Approval for Our App to Launch	249
Our Total Experience Vision for the App	249
Our Focus on Behavior Design	250
Concluding Thoughts	253
Recap of What You Need to Know	254
Final Word: the Rules of UX	256
Index	257

Preface

When I embarked on my career as a psychologist, I never imagined I'd end up designing technology products and services. Funny where you end up in life, and lucky for me all those years at university weren't wasted: the business of understanding humans and the way they behave is critical to designing.

With the digital and physical worlds merging more than ever before, it is vital to understand how technology can enhance the human experience, and not cause frustration or angst at every touchpoint.

To create technology that seamlessly fits into our daily lives, there's a simple formula. First, consider the person attached to your technology solution and the context in which they'll be using your creation; then, design your solution and involve users in the process to refine your thinking.

Today, technology is used to change attitudes and behavior, creating amazing challenges for designers. And if we want to create products and services that have the power to educate people so that they may live better lives, or help to reduce the time people take to do certain tasks—or even attract them to our products instead of our competitors—we need to first understand what makes them tick.

User-friendliness is fast becoming a necessity in product design. Nevertheless, we still have a long way to go to deliver on our users' (high) expectations, and this will only increase as technology and the real world continue to merge.

Understanding behavior allows us to change the customer experience, and that change happens through great design—your great designs.

What is this book about?

This book aims to be an introduction to user experience design. UX design is an approach that starts by understanding the behavior of the eventual users of a product, service, or system. It then seeks to explore the optimal interaction of these elements, in order to design experiences that are memorable, enjoyable, and a little bit “wow.”

The premise of this book is the need to understand how people behave (their habits, motivators, and drivers) to make well-informed design decisions that produce a great customer experience for your users.

Case Study to Bring It All to Life

Depending on the type of business problem you are solving and the product you are designing, there are several ways to approach a design problem. To bring the theory to life, I'll be presenting a case study so you can see the theory discussed in each chapter applied to a real-life example. It's my intention that through this example, you'll see the benefits a UX process can bring to your projects.

I encourage you to think about what you would have done if this project was thrust upon you at work, or if a client approached you to deliver an app as a way to help enhance your learning as you read along.

Who Should Read This Book

This book was written for people who have heard of UX and want to learn more about the basics, or expand their knowledge on distinct aspects of the UX process. If you are charged with understanding how to apply a UX process to your projects, but are unsure quite where to start—this book is for you.

My aim was to present UX design in a fun, practical, and non-academic way, so that the concepts are accessible and can be tried out immediately. In this regard, this book is for newcomers to the UX space rather than seasoned professionals. However, those with a UX background and some experience might be interested to see how we approached design problems.

What's in This Book

The book contains the following eight chapters:

Chapter 1: *You Are Not Your User*

This chapter defines UX design and considers what makes a great experience. You'll learn why this should matter to you when designing.

Chapter 2: *Understand the Business Problem*

If you're unable to understand the problem, you can't solve it. This chapter explores the problem that your client or company aims to solve with the UX process, and explains some useful ways to ensure your success.

Chapter 3: *Understand the User Context*

In order to produce great usable designs, you need to gain empathy and understanding for your users. We'll address all the research methods available to you and look at how to recruit users for testing.

Chapter 4: *Making Sense of What You've Found*

In this chapter, we discuss how to analyze the data you've collected from your user testing. Then we'll delve into behavior design and reveal why understanding behavior and habits is intrinsic to your design work.

Chapter 5: *Sketching to Explore the Design Concept*

Once we've conducted an analysis, we move towards using sketching as a tool. Sketching is cost-effective and easy to do, and helps to generate lots of ideas quickly so that you can select a few really great ones to take to the next stage.

Chapter 6: *Prototype the Solution*

Forming working models of your design is the best way to assess whether your solution—once imagined beyond paper—is going to work or not. Creating rapid prototypes to refine your thought process and ensure you're on the right track is a critical step in your UX process.

Chapter 7: *Test, Learn, Tweak. Iterate*

The whole reason for creating prototypes is to test them with your users, in order to validate whether your design is worth pursuing. This process allows you to ascertain whether users understand your design, and allows for further refining. Final tweaks now will give you confidence that the decisions you've made along the way are the right ones.

Chapter 8: *Launch to Learn About Behavior*

This final chapter focuses on testing and evaluating your solution as you prepare to launch—and beyond. Once you've let it loose on the market, you'll continue to learn from users' habits and behaviors as they use your product, bringing your UX process full circle.

Where to Find Help

Design is an evolving area, so chances are good that by the time you read this, some minor detail or other of these technologies will have changed from what's described in this book. Thankfully, SitePoint has a thriving community of designers ready and waiting to help you out if you run into trouble. We also maintain a list of known errata for this book that you can consult for the latest updates.

The SitePoint Forums

The SitePoint Forums¹ are discussion forums where you can ask questions about anything related to web design and development. You may, of course, answer questions, too. A lot of fun and experienced web designers and developers hang out there, and it's a good way to learn new stuff, have questions answered in a hurry, and just have fun. In particular, check out the design thread.

