Symbols

21st century manufacturing enterprise strategy 9

A

A/VE (see agile/virtual enterprise) 81, 90, 209, 223, 234
A/VE client 359, 368
A/VE configuration manager 117, 235
A/VE contract 252, 266
A/VE design 112, 126, 134, 199, 379
A/VE integration 111, 126, 134, 197, 221, 277, 309
A/VE extended life cycle 124, 139
A/VE operation 90, 115, 222, 239, 246, 250
A/VE owner 234
A/VE reconfiguration 99
A/VE request 197, 234
A/VE operation 90
access procedure 135
actualization 242, 245
agent technology 31, 147, 173, 294
agile enterprise (AE) 13, 15, 26, 28, 34, 53, 90, 100
agile manufacturing 15, 27, 33, 53
agile/virtual enterprise (A/VE) 81, 90, 209, 223, 234
agile/virtual enterprise model 100, 118
agility 15, 33, 53
application service provider (ASP) 362
Ariba 179, 295, 363
ARIS 211
auction 156, 262
automotive industry 10, 107, 163, 352

B

basic resources 99, 102
basic services 144
bidding systems 193
BizTalk 179, 295
BM_Virtual Enterprise 44, 81
boundary crossing 42
broadvision 295, 296
broker 53, 63, 82, 136, 235, 367
broker admission 248
brokerage knowledge base 122
brokerage license 266
brokerage maintenance 238, 246
brokerage regulation 247
business alignment 12, 17, 99, 111
business environment 145
BuySite 156

C

canonical structure 85
catalogue 156
centered model 212
Centre for European Nuclear Research (CERN) 147
certificate authorities 361
CIM open system architecture (CIMOSA) 211
client 223, 365
client contract 266
client registration 300
client search constraint 114
collaboration technologies 150
commerce one 156, 295, 296
commodity exchange 156, 159, 162
common object request broker architecture (CORBA) 50, 83
common service 154
communication network 144
communication technology applications 150
competence 8
competition 6, 152, 361
competitiveness 13
complementary core competencies 42
complex resources 99, 102
computer integrated manufacturing (CIM) 211
contract 237
contracting cost 6, 196
contractualization 7, 264
control block 87, 90
cooperation 6
core competence 8
cost 82
cost-and-effort analysis 309
cost-and-effort model 192, 196, 201, 275, 309
cost driver 310
Covisint 156, 163
creation 124, 198
critical success factors 349, 364

D
data architecture 210
data modelling 211
demand 136
dependent selection model 199, 338
design rules system 247
direct negotiation 200, 228, 263, 282
dissolution 124, 236
distributiveness 16
dynamic composition 42
dynamic network organization 116
dynamically reconfigurable network 81
dynamics enabler 69
dynamics parameters 99, 108

e-alliance 69
e-business 144, 148, 151, 349
e-commerce 144, 148, 149, 151, 174, 353
e-marketplace 144, 152, 161, 193, 295, 349
e-marketplace hype curve 355
e-traditional 193
efficient consumer response (ECR) 26
electronic business 144, 148, 151, 349
electronic business XML (ebXML) 179
electronic commerce 144, 148, 149, 151, 174, 353
electronic contractualization 119
electronic institution 69
electronic marketplace 144, 152, 161, 193, 295, 349
electronic negotiation 123, 151, 173
elementary structure 59
Elemica 163, 167, 370
emulate 83
enforcement cost 6, 91, 195, 277
enterprise dynamic integration 100, 120
enterprise integration (EI) model 49
entity-relationship (E/R) 211, 216, 224
evaluation 237
evolutionary capability 17
expulsion 195, 243, 245, 251, 269
extended enterprise 27, 32
extensible markup language (XML) 121, 176, 178

Copyright © 2006, Idea Group Inc. Copying or distributing in print or electronic forms without written permission of Idea Group Inc. is prohibited.
external entities 66
external environment 91

