

Index

A

active-user scheme (AU) 251
 active mobile group 228
 active objects 8
 adaptive intelligent 42
 AdSense technology 60
 Advanced Knowledge Technologies (AKT) 285
 affordance 101
 agent 25, 26, 28, 30, 239, 240, 241, 242, 243
 obligations 101
 society 239, 240, 261
 agent-based e-business systems 1
 agent-based shopping supports (ASS) 38, 39
 agent-oriented-relationship (AOR) 121
 agents 38
 interaction 96, 114
 algorithmic mechanism design (AMD) 65
 Andreasen model 59
 antecedent 101
 artificial-intelligence technology 42
 artificial intelligence (AI) 63, 97, 126, 218, 269
 Assembling Company (AC) 185
 auction 3, 4, 9, 58, 61, 62, 77
 space 79, 85, 86
 model 79, 84, 92
 automatic
 deterrance
 policy 260
 path
 creation (APC) 331

autonomy oriented computing (AOC) paradigm 193

B

behavioral
 analysis 109
 norms 103, 107, 117
 Bettman information processing model 59
 business
 oriented
 location
 model (BOLM) 294, 297
 models (BOLM) 320
 process
 management 147
 unit (BU) 294
 business-to-business (B2B) 39, 58, 126, 132, 220, 326
 business-to-consumer (B2C) 25, 39, 58, 126, 220

C

case based reasoning (CBR) 39, 132, 218, 219
 CBB model 74
 central processing unit (CPU) 325
 choreography
 language 334
 methods 330
 client to server paradigm (CSP) 340, 344
 client unit (CU) 294

coefficient of convergence 78, 81
 cognitive norms 102
 Colored Petri Net (CP-net) 337
 Commercial Web sites 38
 community of practice 271
 comparative shopping 39
 component market 137
 computer-mediated electronic commerce (CMEC) 45
 computer assisted ordering (CAO) 165
 consumer-to-consumer (C2C) 39, 60
 contextual information 227
 continuous auction space 85
 continuous double auction (CDA) 61, 79, 82
 cooperative agents 141
 cost-per-click (CPC) 31
 Council of Supply Chain Management Professionals 194
 customer-centric solution 51
 customer-to-customer (C2C) 78
 customer relationship management (CRM) 132

D

Darpa agent markup language (DAML) 327, 328
 decision support framework 219
 decommitted agent 141
 degree of autonomy 3
 delegation 1
 demand side 243
 dependent 101
 deterrence theory 239, 241, 261
 direct relationship (DR) 295
 distributed algorithmic mechanism design (DAMD) 65
 distributed hash table (DHT) 335
 Dutch flower auction (DFA) 79, 81, 84
 dynamic
 method 130
 model 244
 semantic
 location
 modeling (DSLM) 290

E

e-commerce (EC) 58
 e-logistics 193, 194, 195
 e-negotiation 189
 electronic data interchange (EDI) 165
 Electronic Product Code (EPC) 195
 empirical studies 40
 end
 clients (EC) 331
 negotiation 72
 English auction (EA) 79, 81, 84, 85
 enterprise resource planning (ERP) 163, 164
 environment (En) 135
 equilibrium 84
 price 80
 quantity 80
 essential transaction 112
 Evaluative norms 102
 event processing 197, 198
 execution phase 113
 expected utility (EU) 246
 extensible markup language (XML) 4
 external search 42

F

feeding 30
 finite state processes (FSP) 337
 flexible actions 129
 flexible autonomous actions 129
 focus-group interview 39
 forces 3
 formal methods 336
 Friend of a Friend (FOAF) 272
 fuzzy
 cognitive
 map (FCM) 219
 logic 175, 178, 188
 set 178
 singleton 179

G

game theory 58, 176
 genetic algorithm (GA) 42, 78, 79, 83, 84, 86, 93

global positioning system (GPS) 194
goal-driven process 149
GPT ontology 49
graphic information system/global positioning system (GIS/GPS) 196
group-package tour (GPT) 45
Group Matching Negotiation (GMN) 67

H

human problem-solving model 43
hybrid auction 84, 86, 92

I

immune networking middleware 341
indirect relationship (IR) 295
individual similarity 181
information technologies (IT) 162
inner characteristics 44
innovation diffusion theory (IDT) 40
intelligent
e-logistics
middleware
service framework (iMSF) 194
middleware
service
framework (iMSF) 196
shopping
support 39, 53
intentional norms 102
Interdisciplinary Research Collaboration (IRC)
285
internal search 42
international joint ventures (IJV) 175
Internet
applications 268
service
protocols (ISPs) 26
provider (ISP) 331
intrinsic norms 107, 117
iso-curve 180
computation 174
model 179
relaxation 181
iso-value curves 180

K

killer apps 265, 267, 268, 275, 280, 283, 284
knowledge-driven process 149
knowledge base (KB) 42

L

language action perspective (LAP) 97
layered agent pattern 2
locally believed 130
location
based
service (LBS) 289, 290
model
platform (LMP) 302
modeling 291, 320