The Book's Website

Located at <http://www.sitepoint.com/books/ux1/>, the website that supports this book will give you access to the following facilities:

Tools

As you progress through this book, you'll note that we've performed a number of user testing sessions. See the book's website to access the documents and templates we've made available to support you in your own user sessions.

Updates and Errata

No book is perfect, and we expect that alert readers will be able to spot at least one or two mistakes before the end of this one. The Errata page on the book's website will always have the latest information about known typographical and code errors.

The SitePoint Newsletters

In addition to books like this one, SitePoint publishes free email newsletters such as the *SitePoint* newsletter, *PHPMaster*, *CloudSpring*, *RubySource*, *DesignFestival*, and *BuildMobile*. In them you'll read about the latest news, product releases, trends,

¹ <http://www.sitepoint.com/forums/>

tips, and techniques for all aspects of web development. Sign up to one or more of these newsletters at <http://www.sitepoint.com/newsletter/>.

Your Feedback

If you've downloaded the app, we'd love to hear your thoughts on it and any ideas that we may not have considered. Get in touch at hello@symplicit.com.au, or on Twitter: @jodiemoule and @thecookapp.

For SitePoint, if you're unable to find an answer through the forums or wish to contact us for any other reason, the best place to write is books@sitepoint.com. We have an email support system set up to track inquiries, and if our support crew are unable to answer your question, they'll send it straight to us. Suggestions for improvements, as well as notices of any mistakes you may find, are welcome.

Acknowledgments

Writing this book has been one of the most rewarding—and challenging—things I have ever bitten off in my career. I'd like to thank the SitePoint team who I got to know over the course of nearly a year, namely Simon, Matt, and Tom during the writing process, with Di and Kelly during the edits. Thanks guys for being there as I agonized about chapters and made false starts, all while gently reminding me to meet deadlines (ugh!).

I really want to thank the app team that made it possible to deliver the case-study app we created: Cook. I think we can safely say that the app has turned into something bigger than we imagined. A special note goes to my fellow Cook business partners and directors: Stephen Moule, Alex Johnston, and Jeff Tan-Ang. Thanks for believing in the idea, guys. I couldn't have done it without you, and have had (and am still having) a ball in the process. The sleepless nights and lack of weekends are all worth it ... honest!

To our team members Jamie Chin, Ekaterina Vasilenko, Chris Michelle-Wells, and Jonathan Sagorin—the Cook app team who were involved at each stage of the UX process, and who worked tirelessly on the app. An extra special thanks goes to Stephen, Jamie, and Ekat for working back late and on weekends to design all the amazing images and posters for this book; and to Chris and Ekat for finalizing and perfecting the videos—you guys rock! I can't thank you enough.

Thanks, too, goes to the Symplicit team for tolerating my absence from day-to-day business for nearly a year, and stepping in to keep things running smoothly. Guys, as a group, I owe you all a great big thanks for your support during this time.

Thanks to my dearly departed Grandmother and parents for seeding a love of cooking, and therefore being the source of what we thought was a great design idea for the case study. Cook is for foodies like you, Mum and Dad; now I just need to get you both onto an iPad so that you can use it!

Most of all, the biggest thanks goes to my beloved husband, Stephen, who managed our business in my absence, and looked after our kids weekends, early mornings, and late at night for close to a year, as I worked to get this book completed. And still managed to smile and be a wonderful husband and father despite it all. Thanks honey. Without you, Blake, and Darci, there is nothing. You are my world.

Conventions Used in This Book

You'll notice that we've used certain typographic and layout styles throughout this book to signify different types of information. Look out for the following items.

Tips, Notes, and Warnings



Hey, You!

Tips will give you helpful little pointers.



Ahem, Excuse Me ...

Notes are useful asides that are related—but not critical—to the topic at hand. Think of them as extra tidbits of information.



Make Sure You Always ...

... pay attention to these important points.



Watch Out!

Warnings will highlight any gotchas that are likely to trip you up along the way.

Chapter 1

You Are Not Your User

So what is user experience (UX) anyway?

You might think it would be a relatively easy term to define; however, when I reflected on the evolution of UX, it was quite a difficult task. Why?

UX covers a broad range of interactions a person can have with a business, and in an increasingly connected world, the lines are blurring between the digital and nondigital spheres. What might begin as an online experience can extend into a physical interaction (say, in a bricks-and-mortar store) and then be further influenced with an instore representative—all shaped by a particular business process.

A Broad Perspective

So, let's attempt a simple explanation. **User experience (UX)** is the sum of a series of interactions a person has with a product, service, or organization. A general example of all these elements interacting can be seen in Figure 1.1.

