

Index

- absorptive capacity and knowledge transfer 183–184
- access to information 127–130, 131
- accessibility of information 275–276
- actor-determined relationships 33
- adoption *see* knowledge transfer
- advice seeking in a bureaucracy 225–226
- agenda setting by management 249–250
- asymmetric relationships 33
- attitudes, development of 173, 178–181
- authority relationships, focus in formal structures 89
- awareness of knowledge 21
- bandwidth hypothesis 229–230
- bandwidth issues in decision making 264
- behavioral decision school 261–263
- beliefs and information seeking 237–238
- Bell Laboratories 193
- betweenness centrality 50–51
- boundaries of networks, defining 38
- boundary spanning 136–138, 139
see also brokers
- boundaryless organization, future directions for KN research 289
- bridge relationships 45
- broadcast of messages 51–52
- brokerage in knowledge transfer 184, 185–186
- brokering researchers and practitioners 140–143
- brokering structural holes 47–48
 in consortia 151–156
 Cooperative Research Centre for Freshwater Ecology 158–159
- brokers, external brokers 185–186
- brokers of structural holes in consortia 156–157
- bureaucracy *see* formal structures
- Cancer Information Service Research Consortium 148–151
- cases
 - advice seeking in a bureaucracy 225–226
 - applying the Comprehensive Model of Information Seeking to work–life 236–239
 - brokering researchers and practitioners 140–143
 - Cancer Information Service Research Consortium 148–151
 - clinical and translational science 171–172
 - Cooperative Research Centre for Freshwater Ecology 158–159
 - designing for innovation 192–194
 - echo in Project 2 227–230
 - external brokers 185–186
 - How Doctors Think* 259–260
 - lost knowledge of Stradivari 19
 - relationship between internal and external boundary spanning 137–138
 - two ignorance studies 22
- cause maps (cognitive maps) 273
- centrality indicators 50–51
- centralization index 87–88
- centralization issues with IT 119–120
- centralized hubs in networks 50
- channels of information 109–111
- clinical and translational science 171–172
- clinical decision making, *How Doctors Think* 259–260
- clinical decision support systems 267–268
- cliques, network indices 52–53
- closeness centrality 50–51
- closer ties model 152–156
 differentiation and integration 155
 homophily 154–155
 shared interests and threats 153–154
 trust 155
- coercion, use in consortia management 162
- cognitive complexity and KN role 270–273
- cognitive limits to information processing 270–273
- cognitive maps 273–274
- cohesion theory of social contagion 42–44
- cohesive groups, limitations for decision making 263–264
- collaborative relationships outside the organization 135
see also consortia
- commitment and information sharing 216–218
- common ground, consortia management challenge 161–162

