

Index

A

Actor Network Theory (ANT) 109
 actors 116
 application service providers (ASP) 128
 ASP business models 128
 ASP industry 128
 auction market session 64

B

balanced matrix 304
 behaviorism 253
 black boxes 116
 Boeing 777 307
 business process re-engineering (BPR)
 5
 business-centric knowledge-oriented
 architecture 48
 business-rules systems (BRS) 211
 business-specific service agents 62

C

case-based reasoning (CBR) 210
 change agents 250
 Chicago Board of Trade (CBOT) 113
 classical conditioning 254

Cognition Era 255
 cognitive learning theories 255
 collaborative applications 40
 commodity market service 63
 communication systems layer 36
 communities of practice (CoPs) 17
 competitive advantage 186
 concept mapping 10
 conceptual indexing 11
 conditioning 253
 content management software 40
 Contingency Theory 205
 cooperative distributed system 47
 cross-functional integration 299

D

data marts 39
 data warehouse 39
 distributed manufacturing system
 (DMS) 332
 dynamic and complex domains (DCD)
 204

E

e-biz companies 312
 e-business era 32

e-business value chain 130
e-commerce 32
economic development 29
economy model 52
electronic communication networks (ECNs) 85
electronic data interchange (EDI) 47
electronic documents 89
electronic exchanges 84
electronic information dissemination 89
electronic market 109
electronic trading systems 114
eMarketplace 47
Emergent Learning Era 257
end-user application layer 41
enterprise data source layer 38
enterprise information portals (EIPs) 41
enterprise intelligence 128
enterprise model 51
enterprise resource planning (ERP) 47
eProcurement model 49
eShop model 49
Eurex 110
expert systems 209
explicit knowledge 4, 169

F

financial markets 80
FIXML 93
fractal approach 312
fractal architecture 321
fractal manufacturing system (FrMS) 312
fractal-based systems 318
fractals 316
fraud detection 13
functional matrix 304

G

global manufacturing 194
goal-orientation 320
Grounded Theory development 250
groupware 90

I

Industry Evolution 128
informal direct contact 302
information and communication technologies (ICTs) 313
information dissemination 88
information modeling 11
information sharing 11
information society 249
information technology 187
information technology assessment 29
integration agents 67
integrative project manager positions 304
intelligent agents 81, 98
intelligent enterprises 32, 312
intelligent manufacturing enterprises 331
Internet 80
Internet Age 80
IT outsourcing 128

K

knowledge application 153, 285
knowledge base (KB) 153, 170
knowledge base support environment 169
knowledge creation 153, 283
knowledge flows 185
knowledge hierarchy 187
knowledge management (KM) 1, 29, 96, 150, 186, 278
knowledge management life cycle 188
knowledge management systems 203
knowledge repository layer 39
knowledge sharing 11, 231
knowledge sharing and dissemination 153
knowledge storage 284
knowledge storage and retrieval 153
knowledge transfer 284
knowledge-based organization 2, 186
knowledge-based systems (KBS) 187, 209
knowledge-flow dynamics 192

Knowledge-Flow Theory 188
knowledge retrieval 284

L

law of effect 254
learning culture 20
learning histories 249
learning maturity 249
learning networks 171
learning organizations 250, 278
liaison coordinating positions 302

M

management processes 20
market service agents 63
markup languages 89
master teaching 252
Mechanistic-Individual Learning Period
253
Mechanistic-Organizational Learning
Period 257
middleware layer 40
modes of integration 305
multi-agent systems (MAS) 100

N

new product development (NPD) 150,
299
New York Stock Exchange (NYSE) 83
NewLearning Project 154
NYSE Trading Floor 83

O

object management group (OMG) 323
operant conditioning 254
Organismic-Individual Learning Period
255
organizational hierarchy 302
organizational knowledge management
230
organizational learning 5, 19, 278
organizational memory 23

P

permanent cross-functional teams 303
portfolio management 101
Portuguese higher education 149
Pre-learning Period 252, 256
project matrix 304

R

real world simulations 169
reinforcement process 253
RIXML 92

S

self-control 256
self-efficacy 256
self-organization 319
self-similarity 319
semantic networks 10
service level agreement (SLA) 128
seven knowledge layers 3
Social Learning Era 255
social learning theories 255
software agents 47
standardized processes 302
stimuli 253
stock trading 102
straight-through-processing (STP) 94
strategic transfer 16
student mentoring system 177
supply chain management (SCM) 313
supply chain model 325
supply-chain 47
supply-chain Integration 53
SWIFT 93
symbolism 256
system development 150

T

T+1 processing 95
tacit knowledge 4, 169
temporary cross-functional teams 303
Third Industrial Revolution 279
Tool Implementation Era 257
total quality management (TQM) 5

traditional classroom 170
traditional training 171
TSMC 287

U

user interface agents 62

V

value chain 128
vicarious learning 256
virtual advisor 220
virtual communities 230
virtual library 178

W

Web services 212
Web-based access system 41
Web-based learning systems 173
wide-area communications network
(WAN) 113
Winbond 289
wireless networks 95
workflow management (WfM) 313
workflow management coalition (WfMC)
322

X

XML 91

Y

Yin-Yang model 35