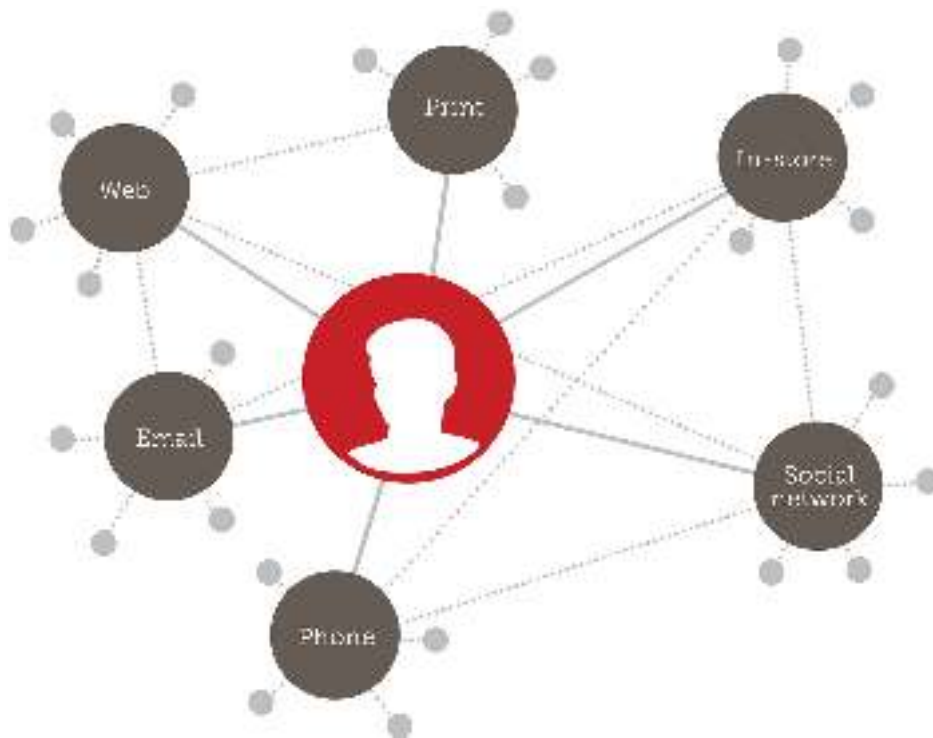


Figure 1.1. The sum of a series of interactions

Broadly considering a user's lifestyle and the overall context of how a product or service is used is necessary if you want to improve on the experience you deliver. This is especially true of digital experiences, and, nowadays, they are closely linked to other channels. To the end-user (or customer), the UX you provide will reflect their perceived experience with your brand, whether dealing with your company online, via a mobile app, or talking to your call center.

The term “user experience” was coined by Don Norman while he was vice president of the Advanced Technology Group at Apple in the 1990s. Upon coming up with the term, Norman said: “I thought human interface and usability were too narrow. I wanted to cover all aspects of the person's experience with the system, including industrial design graphics, the interface, the physical interaction, and the manual. Since then the term has spread widely, so much so that it is starting to lose its meaning.”¹

¹ You can read an excerpt of this interview, or listen to the full hour-long conversation [<http://www.adaptivepath.com/ideas/e000862>] with Don Norman, a luminary in the field of UX.

As Don implies, it's easy enough to let the term "UX" roll off the tongue, but many people lack an appreciation of what it means to deliver the broader aspects of UX, instead taking a narrow approach and considering only one or two elements.

Embracing Multidisciplinary Teams

UX embraces a multidisciplinary approach: the method of using multiple perspectives when tackling a design issue to lead to the best outcomes.

UX incorporates contributions from many disciplines, including:

- interaction design
- human factors engineering (HFE)
- industrial design
- psychology
- anthropology
- sociology
- computer science
- graphic design
- cognitive science

Generally speaking, UX combines all these elements, and covers both digital and nondigital experiences. Designing for user-product experiences that occur nondigitally is often referred to as **experience design**, with the term **customer experience** sometimes used to refer to the sum total of interactions a person has with a brand. Even defining what a customer is can cause confusion among industries; for example, marketing departments might view a customer experience differently from how an industrial designer does.

In this book, we'll focus on a process that can be used across your projects, helping you to create a seamless interaction between your user and your product (whether it's software or hardware). I will assume that your projects are digitally based, though the UX process we'll be examining can also be applied to designing offline products and services just as effectively.

As UX has become more of a buzzword, I've noticed that many people believe "user experience" only applies to interface design. More than assessing a product's ease of use, UX as a philosophy puts the end-user's needs at the center of the design and development process. It's about understanding and prioritizing those needs before,

sample content of Killer UX Design

- [Reboot with Joe Recipe Book pdf, azw \(kindle\), epub](#)
- [click Poetry of the Taliban book](#)
- [The Quarry online](#)
- [read online New Europe](#)

- <http://fortune-touko.com/library/Reboot-with-Joe-Recipe-Book.pdf>
- <http://rodrigocaporal.com/library/Poetry-of-the-Taliban.pdf>
- <http://berttrotman.com/library/The-Quarry.pdf>
- <http://www.experienceolvera.co.uk/library/Introduction-to-Video-and-Image-Processing--Building-Real-Systems-and-Applications--Undergraduate-Topics-in-Com>