- communication channels, network analysis 34
 - see also* information carrier technologies
- communication gradients 127–130, 131
- communication structure research, formal and informal approaches 3, 5–6
- communigrams 26, 38–42
- communities of practice (CoPs) 25–26
 - Cancer Information Service Research Consortium 148–151
 - consortia 147–151
 - social networking 107
- competitive advantage, knowledge as source of 14–15
- complementarity of resources 108
- complexity (horizontal differentiation) index 87
- Comprehensive Model of Information Seeking (CMIS) 236–239
- configurational approaches to strategy 208
- congruence, contingency approaches to context 59–60
- connectiveness of groups, network indices 52
- conscious ignorance 21
- consortia 139–143, 144–147, 148–151, 153, 157
 - barriers to success 144–147
 - brokering structural holes in 151–156
 - brokers of structural holes 156–157
 - closer ties model 152–156
 - communities of practice (CoP) 147–151
 - definition and purpose 139
 - differentiation and integration 155
 - homophily 154–155
 - importance to organizations 135
 - potential costs and benefits to organizations 139–143, 144–147
 - shared interests and threats 153–154
 - trust 155
- consortia management challenges 157–159, 160, 163
 - common ground 161–162
 - contextual issues 162–163
 - government regulations 162–163
 - inertia 159, 160
 - one-party issues 159–161
 - relational issues 161–162
 - resistance to change 161
 - shared interests 162
 - third-party interference 163
 - threats to relationship development 159–160, 161
 - use of formal authority, coercion 162
 - vision 162
- content of expressed symbols 33–34
- context
 - bureaucracy *see* formal structures
 - comparison of structural frameworks 63–64, 65
 - congruence and contingency 59–60
 - contingency approaches 59–60
 - electronic markets 67–68, 72–73
 - exchange relationships *see* market approach to structures
 - formal structures 63–65
 - frameworks and governance structures 60–73
 - governance structures 60–73
 - hierarchies *see* formal structures
 - importance for KN 57
 - informal structures 63–64, 65–66
 - market approach to structures 62, 63–64, 65, 66–68, 70
 - match (fit) and contingency 59–60
 - negotiated ordering of relationships 71–73
 - organizational climate and culture 58–59
 - organizational information environment 73–76
 - organizational structure and information processing 61–63
 - organizational structure as governance framework 61–63
 - professional guilds/clans 62, 63–64, 65, 70–71
 - professional links outside the organization 73
 - senses used in organizational research 57–58
 - shaping by individuals and groups 76
 - situational definition 58–59
 - transaction cost perspective 71–72
 - world outside the organization 73–76
- context and individual action, future directions for research 284–287
- contextual issues in consortia management 162–163
- contextually determined relationships 33
- contingency approaches to context 59–60
- control issues with IT 119–120
- Cooperative Research Centre for Freshwater Ecology 158–159
- CoPs *see* communities of practice
- corporate architecture, symbolic value 123
- corporate yellow pages 118–119
- cospecialization of resources 108
- costs of seeking information 223–224
- creation–transfer–implementation framework for ideas 173–174
- creativity 174–176
 - and change in organizations 169
 - challenges for organizations 169–170, 171–172
 - definition 170
 - effects of group size and diversity 173, 175–176
 - impacts of network structures 174–175
- critical mass for knowledge transfer 186
- criticality of an individual's position 51
- crowding 130–131
- cultural and societal norms, influence on decision making 262–263
- cultural factors in knowledge transfer 181–182
- customer-based approach to design 92, 95

- dashboards 113–114
 data, definitions 11, 12
 data bases 116–117
 data mining programs 118
 data storage 115–116
 security issues 115–116
 verification and quality control 115–116
 viability of information 116
 data transformation 118–119
 data transport 117–118
 decision making
 accessibility of information 275–276
 attention given to information seeking 259–260, 268–270
 bandwidth issues 264
 behavioral decision school 261–263
 cognitive complexity trait 270–273
 cognitive limits to information processing 270–273
 cognitive maps 273–274
 consequences of poorly made decisions 258, 259–260
 echo in cohesive groups 264
 exploration vs. exploitation 264–268
 groupthink concept 258
 How Doctors Think 259–260
 influence of cultural and societal norms 262–263
 information load 262
 information search limitations 274–275
 information used to support decisions 262–263
 limitations of cohesive groups 263–264
 programmed and non-programmed decisions 264–268
 role of KN 258–260
 satisficing 268–270
 search methods and priorities 275–276
 time allocated to information seeking 259–260, 268–270
 uncertainty 261–263
 decision support systems 267–268
 declarative knowledge 15
 degree centrality 50–51
 del.icio.us 107
 denial, definition 23
 density of groups, network indices 52
 design choices 91–92, 93, 94, 97
 design decisions, implementation of innovation 173, 191, 192–194
 design of formal communication structures 89–101
 deciding on what is central 90–97, 100
 dilemmas of design 92, 100–101
 focus on authority relationships 89
 functions of the organizational chart 101–102
 influences on design approach 90–97, 100
 planned ignorance 90–98
 principles of successful design 89–90, 92
 strengths 101–102
 symptoms of poor design 89
 uncertainty reduction and information flow 90–100
 weaknesses and limitations 101
 work unit communication patterns 90–100
 designing for innovation 192–194
 Diamond Lounge 108
 differentiation and integration, closer ties model 155
 differentiation and knowledge transfer 182–183
 differentiation and specialization in formal structures 80–82
 diffusion *see* knowledge transfer
 dissemination *see* knowledge transfer
 disturbed reactive organizational environment 74–76
 domain-based design 93–94
 downward communication in formal structures 82–84
 echo hypothesis 229–230
 echo in cohesive groups, effects on decision making 264
 echo in Project 2 227–230
 effectiveness, definition 196–200
 effectiveness of networks 206–208
 configurational approaches to strategy 208
 resource-based view 206–208
 role of integrated IT 207–208
 efficiency, definition 196–200
 efficiency of networks 197–200, 203–206
 effort expended in information seeking 205–206
 information-seeking cost/benefit analyses 205–206
 match between structure and performance 204
 small-group communication networks 204–205
 Zipf's law 206
 electronic markets (EM) 67–68, 72–73
 and IT 108–109
 electronic medical records (EMR), health information exchanges (HIEs) 144–147
 embedded knowledge *see* tacit knowledge
 employee assistance programs (EAPs), seeking information about 236–239
 error, definition 23
 ethical issues with KN 278–281
 human subject protection 280–281
 informed consent 280–281
 intellectual property 278–279
 privacy issues 279–280
 exchange relationships, market approach 62, 63–64, 65, 66–68, 70

