



AI and **INFORMATION ACCESS**

**Benefits,
Challenges
and Lessons**

**G. G. Chowdhury
Sudatta Chowdhury**

Contents

Figures and Tables

xiii

Introduction

xix

1	Generative AI and Access to Information	1
	Introduction	1
	Generative AI	2
	GPTs (Generative Pre-trained Transformers)	2
	Gen AI for access to information	4
	Gen AI tools used in this book	5
	Information search process	6
	Gen AI v. conventional tools for information access	7
	Implications for information education, research and professional practices	11
2	Information Access: Tools and Processes	15
	Information and data	15
	Information retrieval	17
	Information access	20
	Indexing	25
	Information users	27
	Summary	28
3	Information Seeking	29
	Introduction	29
	Information searches	31
	Information search process	32
	Everyday life information seeking	33
	Information access and critical thinking	34
	From information literacy to AI literacy	35
	Exploratory search and Gen AI	36
	Summary	36

4	Gen AI for Everyday Life Information	39
	Introduction	39
	The search context	40
	Search results	41
	Summary	67
5	Gen AI for Scholarly Information	69
	Introduction	69
	The search context	69
	Search results	70
	Summary	112
6	Gen AI for Research Information	113
	Introduction	113
	The search context	113
	Search results	115
	Summary	156
7	Gen AI and the Information World	157
	Introduction	157
	Gen AI tools for everyday life information	158
	Access to information using libraries and scholarly databases	159
	Comparison with the Gen AI tools	167
	User education	169
	Use of Gen AI for information access: library guidelines	170
	Summary	171
8	Gen AI and Information Seeking: Some Lessons	173
	Introduction	173
	Information for research and scholarly activities	174
	User perceptions of Gen AI	175
	Not all AI-powered search tools are the same	182
	How good are the cited items in Gen AI results?	183
	How to improve the output of Gen AI tools	186
	Retrieval-augmented generation (RAG)	187
	Gen AI and the information services sector	190
	Summary	193
9	Gen AI for Information Access: Teaching, Research and Professional Practices	197
	Introduction	197
	Is Gen AI empowering users?	198
	Gen AI for information access: a paradigm shift?	199
	Unintended consequences of Gen AI	202
	AI governance	203
	Information science education and research	205
	Implications for information behaviour and practice	207
	Implications for society	207

AI literacy	208
Gen AI and sustainability of the knowledge ecosystem	209
Implications for information science education and professional practices	212
How should the users be prepared to use Gen AI for access to information?	214
Summary	218
References	221
Index	237