Státní technická knihovna Praha
4

# Contents

List of figures xiii
Dedication xvii
Introduction xix
List of acronyms and abbreviations xxiii

**Part I Structuring and Describing**

1 **Knowledge, information and their organization** **3**
Introduction 3
Why organize knowledge? 3
Defining 'information' and 'knowledge' 5
Why isn't Google sufficient? 7
Tools for organizing knowledge and information retrieval 9
Approaches to information retrieval: what people do 12
Approaches to information retrieval: what computers do 13
Characteristics of information and knowledge 14
Summary 17

2 **Formatting and structuring knowledge** **21**
Introduction 21
Databases 21
Text and multimedia 31
Documents 33
Bibliographic relationships 35
Text analysis 38

| | | |
|---|---|---|
| | Text markup and encoding | 39 |
| | Metadata | 42 |
| | Traditional forms of metadata used by indexers | 48 |
| | Summary | 51 |
| **3** | **Describing documents** | **55** |
| | Introduction | 55 |
| | Characteristics and problems of document representation | 55 |
| | Records | 57 |
| | Citations | 58 |
| | Abstracts | 63 |
| | Bibliographic record formats | 71 |
| | Bibliographic description | 74 |
| | Description and specific document types | 81 |
| | The MARC format | 85 |
| | Summary | 92 |
| **Part II** | **Access** | |
| **4** | **Users and user behaviour** | **99** |
| | Introduction | 99 |
| | Users | 99 |
| | Information behaviour | 102 |
| | The processes of indexing and searching | 108 |
| | Information seeking | 113 |
| | Usability | 119 |
| | Summary | 122 |
| **5** | **Subjects as access points** | **125** |
| | Introduction | 125 |
| | Approaches to subject retrieval | 125 |
| | 'Aboutness' | 126 |
| | Types of indexing and searching languages | 128 |
| | Features of retrieval systems | 131 |
| | The fundamentals of controlled indexing languages | 134 |
| | Using facet analysis to analyse and represent relationships | 143 |

Displaying the thesaurus 144
Thesaurus use 145
Search facilities 150
Search logics 156
Other common search facilities 160
Differences between Web Information Retrieval and traditional Information Retrieval 168
Summary 168

**6 Classification and order 171**
Introduction 171
Categories, hierarchies and systematic arrangement 172
Functions of bibliographic classification 174
Schedules 175
Notation 183
Alphabetical index 187
Revision 188
The classification process 189
Summary 190

**7 Further concepts and tools for subject access 193**
Introduction 193
Pre-coordination 193
Subject headings lists 199
Bibliographic classification schemes 206
Taxonomies and ontologies 222
Summary 231

**8 Access through author names and titles 237**
Introduction 237
Catalogues and their functions 238
The structure of AACR Part II 242
Choice of access points 243
Headings for persons 246
Corporate bodies 249
Uniform titles 253
Citations, catalogue entries and metadata 254
Summary 256

**Part III Systems**

9 **Organizing knowledge in the digital environment** **261**
Introduction 261
What is a portal? 262
Digital libraries 266
Open access and repositories 270
Search engines and directories 273
Quality controlled resources: Intute 274
Online public access catalogues (OPACs) 275
Abstracting and indexing databases 275
Citation indexes 282
Content management systems (CMSs) 282
Records management systems 283
Image retrieval systems 284
Web community tools (wikis and blogs) 285
Summary 288

10 **The evaluation and design of information retrieval systems** **291**
Introduction 291
Evaluation and evaluation criteria 292
Methods and approaches to evaluation 300
Major retrieval evaluation projects 303
Current issues in evaluation 307
Summary 310

11 **Organizing knowledge without IT** **315**
Introduction 315
Document arrangement 316
Printed and card catalogues and indexes 320
Book indexing 331
Filing order and sequences 333
Summary 338

12 **Management of knowledge systems** **341**
Introduction 341
Maintaining authority control and updating controlled indexing languages 342

Managing systems for knowledge organization 345
Evolving and migrating systems 348
Knowledge networks 354
Summary 357

Index 361