

Detailed contents

Preface	xxv
Guide to the main focus of cases	xxxii
Guided tour of the book	xxxiv
Guided tour to student resources on the Web	xxxvii
Acknowledgements	xxxviii

Part 1 INTRODUCTION

Chapter 1	
Introduction to information management	2
Chapter at a glance · Objective · Learning outcomes · Management issues · Links to other chapters	2
Introduction	3
Information in today's world	4
The information society	4
The information economy	5
The information age	6
Information in today's organization	7
Information overload	7
Research insight 1.1 <i>How much information?</i>	8
Using information to support processes	9
Using information to create value	11
Mini case study 1.1 <i>Capital One creates value through information</i>	11
Activity 1.1 <i>Types of organizational information</i>	14
Fundamentals of business information management	15
What is business information management?	16
Information resources	16
Information quality	19
Activity 1.2 <i>Assessing information quality for the Lo-Cost Airline Company</i>	20
The data-to-information transformation process	20
Information types and sources	21
Online information sources	22
Activity 1.3 <i>Smarter searching using Google</i>	24
Case study 1.1 <i>Avoiding disasters</i>	24
Technology resources	25
Software resources	26
Technology infrastructure resources	26
Information systems	26
E-business and e-commerce	27
Informatics	27
Does IT matter?	28

Debate 1.1	29
Case study 1.2 <i>Has corporate IT failed to deliver?</i>	30
People resources	32
Information orientation	33
Summary	33
Exercises	34
Self-assessment questions	34
Essay and discussion questions	34
References	35
Further reading	36
Weblinks	37
Chapter 2	
Software for information management	38
Chapter at a glance · Objective · Learning outcomes · Management issues · Links to other chapters	38
Introduction	39
The main categories of software	40
Applications software	41
Categorizing applications by level of decision making	42
Enterprise applications	44
Mini case study 2.1 <i>Enterprise applications improve information access at Minolta Europe</i>	47
Document and records management systems	47
Departmental applications	49
Personal productivity or office software	49
Groupware	49
Activity 2.1 <i>Options for using groupware to support student learning</i>	50
Database systems	51
Systems software	52
Operating systems software	52
Network software	55
Development software	56
Case study 2.1 <i>Spares ordering systems in the Navy</i>	57
Selecting appropriate software	58
The software selection process	58
Criteria for selecting software	59
Activity 2.2 <i>Selecting applications software for a small business</i>	60
The make, buy or rent decision	60
Activity 2.3 <i>On-demand computing</i>	61
Best-of-breed or single-vendor?	62
Research insight 2.1 <i>Single-vendor or best-of-breed?</i>	62
Case study 2.2 <i>IT as a utility</i>	63
Open-source software	64
Mini case study 2.2 <i>Munich makes the move to Linux</i>	66
Debate 2.1	66
Activity 2.4 <i>Selecting open-source software</i>	67
Case study 2.3 <i>Is open-source software a realistic choice?</i>	67
E-business applications	69
Research insight 2.2 <i>Online transaction costs</i>	70