M

machine learning 176
macrolevel 243
market mechanism 79, 81, 82, 85, 93, 94
MaSE method 121
MASSIVE methodology 2
mass market 68
master's in business administration (MBA) 115
maximum entropy (ME) 148
mechanism design 58, 65, 66, 74
membership function 178
meta-middleware 194
Metcalfe's Law 267, 271
microlevel 242
middleware 193, 194, 195, 196, 198
mission-critical systems 1
mobile
agent 342, 346
commerce 219
enterprise 290, 292, 320
modeling 98, 113, 114, 121
multi-agent
framework 222
system (MAS) 58, 125, 132, 222, 235, 239,
240
multi-agent architecture for cooperation and
negotiation in supply networks (MCNSN)
131

multiagent 146

multiple

 interfaces 4

 relationship (MR) 295

mutually believed 130

N

negotiating software agents (NSAs) 62

negotiation 58, 59, 60, 61, 62, 63, 64, 174, 175,
 182

 support

 systems (NSSs) 62, 219, 234

Netlogo platform 230

network service providers (NSP) 331

Newton-Raphson method 153

non-mobile group 228

O

old auction space 85

One-off negotiation 68

one purchase 68

ontologies 268

ontology 4, 11, 12, 20, 42, 292, 293, 321, 326,
 327, 328

representation

 languages (OWL) 4

Web

 language (OWL) 327, 329

open MAS 240, 241, 249, 251, 252

orchestration

 approaches 334

 methods 330

order phase 113

organizational semiotics (OS) 97, 99, 101, 122,
 123

original unit (OU) 293

P

Partner relationship (PR) 295

passive mobile group 228

pattern 1, 2

 language 2

Pay-Per-Click (PPC) 35

Pearl-River-Delta (PRD) 194

perceptual norms 102

personal computers (PC) 137

pervasive computing (PC) 323, 342, 347

Platform for Privacy Preferences (P3P) 274

point of sale (POS) 163, 165

portals 4

post-execution evaluation 134

price offer 225

principle of minimum relative entropy 153

process delegation problem 157

product market 137

proprietor multi-agent system (PMAS) 344

proprietor system 344

proselytisers 266

Q

quality of service (QoS) 196, 200

R

radio frequency identification (RFID) 194

request for quotes (RFQs) 138

research and development (R&D) 33, 269

resource description framework (RDF) 329

result phase 113

retail radio frequency identification (RFID) 162

Ronin agent framework (RAF) 332

S

Semantic

 Web

 challenge (SWC) 276

 Web (SW) 265, 267, 275, 276, 277, 278, 280,
 338

 approach 325

semantic

 analysis 101, 103, 104

 navigation 44

semiological behavior 102

sequential alternating protocol (SAP) 63

service

 composition 324, 325, 331, 332, 334, 335,
 336, 340

 discovery 324, 335

 algorithm 338

 service

 provider (SDSP) 331

emergence
paradigm (SEP) 344
oriented
 architecture (SOA) 196, 325, 332
services-to-client Paradigm (SCP) 340
shoppers search 38
similarity index (SI) 225
simple object access protocol (SOAP) 325
simulation 241, 244, 251
small/medium agents (SMAs) 140
small and medium enterprises (SMEs) 126
Smith's
 coefficient of convergence 78
 experiment 81, 83, 84
social
 choice
 function (SCF) 65
 obligations 101
software agent 176, 190
solicit assistance 135
spontaneous service emergence paradigm (SEP)
 340, 341
stock keeping units (SKUs) 138
substantive behavior 102
supplier selection 174, 175, 188
supply-demand schedule 81, 82, 84
supply chain management (SCM) 126, 162, 163
supply side 243
syntactical
 language 332
Web
 approach 325
XML-based
 standards 326

T

task-driven process 149
technology acceptance model (TAM) 40
termination condition 149
theory of planned behavior (TPB) 40
theory of reasoned action (TRA) 40
trade-off 181
trading agent 79, 81, 82, 86, 87, 93
transaction costs 269
Tropos methodology 2

U

ubiquitous and pervasive computing (UPC) 323
ubiquitous computing (UC) 323, 346
united similarity 181
universal description, discovery, and integration
(UDDI) 325
Universal Product Code (UPC) 162
user models 44

V

vendor managed inventory (VMI) 164
virtual database (VDB) 29

W

Web
 service 324, 325, 326, 328, 330, 332, 334,
 337, 338, 345
 choreography
 interface (WSCI) 334
 composition 326, 328
 definition
 language (WSDL) 325
 description
 language (WSDL) 198
 discovery 328
 flow
 language (WSFL) 333
 invocation 328
 ontology 328
World Wide Web (WWW) 25, 38
World Wide Web Consortium (W3C) 274
wrapper 32, 33

X

XML-based languages 328
xpectation- confirmation theory (ECT) 40

Z

zero intelligence (ZI) 79, 82
zero intelligence plus (ZIP) 79, 82