

Index

A

Adaptation, InterNational Development (ALADIN) 12
 ADRIatic sea integrated COastal areaS and river basin Management system (ADRICOSM) 12
 Agenzia Regionale Prevenzione e Ambiente (ARPA) 11
 Akaike information criterion (AIC) 61, 63
 Analytic Hierarchy Process (AHP) 90, 96, 137
 Ant Colony Optimisation (ACO) 355
 arrival-first (AF) 281
 artificial neural network (ANN) 64
 assembly plants (AP) 378
 asset turnover ratio (ATR) 375
 automatic identification system (AIS) 10

B

backlogging rate 226, 252-253
 backward iron-making equipment 143
 backward linkage effect 145, 148-150, 155
 Bayesian information criterion (BIC) 61, 63
 Bayesian Risk 1, 4-5
 bottleneck 152-154, 214
 budget allocation 311-313, 324, 326-327
 Business-to-Business (B2B) 373

C

capabilities in collaboration 335, 345
 capabilities in communication 335, 339, 345, 347
 capabilities in monitoring external processes 332, 334, 345
 capital allocation 312
 capital opportunity cost 264-267
 Cartesian product 43
 CES function 203, 206-207, 222
 choice manipulation 40, 42, 55

closed-loop system 333
 cluster analysis 59-60, 64, 70-72
 component suppliers (CS) 378
 comprehensive sensitivity analysis 172, 180, 262
 confidence Interval (CI) 80
 consistency index (CI) 102
 consistency ratio (CR) 102
 consistent Akaike information criterion (CAIC) 61
 constant monitoring 333-334
 constraint proposal method (CPM) 30
 Consumer Price Index (CPI) 78
 cost synergies 161
 Coupled Ocean 12
 credit-linked demand function 275
 credit sensitive demand 263, 274
 critical ratio method (CRM) 29
 cubic clustering criterion (CCC) 59, 61-62
 current speed (CUR) 13, 18, 20

D

data mining 74-75, 77-78, 82, 84-88
 Decision Authority (DA) 4
 Decision Support Architecture (DSA) 4
 demand 226
 demand rate 170, 172, 181-182, 189, 201, 226-227, 229, 233, 236, 240, 253, 257-258, 264
 departure-first (DF) 281
 deteriorating item 201
 deterioration 171
 Direct Investment 100, 104, 106-107, 112-113
 discounted cash flow (DCF) 172, 180
 discrete facility location 294
 disutility 312, 314-318, 321-322
 dummy1899 variable 164
 Dynamics of the Adriatic in Real Time 2006 (DART06) 10

E

early arrival system (EAS) 281
 economic production quantity (EPQ) 187, 263
 electronic commerce (EC) 355
 Electronic Data Interchange (EDI) 356, 373
 EMME/3 319
 ensemble statistics 1, 3, 7-8, 20-21
 enterprise resource planning 106, 108, 373-374, 387-388
 Enterprise Resource Planning (ERP) 373-374, 388
 extreme payoff (EP) 30
 extreme payoffs method (EPM) 30

F

Factor Analysis 90, 94, 96, 343, 345-346
 first-come, first-served discipline (FCFS) 281
 fully, openly and truthfully exchange (FOTE) 29
 fuzzy cost function 245, 247-249
 fuzzy inventory model 256
 fuzzy least squares priority method (LSM) 119
 Fuzzy Sets 13, 18, 117, 122, 136-138, 244, 257-258

G

game theory 37, 57, 118
 GAMS 319
 Genetic Algorithm (GA) 355
 Geographical Information System (GIS) 4
 gigawatts (GW) 142
 global optimum 286
 Graphical User Interface (GUI) 363
 Green Supply Chain 100, 104, 107
 Gross National Product (GNP) 374

H

Hitchcock Transportation Problem (HTP) 316
 Hopfield-Kagmar (HK) 64
 hypercube queueing model 295, 306

I

inbound logistics (IN) 378
 incomplete information 40, 46, 57
 India 90-94, 99, 104, 112, 115, 117, 139, 141, 145, 149-150, 154-155, 157, 170, 186, 188, 203, 225, 262, 279
 industrial linkage 141, 144-145, 158
 infinitesimal generator 299, 302
 inflation rate 171-172, 177, 180
 informational measure of complexity (ICOMP) 61

information asymmetry 206, 211, 223
 information systems (IS) 356
 information technology (IT) 354, 356, 374
 Input output (IO) 140
 inventory model 171-172, 180-181, 186-188, 195, 197, 200-202, 227, 252, 256-258, 262, 274-277
 inventory turnover ratio (ITR) 375

K

Kuhn-Tucker 314-315

L

Lagrange Multiplier (LM) 345
 Lambda-Max method 119
 late arrival system with delayed access (LAS-DA) 281
 lexicographic preference 58
 Limited Area Model Italy (LAMI) 11
 LINGO 364
 Logarithmic Least Squares Method (LLSM) 118
 logit model 311, 313, 326-327