E-business defined	72
Mini case study 2.3 <i>Dabs.com profit from e-business</i>	72
E-business benefits and management issues	75
From the Internet to intranets and extranets	77
Intranet applications	77
Intranet benefits and management issues	78
Mini case study 2.4 <i>A modern intranet for Ceva Santé Animale</i>	78
Extranet applications	80
Mini case study 2.5 <i>Herman Miller puts the extranet first</i>	81
Extranet benefits and management issues	82
Web logs	83
Customer relationship management applications	84
Mini case study 2.6 <i>Standard Life Bank justifies new data warehouse</i>	86
Supply chain management applications	86
Mini case study 2.7 <i>Iceland brings its suppliers in from the cold</i>	88
Summary	89
Exercises	89
Self-assessment questions	89
Essay and discussion questions	89
References	90
Further reading	91
Weblinks	91
Chapter 3	
Technology for information management	92
Chapter at a glance · Objective · Learning outcomes · Management issues · Links to other chapters	92
Introduction	93
Research insight 3.1 <i>From techno-speak to common speak</i>	93
Systems theory	94
Activity 3.1 <i>Why are environmental influences important?</i>	96
Decision-making theory	96
Research insight 3.2 <i>How people process information</i>	97
Technology infrastructure components	98
The client/server model	99
Types of client computer	101
Types of server computer	103
Computing architectures	104
Voluntary computing	105
Case study 3.1 <i>Why storage networks matter</i>	107
Selecting computer components	109
Selecting processors	109
Factors in microprocessor selection	110
Graphics and audio microprocessors	112
Research insight 3.3 <i>Moore's law</i>	113
Selecting memory devices	113
Factors in selection of RAM	114
Activity 3.2 <i>Understanding storage capacity</i>	115
Selecting permanent storage	116
RAID systems	117

Mean time before failure or mean time between failures (MTBF)	118
Case study 3.2 <i>Summerhill Veterinary Surgery</i>	119
Factors in selection of storage devices and media	120
Activity 3.3 <i>Selecting RAM, storage devices and media</i>	121
Selecting output devices	122
Monitors	122
Printers	123
Factors in selecting displays or monitors	123
Factors in selecting printers	124
Selecting input devices	125
Factors in selecting input devices	125
Other input devices	125
Assistive technologies	126
Debate 3.1	127
Introduction to network technology	127
Telecommunications channels	127
Different forms of guided media	128
Wi-Fi	129
Telecommunications components	129
Electronic data interchange (EDI)	130
Internet technology	131
The development of the Internet	132
What is the World Wide Web?	133
Internet standards – how does the Internet work?	135
Internet data transfer standards	137
Internet-related standards bodies	137
The HTTP protocol	138
Uniform resource locators (URLs)	138
HTML (Hypertext Markup Language)	139
Indexing, describing and referencing HTML documents	140
XML (eXtensible Markup Language)	141
Examples of XML applications	143
Activity 3.4 <i>E-business standards</i>	146
Mini case study 3.1 <i>Ancient stone helps create e-business standard</i>	146
The semantic web	148
The wireless Internet	149
SMS messaging	151
Mini case study 3.2 <i>QR Codes show England fans the way</i>	152
Interactive digital TV	152
Case study 3.3 <i>Online sales soar at easyJet</i>	152
Summary	156
Exercises	156
Self-assessment questions	156
Essay and discussion questions	156
References	157
Further reading	158
Weblinks	158

Part 2 STRATEGY

Chapter 4	
Information management strategy	162
Chapter at a glance · Objective · Learning outcomes · Management issues ·	
Links to other chapters	162
Introduction	163
Why is an information management strategy needed?	164
Data and information needs – concerns about data quantity	164
Data and information needs – concerns over time, quality and cost	165
The information lifecycle	166
Records management	167
Formal strategies	168
Mini case study 4.1 <i>Consequences of poor information management strategy</i>	169
Case study 4.1 <i>Ten commandments for information management</i>	170
The relationship between strategies for managing information-related resources	172
Responsibility for information-related resources	172
Alternative relationships between strategies for managing information-related resources	173
Research insight 4.1 <i>How managers perceive information management</i>	175
Debate 4.1	177
Developing an information management strategy	177
The strategy process	177
Information management strategy issues	179
1 The Hawley Committee IM Guidelines	179
Research insight 4.2 <i>Information management guidelines from the Hawley Committee Report</i>	179
Activity 4.1 <i>Strategic issues of information management</i>	181
2 Orna's information policy and information audit	181
3 The Willard model of information resource management	182
Information management themes and approaches	183
IM theme 1: Information value	183
IM theme 2: Information quality (see Chapter 10)	185
Activity 4.2 <i>Assessing information quality of online resources</i>	185
IM theme 3: Information security (see Chapters 9 and 12)	186
IM theme 4: Legal and ethical compliance (see Chapter 12)	187
IM theme 5: Knowledge management (see Chapter 5)	188
IM theme 6: Technology support (see Chapters 2, 3 and 6)	188
IM management approach 1: Structuring the information management function	189
Case study 4.2 <i>A global information management strategy at GlaxoSmithKline</i>	190
IM management approach 2: Responsibilities	192
Critiquing the roles and responsibilities in IM	192
Activity 4.3 <i>Assigning responsibilities for information ownership at the Lo-Cost Airline Company</i>	194
The chief information officer (CIO) role	194
Debate 4.2	195
Research insight 4.3 <i>The elusive CIO</i>	195
IM management approach 3: Information resource analysis	196
Information mapping	196
IM management approach 4: Information policy	197

