



Introduction

The growth of personal computing in the past two decades of the 20th century put a new emphasis on user interface design. As part of user interface design, companies began to focus on the usability of a product. The term *usability* has its roots in the 14th century, but as computing technology became prevalent in the 1980s, the definition of usability changed toward not only making something functional and usable, but also maximizing the entire user experience with a product.

Despite the power of good user interface and usability design, you have to convince managers that usability testing is vital to the success of the company now and in the future. It's important for you to understand how managers, marketers, and users think so you can craft a proposal that will win enthusiastic support for implementing usability testing in the company for which you work.

Therefore, it's important for anyone involved in usability testing, regardless of title, to have the business acumen to create the short-term return on investment (ROI) goals while creating the framework for long-term returns.

Who Should Read This Book

You don't need a previous background in user interface design to read this book. If you're just getting into user interface design and you're thinking about developing your own user interface, this book is a good starting point for you. It's much more advantageous for you to learn about user interface design from the beginning than to learn about it from your customers when they're unhappy with your product.

If you have been working in product or documentation development and you're ready to work on a new project, you should read this book. You probably have a feel for what your customers like, but you're not sure how to maximize the usability of your product for your customers. Or perhaps you're charged with creating documentation or training and you need to know what your customers expect not only from the product, but also from the

information contained in the documentation or training modules. If this sounds like you, this is a book you should read.

This book is also appropriate if you have experience in the usability and user interface design fields. Although you may already know one or more of the theories and practices contained in this book, it can serve as a refresher. You will likely find nuggets of information you hadn't considered before as well as new ideas that you can apply to your product design and beyond.

The Purpose of This Book

This book is a primer that puts together the leading practices and ideas about user interface design and usability design and testing into a “big picture” view of how people can and should design and implement user interfaces that your customers will enjoy.

The book begins with grounding in user interfaces so you understand how we got from the beginnings of user interface design to where we are today. Then the book delves into designing user interfaces and usability testing for a product; that product can be a hardware product such as a printer, a software interface, or a Web site.

After you read this book, you will know the basics of the user interface design and usability design and testing fields. This book is only the beginning of your journey into usability and user interface design. If you want to dive in and indulge yourself in one or more of the theories and practices discussed in this book, be sure to read the books listed in Appendix B, “Recommended Reading.”

How to Read This Book

I strongly recommend that you read this book in sequence from beginning to end. By doing so, you will keep everything in context, and you will see the big picture that is the user interface design process.

If you are reading this book to refresh your memory about certain topics, you could read just those chapters that are of interest to you. Each chapter is designed to stand on its own as much as possible.

How This Book Is Organized

Here's a brief overview of what you'll find in each chapter.

Chapter 1, “Brief Histories,” gives you an overview of the history of graphical user interfaces (GUIs) and Web design as well as the differences in look and feel between different GUIs.

Chapter 2, “Concepts and Issues,” covers computing terms, user interface models, usability and user analysis terms and trends, and accessibility issues.

Chapter 3, “Making the Business Case,” covers making the case for profitability and understanding what your stakeholders want so you can make that case.

Chapter 4, “Good Design,” covers good user design goals, the constraints faced by users and designers, and how to use paper prototyping and storyboarding to quickly test and work out design problems. This chapter also covers good documentation design, because documentation is the first line of customer support for your product.

Chapter 5, “How Users Behave,” covers the psychology of user actions, how people bring their knowledge to a task, and how they create a conceptual model of the world.

Chapter 6, “Analyzing Your Users,” covers the user's mental model and where users fit on a usability bell curve so you can understand their goals and tasks.

Chapter 7, “Designing a User Interface,” discusses the creation of a persona-based interaction framework that will help you identify who your users are and what they want from your user interface.

Chapter 8, “Designing a Web Site,” explains the differences between an application designed for the Web and a GUI application, discusses design myths surrounding the Web, and provides Web design standards and rules.

Chapter 9, “Usability,” covers usability test design and the testing process itself so you can get valuable feedback from your users about your interface.

Appendix A, “Answers to Review Questions,” contains the answers to all the review questions in Chapters 1 through 9.

Appendix B, “Recommended Reading,” provides a list of books that you should read if you are interested in pursuing an in-depth study of user interface and usability design.

Glossary contains concise definitions of various words and phrases used throughout the book.