M

maintenance
 condition-based 120, 136
 corrective 120
 opportunistic 120, 127
 time-based preventive 120
 maintenance strategies 117-118, 120, 135, 138
 MARISA 3, 22
 market segmentation 59-60, 68, 70, 72-73
 market share 104, 106, 108, 156, 262-263, 337, 357
 Markov Chain 296, 298, 300, 302
 MATLAB 135, 260, 319
 matrix geometric method (MGM) 299
 membership clustering criterion (MCC) 63
 meningioma 74-76, 78, 80, 84, 86
 mergers and acquisitions (M&A) 155
 Meteorological and Oceanographic (METOC) 1-2
 microsurgery 76-77
 mixture model 63, 70
 monotonic function 226
 Multiple Criteria Decision-Making (MCDM) 117
 multiple linear regression 79, 81
 multiserver queueing system 280

N

NATO Undersea Research Centre (NURC) 2
 negotiation support systems (NSS) 26

Index

network centrality 336
newly industrialized countries (NIC) 153
numerical taxonomy 59

O

one level of trade credit 188, 263
open-hearth furnace (OHF) 143
operating cost 359
opportunity cost (OC) 233, 237, 241
optimal budget application 313
optimal parameters 286
optimal replenishment time 262, 269, 275
optimal threshold 280, 292
orbit population 304
ordering cost (OC) 190
organizational capabilities 203-217, 223
Original Design Manufacture (ODM) 378
Original Equipment Manufacture (OEM) 378
o-ring production function 161
outbound logistics (OUT) 378
outsourcing 90-96, 104, 113, 115-116

P

pairwise comparisons 100-102, 121-122, 129
Pareto-optimal 24-32, 35-39
partial information 47-48
partial trade credit financing 188
perfect information 44, 46-47, 50
permissible delay 170-172, 175, 179-182, 187-188,
199-202, 225, 256-257, 262-265, 275-277
plate and tube 143
platinum group metals (PGM) 140
post-settlement settlement (PSS) 26
preference manipulation 40, 42, 55
programming
 dynamic 41, 118, 137
 goal 117
 linear 118, 137, 258, 313, 326-327
pseudo-F statistic (PFS) 62
Public Key Infrastructure (PKI) 377
public sector 311
purchase cost 174, 188-189, 358-359
push-pull effect 141

Q

quantity discounts 200, 202, 225, 256, 275
quasi-birth-and-death (QBD) 296
queuing theory 294-296, 306
Quota sampling 94

R

radiosurgery 74-88
regional market integration 156
Regional Ocean Modelling System (ROMS) 11
relative weight estimation 121
replenishment rate 189, 200
Resource-Based View (RBV) 330
retrial queue 294-296, 304-306
return on assets (ROA) 374
return on equity (ROE) 374
return on investment (ROI) 374
return on sales (ROS) 375
RFID technology 106, 108

S

saddle point detection (SPD) 63
sales revenue 91, 174, 264-265, 267
SER 160-162, 165-168
SERVQUAL 90, 94, 96, 113
shortage 181-182, 205-206, 225-228, 230, 232-233,
235, 237-238, 240-241, 377
Simulating WAves Nearshore (SWAN) 11
single-retailer 264
single-supplier 264
software capability upgrading cost 360
spinoff 203, 205-206, 209-219, 221-224
stepwise linear regression 79
stopping rules 59-64, 66, 69
strategic bargaining 203, 205-206, 215, 222
strategic information transmission 42, 56-58
Successive Coordinate Descent (SCD) 311, 315
super ensemble (SE) 8
supermatrix 121-122
Supply Chain Integration (SCI) 330, 347
supply chain management 90, 92-93, 104, 114-115,
186-188, 348-352, 354, 356-357, 362, 370-371,
384, 387-389
Supply Chain Performance Measurement Systems
(SCPM) 331
Supply Chain Sustainability (SCS) 338
synergy 155, 204, 208, 211-212, 214, 216, 221, 223
Systems Theory 333, 338, 345

T

talent 204, 207, 213-215, 223
TATA Company 188
team 203, 209
team organization 203
Third party logistics (3PL) 90

time horizon 189, 205, 225-226, 253, 264, 295
total source's dislike (TSD) 322
Track Access Agreements 165
Transaction Cost Economics (TCE) 331
 opportunism 331
 transaction risk 331
transaction cost theory (TCT) 356
triadic policy 279-281, 290, 293
two-level trade credit 186, 188, 201, 263, 276

U

unit stock-holding cost 189
univariate analysis 62

unscented transform (UT) 3
User 13, 75, 78, 91, 94, 96, 100, 102-104, 106-108,
113, 165, 363

V

Variance Inflation Factor (VIF) 380
variation coefficients model 140

W

Wave Model (WAM) 12
weibull distribution deterioration 171, 181, 201