IM management approach 5: Risk management	198
Mini case study 4.2 <i>An example information policy from an SME</i>	198
Activity 4.4 <i>Evaluating information strategies at UK universities and colleges</i>	200
Case study 4.3 <i>Information management at GlaxoSmithKline – the Robin Hood connection</i>	200
Summary	202
Exercises	203
Self-assessment questions	203
Essay and discussion questions	204
References	204
Further reading	205
Weblinks	205
Chapter 5	
Knowledge management strategy	207
Chapter at a glance · Objective · Learning outcomes · Management issues · Links to other chapters	207
Introduction	208
Defining knowledge	209
From information to knowledge and from knowledge to information	210
Debate 5.1	213
Defining knowledge management	217
Research insight 5.1 <i>Deadly sins of knowledge management</i>	219
Activity 5.1 <i>Defining knowledge management</i>	220
Knowledge management strategy	220
Research insight 5.2 <i>How important is knowledge management to business?</i>	221
The knowledge audit	221
Define audit objectives	222
Identify ideal state	223
Define audit sample	224
Select audit assessment tools	224
Activity 5.2 <i>Using the ASHEN model</i>	225
Build profiles of employees	226
Develop a knowledge map	226
Case study 5.1 <i>Using social network analysis as part of a knowledge audit</i>	228
Develop a knowledge value chain to represent core knowledge processes	231
Determine key issues and conclusions	232
Discuss key findings in groups to test conclusions	232
Highlight good practice examples of knowledge management already in action in the organization	232
Knowledge management objectives, vision and mission	232
Activity 5.3 <i>Defining knowledge management objectives</i>	233
Strategy selection	234
Codification versus personalization	234
Activity 5.4 <i>Assessing knowledge management strategy approaches</i>	234
Explorer versus exploiter	235
Aggressive versus conservative	236
Technocratic versus economic versus behavioural	236
Case study 5.2 <i>Knowledge management strategy at the UK Department of Trade and Industry (DTI)</i>	237

Strategy options: knowledge management in action	238
Communities of practice	238
Competitive intelligence	241
Story and narrative management	242
Using information and communications technologies (ICT) to enable knowledge management	244
Matching ICT to knowledge management requirements	244
Intranets and extranets	245
Expertise databases and corporate yellow pages	246
Collaborative tools	247
Corporate portals	247
Customer relationship management (CRM) systems	248
Document management/Content management systems	249
E-learning	250
Roles and competencies	250
Activity 5.5 <i>Knowledge management roles and competencies</i>	251
Creating a knowledge-sharing culture: rewards and incentives for knowledge management	253
Activity 5.6 <i>Debate: can a standard be developed for knowledge management?</i>	254
Summary	254
Exercises	255
Self-assessment questions	255
Essay and discussion questions	255
References	256
Further reading	257
Weblinks	258
Chapter 6	
Information systems strategy	259
Chapter at a glance · Objective · Learning outcomes · Management issues · Links to other chapters	259
Introduction	260
What is IS strategy?	261
IT governance	262
Mini case study 6.1 <i>Philips benefits from COBIT IT governance</i>	264
Information systems strategy activities	265
Defining a process for IS strategy development	267
Long-term vs short-term scope of IS strategy	267
Top-down vs bottom-up IS strategy	268
Debate 6.1	268
Mini case study 6.2 <i>Test Valley Council IS strategy 2002–2005</i>	268
Activity 6.1 <i>Evaluating different approaches to the IS strategy development process</i>	272
Responsibilities and controls for IS strategy	273
Case study 6.1 <i>Jean-Pierre Corniou of Renault shows how to bring business technology out into the open</i>	273
Activity 6.2 <i>Where should ultimate responsibility for IS lie?</i>	275
Research insight 6.1 <i>Does IS have a voice?</i>	276
Mini case study 6.3 <i>The incredible shrinking CIO</i>	277