- executive information systems (EIS) 114
- expert's paradox 12
- explicit knowledge transfer 17–18
- explicit vs. tacit knowledge 16–20
- external brokers 185–186
- face (loss of), and information seeking 224–226
- Facebook 107
- false truths, definition 23
- FATCAT software 31–32
- feedback in formal structures 82–83
- feedback seeking
 - about performance 242–246
 - strategies for individuals 244–246
- fields of information 124–125
 - management's role in creating 255–256
- flow states 232–233
- formal authority, use in consortia management 162
- formal communication structure
 - downward communication 82–84
 - factors affecting information load 80
 - focus on differentiation and specialization 80–82
 - formal authority context 86
 - grapevine communication 85–86
 - horizontal communication 85–86
 - lack of feedback on performance 82–83
 - management assumptions 86
 - management by exception 84
 - motivations to withhold/hoard information 82–84
 - negative feedback to upper management 84–85
 - organizational chart (organigram) 80, 81–82
 - study approaches 79–80
 - traditional views 80–82
 - upward communication 84–85
 - see also* design of formal communication structures
- formal organizational structure, influence of technology 104–105
- formal structural relationships *see* indices of formal structural relationships
- formal structures 63–65
- formalization (formal rules) index 88
- frame concept 60–61
- framework concept 60–61
- frameworks as context 60–73
- free-riders 218
- Friends of a Friend (FOAF) project 107
- functional approach to design 91–93
- functions of a relationship, network analysis 33–34
- future directions for KN research 284–290
 - context and individual action 284–287
 - nature of relationships 288–289
 - planned vs. emergent views of structures 289–290
 - the boundaryless organization 289
- global centrality 50–51
- global positioning satellite systems 117–118
- Google® 118
- governance structures as context 60–73
- government regulations, consortia management challenges 162–163
- GRADAP (Graph Definition and Analysis Package) 31
- gradients (communication gradients) 127–130, 131
- grapevine communication within formal structures 85–86
- graph theory 49
- graphic representations of efficiency and effectiveness 197–200
- graphic representations of networks 25, 26, 38–42
- group decision support systems (GDSS) 267–268
- group processes, effects on information seeking 226–230
- group size and diversity, effects on creativity 173, 175–176
- groups, network indices 52–53
- groupthink concept 258
- Hägerstrand's time-space paths 131, 132
- health information exchanges (HIEs) 144–147
- hierarchical level index 87
- hierarchies *see* formal structures
- homophily, closer ties model 154–155
- horizontal communication in formal structures 85–86
- horizontal differentiation (complexity) index 87
- How Doctors Think* 259–260
- human agency in IT integration 120
- human aspects of KN
 - commitment 216–218
 - free-riders 218
 - group processes 226–230
 - ignorance 218–223, 225–226
 - knowledge as a public good 218
 - loss of face 224–226
 - motivations not to seek information 220–223, 225–226
 - motivations to share information 216
 - organizational demography 210–213
 - potential costs of seeking information 223–224
 - role ambiguity 213–216
 - social barriers to KN 223–226, 227–230
 - status 224–226
- human subject protection in network analysis 280–281
- hybrid designs 95

