

DOCKET A L A R M Find authenticated court documents without watermarks at <u>docketalarm.com</u>.

Usability Engineering

JAKOB NIELSEN

SunSoft 2550 Garcia Avenue Mountain View, California

Morgan Kaufmann An Imprint of Elsevier

Amsterdam Boston Heidelberg London New York Oxford Paris San Diego San Francisco Singapore Sydney Tokyo



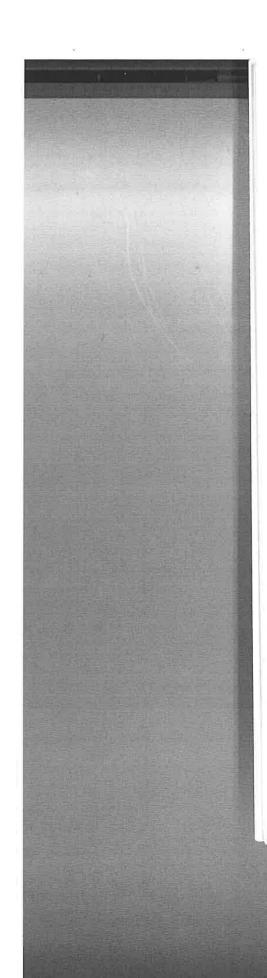
DOCKE

Α

RM

Α

Find authenticated court documents without watermarks at docketalarm.com.



DOCKE.

Δ

This book is printed on acid-free paper. 😁

Copyright © 1993 by Academic Press.

An Imprint of Elsevier

All rights reserved.

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher.

Permissions may be sought directly from Elsevier's Science and Technology Rights Department in Oxford, UK. Phone: (44) 1865 843830, Fax: (44) 1865 853333, e-mail: permissions@elsevier.co.uk. You may also complete your request on-line via the Elsevier homepage: http://www.elsevier.com by selecting "Customer Support" and then "Obtaining Permissions".

All brand names and product names are trademarks or registered trademarks of their respective companies.

ACADEMIC PRESS An Imprint of Elsevier 525 B Street, Suite 1900, San Diego, CA 92101-4495 USA http://www.academicpress.com

Academic Press Harcourt Place, 32 Jamestown Road, London, NWI 7BY UK

Morgan Kaufmann 340 Pine Street, Sixth Floor, San Francisco, CA 94104-3205 http://www.mkp.com

Library of Congress Catalog Number: 93000488 ISBN-13: 978-0-12-518406-9 ISBN-10: 0-12-518406-9

Printed and bound in the United Kingdom

Transferred to Digital Printing, 2010

Find authenticated court documents without watermarks at docketalarm.com.

Table of Contents

Preface ix

Audience ix Teaching Usability Engineering xi Acknowledgments xiii

- Chapter 1 Executive Summary 1
 - 1.1 Cost Savings 2
 - 1.2 Usability Now! 8
 - 1.3 Usability Slogans 10
 - 1.4 Discount Usability Engineering 17
 - 1.5 Recipe For Action 21

Chapter 2 What Is

DOCKE.

R

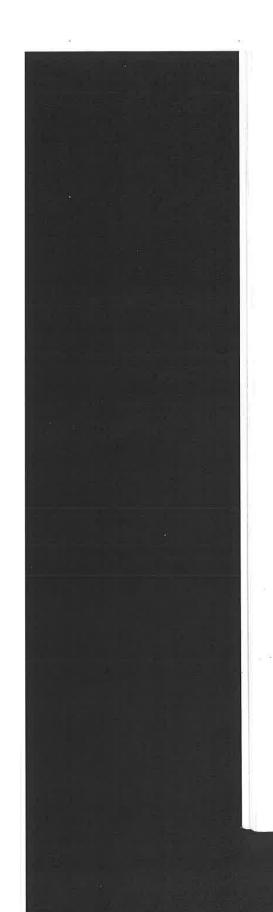
Δ

What Is Usability? 23

- 2.1 Usability and Other Considerations 24
- 2.2 Definition of Usability 26
- 2.3 Example: Measuring the Usability of Icons 37
- 2.4 Usability Trade-Offs 41
- 2.5 Categories of Users and Individual User Differences 43

v

Find authenticated court documents without watermarks at docketalarm.com.



Usability Engineering

01	Commuting of Llow Interfaces 10	
Chapter 3	Generations of User Interfaces 49	
	3.1 Batch Systems 51	
	3.2 Line-Oriented Interfaces 52	
	3.3 Full-Screen Interfaces 54	
	3.4 Graphical User Interfaces 57	
	3.5 Next-Generation Interfaces 62	
	3.6 Long-Term Trends in Usability 67	
Chapter 4	The Usability Engineering Lifecycle 71	
	4.1 Know the User 73	
	4.2 Competitive Analysis 78	
	4.3 Goal Setting 79	
	4.4 Parallel Design 85	
	4.5 Participatory Design 88	
	4.6 Coordinating the Total Interface 90	
	4.7 Guidelines and Heuristic Evaluation 91	
	4.8 Prototyping 93	
	4.9 Interface Evaluation 102	
	4.10 Iterative Design 105	
	4.11 Follow-Up Studies of Installed Systems 10	9
	4.12 Meta-Methods 111	
	4.13 Prioritizing Usability Activities 112	
	4.14 Be Prepared 113	
Chapter 5	Usability Heuristics 115	
	5.1 Simple and Natural Dialogue 115	
	5.2 Speak the Users' Language 123	
	5.3 Minimize User Memory Load 129	
	5.4 Consistency 132	
	5.5 Feedback 134	
	5.6 Clearly Marked Exits 138 5.7 Shortcuts 139	
	5.7 Shortcuts 139	
	5.8 Good Error Messages 142	
	5.9 Prevent Errors 145	
	5.10 Help and Documentation 148	
	5.11 Heuristic Evaluation 155	
vi		

DOCKET A L A R M Find authenticated court documents without watermarks at <u>docketalarm.com</u>.

DOCKET A L A R M



Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.