Index

A
Absorption 26
academic theory 103
advanced manufacturing technology (AMT) 108
Advanced manufacturing technology (AMT) 109
agency theory 132, 135, 150
AMT implementation 108, 109, 110, 111, 112, 113, 114, 116, 117, 121, 122
AMT research 121
antagonistic labor-management relations 119
antennapedia 223
anticipatory systems 79, 80
Atavism 227
attitude 43, 44, 45, 46, 49
autonomy 65

B
Bayesian information criterion (BIC) 305, 317
benchmarking 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 106
benchmarking results 98, 101
black-box theory 236
business knowledge 1, 5, 6
business strategy 1, 12, 13

C
Canalization 217, 223, 227, 228
CAS theory 166, 167, 174
category theory 78, 84, 85
cellular automata 39
change-related decision making 119
closed causal loops 75, 86
cognitive existence 177
cognitive orientation 61
collaborative co-construction 238
collective behavior 179
competitive convergence 13
Complex Adaptive Systems (CAS) 166
complex cybernetic challenge 103
complexity of theory 155
Complex methods 97
complex system 26, 37, 38, 39, 40, 42, 51, 83, 84, 86, 89
complex world 21
counterpart control 120
collections of Knowledge 22
cognitive framework 176, 183, 184
cognitive planning knowledge 197
Conrad Waddington 221, 227
Consortial benchmarking 93, 94, 96, 97, 98, 104, 106
collection of knowledge 95
contextual field 58
Coulomb’s revolutionary theory 166
covariance inflation criterion (CIC) 306
cybernetic evolutionary theory 217, 220, 224, 225, 228
cybernetic explanation 217, 218, 221
cybernetic perspective 224, 226
cybernetics 52, 54, 56, 57, 58, 59, 60, 63, 65, 66, 70, 71, 72, 74, 75, 76, 77, 90, 133, 134, 149
cybernetics aspect 254
cybernetics phenomena 218
Index

D
decision environment 58, 59
decision field 52, 54, 55, 56, 57, 58, 59, 60, 61, 63, 64, 65, 66, 67, 68, 70
decision maker 52, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 66, 67, 68, 69, 70, 71
decision-making 21, 22, 24, 25, 26, 27, 33, 34
decision-making processes 191
decision-making system 21
decision system 54, 55, 56, 57, 58, 59, 62, 66, 67, 69
deoxyribonucleic acid (DNA) 218
Deweyan philosophical approach 229
Digraph (DG) 273
Discrete Event Systems (DES) 253, 273
Drosophila 223
dynamical systems theory 5
dynamic mode 59
Dynamic Usage of Models (DYSAM) 176, 178, 189

E
Electrolux 16
environmental business-critical global 130
Epigenetic Landscape 227
epistemo-ontological framework 193
evolutionary advantage 1, 13, 14, 15, 16, 17, 18
evolutionary leaning 1
evolutionary theory 217, 218, 219, 220, 224, 225, 226, 227, 228
evolution theory 5

F
Finite Impulse Response (FIR) 278

G
general activity theory (GAT) 231
geo-political body 14
geo-political system 3
global age 54, 71, 72
global economies 87
global financial crisis 128
globalization of business 3, 4
globalization of communication 3
globalization of trade 4
global levels 2, 7, 130, 138
global macroshift 8
global market 67
global processes 187
global social 129
global society 4
Glocalising 139, 141, 144

H
hierarchical set of theories 21
hierarchy of information 31
homomorphism 60, 61
human beings 76
human dignity 143
human resource management 183

I
implementation operation 59
individual-collective polarity 137
industrial marketing and purchasing group (IMP) 95
Input/Output (IO) 278
interactive approach 135
interdependent civilization 1
intergovernmental organizations 3
Interval Analysis 274, 295, 296, 297, 298
Interval Model 274, 298

K
knowledge-based society 3
knowledge capture 24
knowledge cybernetic framework 191, 208
Knowledge cybernetics 191, 192, 194, 199, 213
knowledge management 3, 4, 5, 6, 7, 19
knowledge sharing 24