- IBM 107–108
- IDEO 185–186
- ignorance 20–22, 23, 218–223, 225–226
 - and productivity 201
 - awareness of knowledge 21
 - classification scheme 20–23
 - conscious ignorance 21
 - costs and benefits of differing levels 294–297
 - definition 23
 - denial 23
 - dysfunctional consequences 219
 - error 23
 - false truths 23
 - ignorance explosion 20–21
 - knowledge gaps 21
 - known unknowns 21
 - meta-ignorance 21
 - motivations not to seek information 220–223, 225–226
 - potential causes 220
 - promoting ignorance in organizations 23
 - psychological perspectives 220–223
 - relation to knowledge 13, 20
 - taboo 23
 - unconscious knowledge 21
 - unknown unknowns 21–23
- ignorance explosion 20–21
- ignorance within organizations about important issues 3
- implementation of innovation 174, 186–191
 - influence of structure 174, 186–187
 - managers' design decisions 173, 191, 192–194
 - organizational change 190–191
 - paradoxical forces 173, 191, 192–194
 - persuasive strategies 189–190
 - reducing uncertainty 187–188, 189–190
 - types of power used to promote it 173, 188–190
- importance, relative status of interactants 33
- indices of formal structural relationships 87–88
 - centralization 87–88
 - complexity (horizontal differentiation) 87
 - formalization (formal rules) 88
 - hierarchical level 87
 - span of control 88
- individual information-seeking strategies 232–247
 - accessibility 240
 - flow states 232–233
 - influence of opinion leaders 235–240
 - information acquisition as a life skill 233
 - information foraging 246–247
 - knowing where to look 234–235, 236–239
 - knowing who knows what 240–241
 - role of training programs 233
 - seeking feedback about performance 242–246
 - small-world strategies 235, 241–242
 - strategies for individual feedback seeking 244–246
 - timeliness and quality of response 240
 - transactive memory 240–241
- individual patterns of relationships 42–48
- individual positioning indices 50–52
- inertia, consortia management challenge 159, 160
- informal elements in communication structures 3, 5–6
- informal structures 63–64, 65–66
- information 11, 13
 - amount and complexity (information load) 13
 - definitions 11–12
 - expert's paradox 12
 - implications of an information society 13–14
 - information load 12–13
 - recognition of patterns 13
 - relevancy 13
 - senses and properties 11–14
 - to overcome uncertainty 12
- information and referral centers 118–119
- information carrier technologies 109–114, 115
 - channels 109–111
 - defining relationships in KN 112–114, 115
 - information-seeking matrix 110, 112
 - interpersonal channels 111
 - messages 109–111, 112
 - sources 109–112
- information exchange relationships, market approach 62, 63–64, 65, 66–68, 70
- information fields 124–125
 - management's role in creating 255–256
- information flow, echo in Project 2 227–230
- information foraging 246–247
- information load 12–13
 - and decision making 262
 - factors affecting 80
- information overload, and productivity 201
- information politics in organizations 103–104
- information search limitations 274–275
- information search methods and priorities 275–276
- information seeking, applying the CMIS to work-life 236–239
 - see also* individual information-seeking strategies; management's role in KN
- information-seeking cost/benefit analyses 205–206
- information-seeking matrix 110, 112
- information society 13–14
- information technology *see* IT
- information terminals 132–133
- information underload, and productivity 201
- information used to support decisions 262–263