The stages of IS strategy development	277
Simple models of strategic analysis	278
Strategic situation analysis	281
1 Internal organizational environment	282
IS analytical tool 1: The 7S model	282
2 Internal IS environment	283
IS analytical tool 2: Stages of growth models	283
Activity 6.3 <i>Stage of growth and maturity models of IS strategy</i>	288
E-business adoption stages model	288
Activity 6.4 <i>Time travel using the Wayback machine</i>	290
IS analytical tool 3: IS applications portfolio	290
IS analytical tool 4: Internal value chain analysis	291
3 External micro-environment	292
IS analytical tool 5: Porter's five competitive forces model	292
Activity 6.5 <i>Evaluating the impact of the Internet on the five competitive forces</i>	293
External value chain analysis	293
4 External macro-environment	294
Social factors	294
Legal constraints	296
Economic	296
Political	296
Technological	296
Strategic objective setting	298
Critical success factors (CSFs)	298
The balanced scorecard	300
Strategy definition	300
Debate 6.2	301
IS portfolio management	301
Mini case study 6.4 <i>IS portfolio management</i>	302
IS investment appraisal	305
IS services strategy	305
IS infrastructure strategy	306
Case study 6.2 <i>Supermarket Tesco sets out its infrastructure strategy</i>	307
Strategic failure	308
Summary	309
Exercises	310
Self-assessment questions	310
Essay and discussion questions	310
References	310
Further reading	312
Weblinks	312

Part 3 IMPLEMENTATION

Chapter 7	
Managing systems development	316
Chapter at a glance · Objective · Learning outcomes · Management issues ·	
Links to other chapters	317
Introduction	317

Types of information systems project	319
Mini case study 7.1 <i>The UK National Health Service project to develop an integrated care records service (ICRS)</i>	319
Project management goals	320
Approaches to building information management applications	323
Activity 7.1 <i>Choices in systems build</i>	324
Debate 7.1	325
Mini case study 7.2 <i>Alstom replaces legacy systems with enterprise resource planning system</i>	325
The project management process	326
Research insight 7.1 <i>Balanced resourcing for IS projects</i>	326
Planning tools to support the project management process	327
Methodologies to support the project management process	329
The PRINCE2 methodology	329
Euromethod	330
British Standard 6079	330
The Dynamic Systems Development Method (DSDM)	330
COBIT IT governance framework	330
Systems analysis and design methodologies	331
The European Foundation for Quality Management (EFQM)	332
Organizing to support the project management process	332
Case study 7.1 <i>Reading Council implements the PRINCE2 project management methodology</i>	333
The systems development process	334
The waterfall model of systems development	335
Prototyping	336
Agile software development	338
The Dynamic Systems Development Method (DSDM)	339
The DSDM systems development framework	339
Timeboxing	342
Further systems development methodologies	343
Structured Analysis and Structured Design (SASD)	343
Jackson Systems Development (JSD)	343
Merise	344
Structured Analysis, Design and Implementation of Information Systems (STRADIS)	344
Yourdon Systems Model (YSM)	344
End-user development	344
Research insight 7.2 <i>Rapid results teams</i>	345
Case study 7.2 <i>Information systems development in the Police Force</i>	345
Risk management	347
Mini case study 7.3 <i>Dell begs ToryDems to keep NHS IT project</i>	349
Debate 7.2	350
Key activities in systems development	350
Systems initiation phase	351
Key activities of systems initiation	351
1 Produce feasibility study	351
2 Project plan	351
Typical problems of the initiation phase	352
Systems analysis phase	352
Key activities of systems analysis	352
1 Focus groups	352