**F**
first-tier supplier 11
fixed-price sale 174
focused domain 229, 313
focused domain (FD) 226, 229, 263, 287, 313, 318, 331
focused Markets of Resources 123, 225, 229
focused-market identification 241, 242
functional specification xiii, 209, 210, 302

**G**
generative integration 70
geographical dispersion 42
GERAM 212
global process structure 219
global sources 153, 155, 167, 322, 328, 363
global structure 210, 218, 289
Google 327
guilds 69

**H**
heterogeneity 48
hi-fi industry 108
high reconfigurability dynamics 12, 18, 100, 126, 138
hype cycle 354, 356

**I**
i2 technologies 295, 297
ICT reference model 45
IDEF 209, 211, 212, 214, 226, 231, 239, 274, 292, 360
IDEF0 213, 215, 217, 219, 231, 238, 256, 274, 360
IDEF1x 213, 216, 217, 274, 300
independent selection model 198
industry operating system 163
information and communication technologies (ICT) 16, 28, 38, 40, 135, 144, 147, 151, 161, 178, 216, 275, 360
information infrastructure 139
information systems architecture (ISA) 211
infrared sensor 324
infrastructure suppliers 11
integrated computer aided manufacturing (ICAM) 213
integratibility 16
integration 11, 18, 34, 49, 60, 70, 81, 91, 99, 100, 111, 115, 122, 136, 194, 200, 216, 236, 277, 289, 367
integration mechanism level 60, 83
intellectual property 139, 146, 148
inter-process relations 93
inter-world intelligent manufacturing system 176
interaction 120, 123, 135, 149, 167
internal organization 6
International Standards Organization (ISO) 50, 61, 178
Internet 135, 140, 147, 149, 180, 192, 207, 294, 309, 323, 349
Internet directory 192
Internet economy 349
Internet search engine 192, 207
Internet-based catalogue 148, 192
Internet-based marketplace 148, 151
Internet-based online auctions 193

**J**
just-in-time (JIT) 26, 368

**L**
language 48, 49, 179, 213, 252, 359
lower limit 105, 137

**M**
machine cell 63
maintenance 239
make-or-buy decision 4
management enabler 91, 92, 96
management procedures 222, 239, 241
manufacturing quote (MfgQuote) 169
market alignment 112, 114
Market of Resources 69, 70, 81, 82, 91, 96, 134, 209, 219, 233, 294, 323, 329, 348, 369, 370

Copyright © 2006, Idea Group Inc. Copying or distributing in print or electronic forms without written permission of Idea Group Inc. is prohibited.
market requirements 112
MarketSite 156
membership 234
meta-enterprise 82, 91, 97
Microsoft 295, 297
modification 124
monitoring costs 6, 196

N
negotiation 114, 235, 313
negotiation domain (ND) 192, 264, 313, 323, 332
negotiation parameter 114
network infrastructure 145
network structure 3, 57
new organizational model 12, 18, 144, 370
next generation (enterprise) organization 82
NIIIP 37, 45
non-canonical structures 87
normalized device (ND) 57

O
one-product-integrated-manufacturing (OPIM) 13, 28, 39, 43
open system architecture 48
operation off-line reconfigurability 56
operation online reconfigurability 59, 83
operation rules system 210, 232, 264
Oracle 295
organizational network structures 3
organizational concept 26
organizational model 27
original equipment manufacturers (OEM) 9
output flow 240, 241, 264
outsourcing 3, 7, 12, 102, 172, 181, 194, 264, 265, 352
owner 6, 55, 90, 118, 155, 234, 266, 368

P
partner selection 125, 172
passive selection 262, 264
performance analysis 309
primitive resources 12, 44, 86, 199, 234
process modelling 211
process requirements 112
process-centered 212
procurement 7, 32, 153, 163, 193, 297, 350, 364
product complexity 270, 279, 313
product development 163
product life cycle 9, 101, 108, 236
product processes 102
product-centered 94
productivity 11, 213, 253, 354, 362
prototype 294, 300

