Contents

Preface vii

CHAPTER 1: GENERAL INTRODUCTION
- What is online searching? 1
- Basic elements of an online search 4
- Sample searches of external services 11
- General aspects of online searching 23

CHAPTER 2: HISTORY AND DEVELOPMENT OF THE ONLINE INDUSTRY
- Introduction 32
- Growth of databases and database producers 34
- Growth of online search services 40
- Developments in telecommunications technology 54
- Growth of databases on CD-ROM 57
- Growth of gateways 60

CHAPTER 3: DATABASE STRUCTURES
- Records 64
- Fields 72
- File structure 75
- Boolean operators 79

CHAPTER 4: BASIC SEARCHING
- Command-driven systems 83
- Pre-search preparation 84
- The search 85
- Search examples from command-driven services 96
- Menu-driven services 108

CHAPTER 5: RETRIEVAL FACILITIES
- Introduction 117
- Standard retrieval facilities 119
- Special retrieval facilities 137
- Command language problems, options and criteria 147

CHAPTER 6: SEARCH STRATEGIES
Introduction 153
Methods of narrowing searches 154
Methods of broadening searches 158
Maximizing retrieval effectiveness 163
Search strategy styles 170

CHAPTER 7: ONLINE SOURCES
Categorization of databases 174
Agriculture 175
Energy and the environment 179
Life and health sciences 182
Business and finance 185
Chemistry and the chemical industry 189
Law 193
News 194
Engineering 195
Information technology 197
Social and behavioural sciences 198
Humanities 201
Bibliographic databases covering particular forms of materials 203

CHAPTER 8: SEARCHING AND THE SEARCH PROCESS
Intermediaries and end-users 208
Searcher characteristics 214
The search process 215
Hardware and software search aids 222

CHAPTER 9: MANAGEMENT ASPECTS OF USING EXTERNAL SEARCH SERVICES
Introduction 236
Planning and implementation 236
Operation 245
Education and training 248

CHAPTER 10: ONLINE SEARCHING OF LOCALLY STORED DATABASES
Introduction 256
Local record and database structure 259
Searching local databases 266
Management aspects 281

CHAPTER 11: VIDEOTEX AND TELETEXT SYSTEMS
Introduction 296
Teletext 297
Videotex 304

CHAPTER 12: ONLINE PUBLIC ACCESS CATALOGUES
Introduction 319
OPACs in context 320
Records 325
Searching OPACs 328

CHAPTER 13: BEYOND BOOLEAN SEARCHING
Introduction 344
Boolean searching considered 345
Automatic query formulation 346
User–system interaction 358

APPENDIX: CASE STUDIES
BDO Binder Hamlyn 360
Birmingham Public Libraries 363
Bronglais General Hospital 368
Plymouth Polytechnic (now Polytechnic South West) 372
Unilever Research Port Sunlight Laboratory 377