L
learning experiences 24
learning loop model 67
learning management system (LMS) 231
lessons-learned meeting 99
likelihood-based approach 268
M

macroscopic cultural change 197
management decision 59
management-oriented domains 95
management theory 75, 76, 78, 80, 86, 89, 128, 137, 151, 153, 154, 155, 156, 159, 160, 164, 165, 166, 168, 169, 170, 217, 218, 220, 222, 224, 225, 226, 228
man-made machines 83
MAS behaviour 267, 271
matching theory 41
Memory Effect 283, 298
memory-prediction model 32
mental model 56, 58, 59, 60, 61, 65, 67
metaframework 108, 110, 112, 113, 117, 118, 119, 120, 122
metaphorical school 44, 45
Metatheorizing 112
methodology researchers 94
middle-range theory 132, 145
Modeling Error 298
modular approach 253, 256, 259, 271
multi-agent 95
multi agent systems (MAS) 253, 273
multi-case nature 93
multi-case research 93
multi-case study research approach 96
multiple linear regression analysis 303
Myers-Briggs Type Inventory (MBTI) 192
myth of control 54

N

naïve realism 47
natural environment 9, 12
neo-reductionist mold 44
network monitoring 255
non-linear dynamics 154
non-linear optimization 283
non-linear term 283
non-numerical calculus 65

O

object instantiation 231, 232, 241, 245
ontology 48, 83
organisational context 67
Organisational Development (OD) 200
organisational levels 138, 141
Organisational Patterning (OP) 200
organizational behavior 37
organizational chart 75, 88, 89
organizational functions 75, 88

P

paradigm 108, 109, 110, 111, 112, 113, 115, 117, 118, 121, 122, 123
paradigmatic mindset 11
paradigmatic revolution 151, 152, 154, 158, 159, 160, 165, 166, 167, 168, 170
paradigm-related literature 112
paradox literature 109
pedagogic strategy 230
Petri nets (PN) 253, 254
Petri nets (PN)-based analytical approach 253
philosophical development 78
pluralism 36, 39, 41, 45, 46, 49
PN-based approach 256, 271
PN-based modelling 255, 256
PN model 257, 258, 264, 265, 267, 269
positional advantage 2, 13
post-conventionalism 135
postmodern theorising 133
Pragmatic partnership 141
probability density function (PDF) 275
professional employee thinking (PET) 231, 238, 240, 241

Q

quantum mechanics 81
Quasi-Linear-Fuzzy models 275

R

Radical structuralism 119
rational-emotional 137
Reachability Graph (RG) 273
reachability tree (RT) 255
real world complexity 80, 82
representationalism 47
research-oriented partnership 94
resistant-to-change 137
ribonucleic acid (RNA) 218
Index

S

simple complex systems (SCSs) 39
social capital 47
social collective 193, 201
social communities 193, 195, 208
social context 95
social distinctions 120, 122
social geometry 193, 201, 208, 214
social interactions 23, 24
social knowledge 193
social-organizational phenomena 136
social science 153, 158
social sciences 78, 79, 89, 127, 149
social situations 193, 198
social system 195, 205, 229, 230, 236, 239, 240, 242, 246
social systems 154
Social Viable Systems (SVS) 194
social worlds 133
socio-cultural matrix 230
socio-economic system 3
socio-instrumental leader 243
Structural adaptation 26
structural gene 223
subcultures 115, 116, 119
Sustainability As Usual (SAU) 2
Sustainable Development 1
Switching Process/System 298
Switching Signal 299
systemic analogy 14
system-internal canalization 223
system-internal factors 219

T

tacit knowledge 67, 115, 116, 119
testable theory 95
theoretical construct 1
Theories of Everything (TOEs) 41
toory building 93, 94, 106
toory-building 93, 94, 95, 96, 98, 99, 102, 107
theory-induced bias 93
theory of management 77, 78, 80, 82, 84, 90
Time-Variant Process/System 299
Torbert’s model 134
Total Quality Management (TQM) 152, 153
traffic management 255
Trans-Classical Systems Theory 65
typology 108, 110, 134

V

Validity Domain 299
Viable Systems Model (VSM) 199

W

world paradigm 55
Wrapping Effect 278, 299
wrapping envelope 274, 275, 280, 281, 282, 284, 285, 286, 289, 294, 295, 296, 299
Wrapping Envelope 294, 299
WYSIWTI 47
WYSIWYG 47