- information withholding/hoarding in formal structures 82–84
- innovation
 - and change in organizations 169
 - challenges for organizations 169–170, 171–172
 - definition 170
 - role of knowledge management 5
- innovation diffusion *see* knowledge transfer
- innovation process, impacts of organizational structure 170–173
- integration and knowledge transfer 182–183
- intellectual property issues in KN 278–279
- Internet 49, 50, 118
- interpersonal channels 111
- interpretation of expressed symbols 33–34
- intuition 21
- invention, definition 170
- IT (information technology)
 - centralization issues 119–120
 - complementarity of resources 108
 - control issues 119–120
 - cospecialization of resources 108
 - dashboards 113–114
 - decision support systems 267–268
 - electronic markets 67–68, 108–109
 - essential functions in organizations 109
 - factors affecting successful use 103–104
 - health information exchanges (HIEs) 144–147
 - human agency in IT integration 120
 - impacts on organizational communication 105–109
 - impacts on organizational structures 105–109
 - influence on organizational forms 6
 - information politics in organizations 103–104
 - potential impacts 103–104
 - productivity paradox 103–104
 - social networking 108
- IT integration, and effectiveness of networks 207–208
- KM *see* knowledge management
- KN *see* knowledge networks
- knowledge
 - as a public good 218
 - data 11, 13
 - definition of key concepts 11–15
 - definitions 13, 14–15
 - higher-order terms 11, 13
 - information 11–14
 - learning 15
 - social consensus 15
 - source of competitive advantage 14–15
 - wisdom 11, 13, 15
- knowledge-based approach to design 95–97
- knowledge classifications 15–20
 - declarative–procedural–structural scheme 15
 - tacit vs. explicit 16–20
 - work of Polanyi 16–17, 20
- knowledge codification 15, 17–18
- knowledge creation and transfer, purposes 4
- knowledge flow *see* pathways
- knowledge gaps 21
- knowledge in organizations
 - effects of current trends on employees 2–4
 - effects of specialization and segmentation 2–4
 - formal approaches 2–3
 - informal approaches 2–3
 - information overload 2
 - loss of control by management 2–4
 - members' ignorance about important issues 3
 - negative consequences of KN 3–4
 - right of access to information 4
 - trends in information context evolution 1–2
- knowledge infrastructure of organizations 115–119
 - corporate yellow pages 118–119
 - data bases 116–117
 - data mining programs 118
 - data security issues 115–116
 - data storage 115–116
 - data transformation 118–119
 - data transport 117–118
 - information and referral centers 118–119
 - telecommunications systems 117–118
 - verification and quality control 115–116
 - viability of information 116
- knowledge management (KM)
 - and innovation 169
 - as innovation and meta-innovation 5
 - challenges of creativity and innovation 169–170, 171–172
 - concept 5
 - outcome of effective KM 5
 - pro-innovation bias 170
 - purposes 4
 - role in innovation 5
- knowledge network design *see* formal communication structure
- knowledge networks (KN)
 - collaborative relationships outside the organization 135
 - creation–transfer–implementation framework 173–174
 - fluidity of 25–26
 - functions in organizations 1–2
 - importance of consortia 135
 - importance of context 57
 - importance to organizations 25–26
 - knowledge from outside the organization 135
 - negative consequences 3–4
 - role in decision making 258–260

- knowledge transfer (diffusion) 177–186
 absorptive capacity 183–184
 barriers 181–184
 brokerage 184, 185–186
 clinical and translational science 171–172
 critical mass 186
 cultural factors 181–182
 development of attitudes 173, 178–181
 differentiation 182–183
 explicit knowledge 17–18
 facilitators 173, 184–186
 innovation diffusion scenario 177–178
 integration 182–183
 shared symbols and meanings 15, 17–18
 social factors 177–178
 “stickiness” of information 183
 tacit knowledge 18–20
 threshold 186
 trust 184
- known unknowns 21
- learning, definition 15
- liaison role 26, 44–48
 brokering structural holes 47–48
 emergence of liaisons 45–46
 functions in management 46
- life skills, information acquisition 233
- Linkedin.com 107
- links (relationships) between nodes 25, 26–35
- local centrality 50–51
- loss of face and information seeking 224–226
- M-form design (product-driven) 93–94
- Mage 3D Visualization 38
- management by exception 84
- management’s role in KN 247–256
 agenda setting 249–250
 communication of information 248–249
 creating rich information fields 255–256
 facilitating information seeking 252–256
 management’s KN 250–251
 strategies used to acquire information 250–251
 worker education on information carriers 254–255
- managers as liaisons 46
- managing KN 290–294
 dilemmas 291–294
 paradoxes 290–291
- market approach to structures 62, 63–64, 65, 66–68, 70
- mash-ups (customized information) 113–114
- match (fit), contingency approaches to context 59–60
- matrix approach to design 94–95
- Meetup 107
- messages 109–111, 112
- meta-ignorance 21
- mobility of individuals 131, 132
- motivations not to seek information 220–223, 225–226
- motivations to share information 216
 free-riders 218
 knowledge as a public good 218
 organizational commitment 216–218
- MultiNet software 31–32
- multiplex networks 35–36
- Myspace 107
- NEGOPY software 31–32
- NetDraw software 38
- NetMiner software 31, 38
- network, definition 25, 26
- network analysis 5–6
 actor-determined relationships 33
 applications 6
 approach to communication structure research 3, 5–6
 asymmetric relationships 33
 combining link properties 35–37
 communication channels 34
 content of expressed symbols 33–34
 contextually determined relationships 33
 distinction between interpretation and content 33–34
 fluidity of KN 25–26
 functions of a relationship 33–34
 graphic portrayal of networks 6, 25, 26
 human subject protection 280–281
 importance of KN to organizations 25–26
 influence of IT on organizational forms 6
 informal elements in communication structures 3, 5–6
 interpretation of expressed symbols 33–34
 links as relationships 25, 26–35
 methods 27–29
 multiplex networks 35–36
 nodes and their relationships (links) 6, 25, 26–35
 range of applications 25
 reciprocity in relationships 33
 relationships (links) between nodes 6, 25, 26–35
 relative importance of interactants 33
 rules of interaction 34–35
 software 30–32, 38
 strength of links 34
 strong ties 37
 weak ties 36–37
 work-dependent relationships 33
- network closure and information flow 229–230