2 Documentation	352
3 Surveys	352
4 Observation	353
5 Interviews	353
6 Prototyping	353
7 Producing the requirements specification	353
Typical problems	353
Systems design phase	354
Key activities in systems design	354
Typical problems and solutions	354
Systems development phase	355
Key activities in systems development	355
Typical problems and solutions	355
Systems implementation phase	355
Key activities in systems implementation	356
1 Changeover	356
2 Data migration	356
3 Testing	356
Typical problems and solutions	356
Systems maintenance phase	357
Key activities in systems maintenance	357
Typical problems and solutions	357
Specific risks related to Internet and content-based projects	358
Summary	359
Exercises	359
Self-assessment questions	359
Essay and discussion questions	360
References	360
Further reading	361
Weblinks	361
Chapter 8	
Managing change	363
Chapter at a glance · Objective · Learning outcomes · Management issues ·	
Links to other chapters	363
Introduction	364
Different types of change	365
Debate 8.1	366
Different scales of managing change in information management initiatives	366
Business process management	366
Discontinuous process change	367
Case study 8.1 <i>Business process management</i>	369
Activity 8.1 <i>The magnitude of change and information management applications</i>	370
Models of change	371
Individual responses to change	371
Organizational culture and change	373
Models of technology acceptance	375
Activity 8.2 <i>The constraints of culture on implementing a new knowledge management approach</i>	376

Approaches to managing change	376
Soft systems methodology	378
Stakeholder involvement in change management	379
Leadership qualities	379
Employee motivation	381
Debate 8.2	384
Changing job design	384
Education and training	384
Activity 8.3 <i>Managing e-commerce-related change at the Lo-cost Airline Company</i>	385
Research insight 8.1 <i>The role of Human Resources Departments</i>	386
Specific examples of change management in BIM	386
1 The corporate information portal	386
What is it?	386
What are the benefits?	388
Problems of change management	388
Approaches to managing change	388
Mini case study 8.1 <i>IT and change in small to medium businesses</i>	389
Activity 8.4 <i>Keeping a portal alive</i>	389
2 Sell-side e-commerce	390
What is it?	390
What are the benefits?	390
Problems of change management	392
Approaches to managing change	392
3 Customer relationship management	395
What is it?	395
What are the benefits?	396
Problems of change management	396
Approaches to managing change	397
4 Business intelligence	398
What is it?	398
What are the benefits?	400
Case study 8.2 <i>A discussion of data analysis methods</i>	401
Problems of change management	402
Approaches to managing change	402
Activity 8.5 <i>Summarizing common themes in change management for BIM</i>	404
Case study 8.3 <i>Fighting the flood of data</i>	405
Summary	406
Exercises	407
Self-assessment questions	407
Essay and discussion questions	407
References	408
Further reading	410
Weblinks	410
Chapter 9	
Building an information architecture	411
Chapter at a glance · Objective · Learning outcomes · Management issues ·	
Links to other chapters	411
Introduction	412
Definitions	412