R
“r-c-r” pattern 94
reconfigurability 15, 49, 82, 88
reconfigurability dynamics 99, 104, 107, 110, 320
reconfiguration request frequency 109
reconfiguration time 16, 109, 127, 321
remote negotiation 135
remotely operated vehicle (ROV) 176
request for bid (RFB) 159
request for proposal (RFP) 154, 159
request for quotation (RFQ) 159
resource (dynamic) reconfiguration 54
resource control 54
resource integration 54
resource management level 57
resource manager 53, 56, 59, 63, 83
resource monitoring 54
resource provider 234
resource selection 24, 54, 205
resource-centered virtual enterprise 82, 97
resources alignment 113, 115
resources integration 49
resources management level 60, 83
resources provider subscription 300
resources provider 223, 359, 364
resources providers alignment 113, 116
resources providers selection 227
resources regulation 231
resources requirements 112, 114, 192, 228, 329, 359
resources search and selection 197
resources selection domain 14, 51, 137
reverse Auction 157, 263
RosettaNet 121, 179

Copyright © 2006, Idea Group Inc. Copying or distributing in print or electronic forms without written permission of Idea Group Inc. is prohibited.
scalability and business dynamic alignment 16
search and selection 197, 235, 323
search costs 6, 196
search domain dimension (SD) 313
search engines 148, 192, 197, 199, 323
search patterns 241
second approach 39
selection algorithm 104, 106, 109, 284
selection complexity 99, 104
selection model 99, 104, 127, 198, 199, 203, 205, 228, 282, 286, 318, 345
skill upgrading 146
slope of enlightenment 354
software solutions 156
solution space 99, 104, 313
space dynamics 104
straight auction 157
structural dynamics 88, 90, 102
structured analysis (SA) 211
structured analysis and design technique (SADT) 211
sub-tier suppliers 11
subcontracting 3, 11, 38, 104, 194, 276
subscription 242, 243
supply chain 11, 16, 30, 38, 102, 138, 164
supply chain management (SCM) 30, 36, 65, 138, 166, 297
support mechanism 139
SWOT 348, 349, 356, 357, 363

taylorism 9
technical requirement 137
technology trigger 354
tele-operation 144, 176
theory of the firm 4, 27
time estimation 330
total quality management (TQM) 26, 368
trading functions 156
traditional enterprise 66, 67, 96
traditional Internet-based tool 192, 311
traditional way 192
transaction 4, 6, 14, 27, 68, 82, 91, 102, 148, 151, 154, 159, 191, 195, 264, 275, 295, 310, 350, 368
transaction cost 91, 194
transaction cost economics (TCE) 5, 195
transaction cost theory 195
transaction time 91
trough of disillusionment 354
trust infrastructure 145
ubiquitous enterprise 82, 97
UDDI 121, 180
unified modelling language (UML) 211
unsubscription 210, 232, 245, 247, 251
upper limit 105, 137, 204
utilization of services 135
VE extended life cycle 82
VE life cycle 99, 125
VERA 46
virtual cluster 69
virtual company 36, 64, 65
virtual corporation 36
virtual enterprise 15, 27, 43
virtual enterprise brokerage 116, 117
virtual enterprise demonstrator 64
virtual enterprise extended life cycle 99, 124, 125, 127
virtual enterprise life cycle 124
virtual enterprise model 26, 28, 66
virtual enterprise operation scheme 59
virtual enterprise potential 66, 67
virtual enterprise/organization approach 36
virtual enterprise reference architecture (VERAM) 46
virtual factory 36, 39, 100
virtual manufacturing 36, 39, 63
virtual organization (VO) 27, 39, 68, 149
virtual value chains 15, 28
virtuality 16, 36, 57, 66, 82, 90
visit domain (VD) 313, 331, 333, 340, 342
W

Web services 121, 180, 297, 354
Web services description language (WSDL) 121, 180, 181

Y

Yahoo 324, 325, 329

Z

zero inventory (ZI) 26