- network configurations 37–53
 - bridge relationships 45
 - brokering structural holes 47–48
 - cohesion theory of social contagion 42–44
 - communigrams 26, 38–42
 - defining boundaries of networks 38
 - graphic representations of networks 26, 38–42
 - individual patterns of relationships 42–48
 - liaison emergence 45–46
 - liaison functions in management 46
 - liaison role 26, 44–48
 - managers as liaisons 46
 - network indices 48–53
 - network roles 26, 44–46
 - nonparticipants in networks 26, 44
 - participants in networks 26, 44
 - social contagion 42–44
 - software for generating communigrams 38
 - structural equivalence theory of social contagion 42–43, 44
- network indices 48–53
 - centrality indicators 50–51
 - cliques 52–53
 - connectiveness of groups 52
 - criticality 51
 - density of groups 52
 - groups 52–53
 - individual positioning indices 50–52
 - levels-of-analysis problems 48–49
 - methods of spreading messages 51–52
 - pathways (knowledge flow) indices 49–50
 - transaction alternatives 51
- network roles 26, 44–46
- network structures, impact on creativity 174–175
- nodes and their relationships (links) 6, 25, 26–35
- nonparticipants in networks 26, 44
- one-party issues in consortial relationships 159–161
- opinion leaders, influence of 235–240
- organizational boundaries
 - boundary spanners 136–138, 139
 - boundaryless organization (future research) 289
 - defining boundaries of networks 38
- organizational change, implementation of innovation 190–191
- organizational chart (organigram) 80, 81–82
 - functions 101–102
- organizational climate and culture as context 58–59
- organizational demography and knowledge transfer 210–213
- organizational information environment 73–76
- organizational structure
 - and information processing 61–63
 - and the innovation process 170–173
 - as governance framework 61–63
 - designing for innovation 192–194
 - impacts of IT 105–109
- organizations, contextualizing the world outside 73–76
- Pajek software 38
- participants in networks 26, 44
- path
 - definition 49
 - length of 49
- pathways (knowledge flow)
 - centralized hubs in networks 50
 - closed walk 49
 - definition of a path 49
 - definition of a trail 49
 - definition of a walk 49
 - definition of reachability 49
 - indices 49
 - length of a path 49
 - “stickiness” of information 49
- perceptions of organizational innovativeness 227–230
- performance *see* effectiveness of networks
- performance feedback in formal structures 82–83
 - see also* feedback seeking
- persuasive strategies to promote innovation 189–190
- physical environment and relationships 125–133
 - access 127–130, 131
 - communication gradients 127–130, 131
 - crowding 130–131
 - information terminals 132–133
 - mobility of individuals 131, 132
 - privacy 130
 - proximity 126–130, 131
 - social density 126, 127–130, 131
- physical environment of organizations
 - definitions 123–124
 - functions 123–124
 - impacts on organizational communication 123–124
 - symbolic value 123
- placid, clustered organizational environment 74
- placid, randomized organizational environment 74
- planned ignorance 90–98
- Polanyi, work on knowledge classification 16–17, 20
- policy issues, trends in the information environment 281–283
- power, types used to promote innovation 173, 188–190
- privacy
 - and the physical environment 130
 - issues in KN 279–280
- procedural knowledge 15

- product-driven design 93–94
- productivity, definition 196–200
- productivity and communication 200–203
 - amount of communication required 201–203
 - ignorance 201
 - information overload 201
 - information underload 201
 - minimalist perspective 202
 - structural equivalence approach 202–203
 - tacit understandings 203
- productivity paradox with IT 103–104
- professional communities, social networking 108
- professional guilds/clans 62, 63–64, 65, 70–71
- professionals, links outside the organization 73
- proximity 126–130, 131
- psychological perspectives on ignorance 220–223
- public good, knowledge as 218