Information architecture	414
Standards for information architecture	415
Systems analysis	416
Identifying information architecture requirements	416
Using the results from the information and knowledge audits	417
Identifying stakeholders	417
Questionnaires	418
Interviews	418
Activity 9.1 <i>Researching requirements at The Lo-cost Airline Company: questionnaire</i>	418
Observation	419
Audit of documentation	419
Systems diagrams	420
Information flow diagrams	420
Activity 9.2 <i>Understanding an information flow diagram</i>	421
Data flow diagrams	422
Entity relationship diagrams	424
UML	426
Use case analysis	427
Actors	427
Use cases	428
Use case diagramming	428
Card sorting	428
Card sorting for web classification	428
Class Responsibility Collaborator (CRC) cards	430
Analysis for interoperability	431
Security analysis	433
Introduction to information security	433
Standards: British Standard for Information Security BS7799	433
Design	435
Database design	435
Normalization	435
Data dictionaries	436
Case study 9.1 <i>Remote database administrators and vendors</i>	437
Web design	438
The difference between websites and intranets	438
Analysis for web design: web blueprint	439
Page design and wireframes	440
Navigation systems	442
Search versus browse	445
Using search technologies	446
Organizational standard and guidelines	448
Activity 9.3 <i>Intranet design at the Lo-cost Airline Company</i>	450
Uses of meta-data on web pages	451
Activity 9.4 <i>Creating Dublin Core metadata using an online generator</i>	452
Designing for interoperability	452
Taxonomy, thesauri and controlled vocabularies	452
Case study 9.2 <i>Sainsbury's: getting connected with a taxonomy</i>	458
Using Extensible Markup Language – XML	460
XML schemas	460
Uses of XML	460
RSS	461
Usability	464

Activity 9.5 <i>Jacob Nielsen's ten usability heuristics</i>	465
Security design	466
Security design: logical	466
Security policies	466
Acceptable use policies	467
Security design: physical	467
Summary	468
Exercises	469
Self-assessment questions	469
Essay and discussion questions	469
References	470
Further reading	471
Weblinks	471
Multimedia resources	472

Part 4 MANAGEMENT

Chapter 10	
Managing information quality	474
Chapter at a glance · Objective · Learning outcomes · Management issues ·	
Links to other chapters	474
Introduction	475
Define information quality	477
The DIKAR and RAKID models	478
Data quality	479
Mini case study 10.1 <i>Abbey Bank cuts costs through improving data quality</i>	481
Information quality	482
COBIT information quality requirements	486
Activity 10.1 <i>Evaluation of information quality</i>	487
Knowledge quality	487
Activity 10.2 <i>Management of knowledge quality at AstraZeneca</i>	489
Actions and results quality – performance management systems	490
The imperative for performance management systems	490
Corporate performance management	491
Activity 10.3 <i>Capabilities of a corporate performance management system</i>	493
Mini case study 10.2 <i>Jigsaws always have more than one piece</i>	494
Performance metrics	495
The balanced scorecard	496
Six Sigma quality improvement	497
Assessing the quality of business performance metrics	498
Case study 10.1 <i>NHS Operating Room Management Information System (ORMIS)</i>	499
Research insight 10.1 <i>Successful metrics guidelines</i>	500
Conduct information audit	501
What is an information audit?	501
What is the purpose of an information audit?	502
What is the procedure for an information audit?	503
Research insight 10.2 <i>An information audit at the University of Glamorgan</i>	505
Case study 10.2 <i>An information audit at an SME</i>	507

Define and implement information quality policy	509
Approaches for managing data quality	510
The data dictionary	510
Data validation	511
Data quality auditing	512
Data cleansing	512
Data migration to data warehouses	513
Targets for data quality	513
Activity 10.4 <i>Procedures for managing information quality – the challenge of the e-mail address</i>	514
Human factors in data quality	514
Mini case study 10.4 <i>Managing data quality at the Lo-cost Airline Company</i>	515
Approaches to managing information quality	516
Mini case study 10.5 <i>A games retailer</i>	517
Human factors in information quality	519
Responsibilities for information quality	520
Summary	521
Exercises	522
Self-assessment questions	522
Essay and discussion questions	522
References	522
Further reading	523
Weblinks	524
Chapter 11	
Managing information services quality	525
Chapter at a glance · Objective · Learning outcomes · Management issues · Links to other chapters	525
Introduction	526
What is information service quality?	527
Attributes of service quality	529
Activity 11.1 <i>End-user information service quality requirements</i>	530
Assessing online service quality	530
Case study 11.1 <i>Multi-channel customer service</i>	531
Costs of service delivery	532
Managing information delivery	532
Mini case study 11.1 <i>The World Bank pulls information using the Google Search Appliance</i>	533
Managing the quality of information delivery	535
Controlling information security	536
Business continuity planning	538
Mini case study 11.2 <i>The price of security</i>	538
Managing computer viruses	539
Types of virus	539
Protecting computer systems against viruses	541
Controlling information service usage	543
E-mail management	543
1 Minimizing spam (unsolicited e-mail)	543
Research insight 11.1 <i>E-mail volume</i>	544
2 Minimizing internal business e-mail	547

3	Minimizing external business e-mail	548
4	Minimizing personal e-mail (friends and family)	548
	Debate 11.1	549
5	Legal liability	549
	End-user support	550
	End-user development	550
	Research insight 11.2 <i>Press Delete for IT time wasters</i>	551
	ICT infrastructure	554
	Research insight 11.3 <i>Service quality disruptions</i>	554
	Resourcing information services	555
	Managing service costs	555
	Reducing the TCO of client computers	556
	The cost of information provision	558
	Case study 11.2 <i>How long before we scrap that PC?</i>	559
	Outsourcing of information services	560
	Mini case study 11.3 <i>Outsourcing</i>	561
	Types of information services outsourcing	562
	Offshore outsourcing or 'offshoring'	562
	Outsourcing for small and medium organizations	564
	Benefits of information services outsourcing	564
	Problems with information services outsourcing	565
	Debate 11.2	565
	Summary	566
	Exercises	567
	Self-assessment questions	567
	Essay and discussion questions	567
	References	568
	Further reading	568
	Weblinks	569
	 Chapter 12	
	Managing ethical and legal issues	570
	Chapter at a glance · Objective · Learning outcomes · Management issues ·	
	Links to other chapters	570
	Introduction	571
	Ethics in information management	572
	The role of professional bodies	573
	Ethics within the information society	574
	Internet governance	576
	Independent supra-government organizations	577
	E-government	577
	Privacy	579
	Mini case study 12.1 <i>Google privacy</i>	580
	Debate 12.1	581
	Data protection and privacy legislation	581
	Debate 12.2	585
	Activity 12.1 <i>Data protection guidelines</i>	586
	Regulations on privacy and electronic communications	586
	Cookies and the law	589
	Privacy issues with cookie use	590

Legal constraints on cookies	590
Viral e-mail marketing	591
Problems introduced by data protection and privacy legislation	592
Electronic commerce legislation	593
The Freedom of Information Act (FOIA)	595
Monitoring of electronic communications	596
Employee monitoring legislation	599
Debate 12.3	600
Case study 12.1 <i>Prevention better than litigation? Monitoring of employee computer use</i>	600
Identity theft	601
Approaches to countering identity theft	602
Identity cards	603
Other applications of RFID	603
Techniques used to gain unauthorized access to computer systems	605
Hacking	605
Protecting computer systems against hackers	606
‘Phishing’	608
Viruses	608
Disability and accessibility legislation	609
Copyright law and IPR	610
Protection of software from copying by other developers	610
Protection of software from unauthorized copying	611
Mini case study 12.2 <i>Software piracy</i>	612
Copyright protection of online information resources	614
Case study 12.2 <i>MBA students swap integrity for plagiarism</i>	615
Summary	617
Exercises	617
Self-assessment questions	617
Essay and discussion questions	618
References	618
Further reading	619
Weblinks	619
Glossary	G1
Index	I1