- reachability, definition 49
- reciprocity in relationships 33
- relational issues in consortia management 161–162
- relationships, future directions for KN research 288–289
- relationships and the physical environment 125–133
 - access 127–130, 131
 - communication gradients 127–130, 131
 - crowding 130–131
 - information terminals 132–133
 - mobility of individuals 131, 132
 - privacy 130
 - proximity 126–130, 131
 - social density 126, 127–130, 131
- relationships (links) between nodes 6, 25, 26–35
- researcher–practitioner relationships 140–143, 158–159
- resistance to change, consortia management challenge 161
- resource-based view of network efficiency 206–208
- role ambiguity 213–216

- salience and information seeking 237
- satellite communications systems 117–118
- satisficing, decision making 268–270
- scripts (remembered sequences of behavior) 273–274
- serial replication of messages 51–52
- Sermo online community 107–108
- shared interests, consortia management challenge 162
- shared interests and threats, closer ties model 153–154
- sharing of knowledge *see* knowledge transfer
- situational definition of context 58–59

- small-group communication networks 204–205
- small-world information-seeking strategies 235, 241–242
- small-world studies 49–50
- Smith, Adam 80–82
- social barriers to KN 223–226, 227–230
 - group processes 226–230
 - loss of face 224–226
 - potential costs of seeking information 223–224
 - status 224–226
- social consensus and knowledge 15
- social contagion 42–44
- social density 126, 127–130, 131
- social factors in knowledge transfer 177–178
- social networking 108
- software
 - generating communigrams 38
 - network analysis 30–32
- sources of information 109–112
- span of control index 88
- spatial distribution
 - and communication structures 122–123
 - as context for interaction 122–123
 - see also* physical environment
- status
 - advice seeking in a bureaucracy 225–226
 - and information seeking 224–226
- “stickiness” of information 49
 - and knowledge transfer 183
- “sticky” knowledge 18
 - see also* tacit knowledge
- Stradivari, Antonio, lost knowledge 19
- strategy, configurational approaches 208
- strength of links between nodes 34
- strip maps (cognitive maps) 273
- strong ties 37
- structural autonomy 50
- structural equivalence theory of social contagion 42–43, 44
- structural holes
 - brokering 47–48
 - brokering researchers and practitioners 140–143, 158–159
- structural holes in consortia
 - brokering 151–156
 - brokers of 156–157
- structural knowledge 15
- structure and performance, optimum match 204
- STRUCTURE software 32
- structures
 - approaches to communication structure research 3, 5–6
 - designing for innovation 192–194
 - future directions for research 289–290
 - influence on implementation of innovation 174, 186–187

supply chains, electronic markets 67–68	U-form design (functional approach) 91–93
symbolic value of physical factors 123	UCINET software 32, 38
taboo, definition 23	uncertainty and decision making 261–263
tacit knowledge, lost knowledge of Stradivari 19	uncertainty reduction
tacit knowledge transfer 18–20	and information flow 90–100
tacit vs. explicit knowledge 16–20	implementation of innovation 187–188,
work of Polanyi 16–17	189–190
technology	unconscious knowledge 21
and formal organizational structure 104–105	unknown unknowns 21–23
definition 103	upward communication in formal structures 84–85
impact of information processing technologies	utility of a medium, and information seeking 238
103–104	
potential impacts 103–104	Visio®: a drawing tool 81–82
productivity paradox with IT 103–104	vision, consortia management challenge 162
<i>see also</i> IT (information technology)	visualization (in relation to dashboards) 114
telecommunications systems 117–118	
third-party interference, consortia management	walk
challenge 163	closed 49
thresholds for knowledge transfer 186	definition 49
trail, definition 49	weak ties 36–37
transaction alternatives 51	Web 107, 113
transaction cost perspective on context	wisdom, definitions 11, 13, 15
71–72	work-dependent relationships 33
transactive memory 240–241	work–life balance 236–239
transfer of knowledge <i>see</i> knowledge transfer	work unit communication patterns 90–100
transfer of messages 51–52	
trust	Xerox 193, 246
closer ties model 155	
role in knowledge transfer 184	Yahoo! groups 107
turbulent field organizational environment 74–76	Zipf’s law 206