

Index

Symbols

3D model 268, 272, 273, 275
3D model control module 273

A

ABC analysis 193
abstraction mechanism 322, 325
AcceleratedSAP (ASAP) 64
Accounting and Finance (AF) 108, 109
account manager 49
administrative innovation 224, 225, 227, 228, 234, 238, 382
administrative innovations 225, 227
administrative organizations 264
administrative system 227
Advanced Manufacturing Research (AMR) 30
agent-oriented view 183
alert 281
Alfa's situation 88
American Production and Inventory Control Society (APICS) 6
American Productivity and Quality Center (APQC) 6
Analysts 33
analytic hierarchy process (AHP) 63
analytic hierarchy process (AHP) method 63
antecedent conditions 85, 88
application design 289
application layer 122, 124
application monitoring 278, 281, 284, 285, 286
application roadmap 195
application service provider (ASP) 261, 262
application software 29

areas of function 125
ASP-based product customization service 261, 262, 263, 264, 265, 268, 275
ATP approach 190, 193, 195
ATP function 190, 191, 192, 193
ATP functionality 189, 192, 193
ATP model 189
ATP problem 189, 193, 198, 201
authoritative communication 179
authority 174, 175, 176, 177, 178, 179, 180, 182, 183, 184, 185, 186, 187, 376
authority structure 180, 182, 184
automatic solution 289
autonomy 181
available-to-promise 189, 192, 193, 200, 202, 376, 386
available-to-promise (ATP) 188, 190, 192
Available-to-promise (ATP) procedures 188
average variance extracted (AVE) 163

B

back-end database 268
back-end systems 302
basic systems 162, 164
bidimensional structure 164
BI framework 297
big bang 128
BI infrastructure 293
bill of material (BOM) 268
BI market 292, 293
BI project 293, 299, 303
BI stakeholders 291, 294, 304
BI system 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304

- BI team 297, 299, 300, 301, 302, 303
- black boxing 220
- BOM creation 192
- BPR 18, 19, 20, 21, 23, 25, 26
- brainstorming 66
- broader data modeling 297
- bureaucratic firms 207
- business analyst 33
- business-centric championship 291, 297
- business-driven methodology 291, 297, 300
- business-driven project 301
- business efficiency 244
- business environment 157, 159, 160, 161, 217
- business execution and management 292
- business functions 292
- business gainer actor object 328
- business intelligence 235
- business intelligence software 40
- business IS 156
- business-led commitment 303
- business model 327
- business operations 278
- business plan 145, 150
- business processes 99, 100, 114
- business process reengineering (BPR) 18, 19, 20, 32, 37, 38
- business process standardization 35
- business process, training 2
- business user-oriented change management 291, 296
- button-event 123
- buying centre influence 106
- C**
- Capability Maturity Model (CMM) 37
- capable-to-promise (CTP) 192
- capital investment 102
- case-based product configuration 271
- case-based search module 265
- categorization 211, 217, 218
- categorization strategy 211
- categorization structure 217
- CAX scene 265
- check in/check out 130
- CIMOSA 175, 186, 385
- client/server architecture 198
- CMM model 39
- CMPCS solution 192
- code fragments 124, 125, 128, 131
- collaborative configuration 261, 274
- collective knowledge 205, 206
- Commercial-off-the-Shelf (COTS) 47
- Commercial-off-the-Shelf (COTS) systems 47
- commercial software package 135
- commodity-off-the-shelf computers 188
- communication channels 226, 227, 235
- company arena 82
- company local system 311
- company-specific business process 35
- complex management tools 18
- complex projects 59
- complex software 34, 36
- complex systems 131, 132
- complex tools 162, 164
- complex undertaking 291, 293
- composite reliability coefficient (CRC) 163
- computer aided design (CAD) 264
- computer aided manufacturing (CAM) 264
- computer-aided modeling 323
- computer-based systems 247
- computer system applications 189
- concept of service 121
- conceptual design 220
- conceptual frameworks 209
- conceptual model 325, 326, 328
- construction machinery orient-
ed product customization
261, 262, 273, 274, 275, 276
- content management 120, 125, 127, 130
- context 203, 205, 206, 207, 208, 209, 210, 212, 213, 215, 218, 220, 222, 384
- contextual organizational factors 100
- conventional operational systems 297, 304
- co-ordination mechanism 138, 141
- cost-failure paradox 99
- COTS systems 47
- counter-resistance according 142
- critical success factors (CSFs) 62, 63, 135, 240, 293
- CRM users 37
- cross functional 141, 142, 146, 150

Index

cross-functional 81, 90, 91, 293, 299, 301
cross functional executive level 8
cross-functional implementation 299
cross-functional implications 33
cross-functional team 103
cross-sectional mail survey 1
cross-system analysis 303
cross-system improvement 121
crucial milestones 300
CSFs framework
 291, 293, 294, 297, 303, 304
cultural foundations 100
current market-oriented manufacturing environments 262
customer enquiry 140
customer order decoupling point (CODP) 191
customer relationship management
 209, 228, 235
customer relationship management (CRM) 30,
 31, 34, 37, 228, 264
customer service (CS) 108, 109, 188, 190,
 191, 193, 194, 201
customization 47, 56, 261, 262, 263, 264,
 265, 268, 269, 273, 274, 275, 276,
 277, 371, 380, 385
customization service 261, 262, 263, 264,
 265, 266, 268, 273, 274, 275, 276

D

DAML-S profile 309
data architectures 35
data collection 106
data dictionary (DD) 30
data envelopment analysis (DEA) 64
data flow diagrams (DFD) 30
data issues 35
data mining tools 292
data quality 291, 293, 296, 297, 299, 301,
 303, 305, 306, 358, 371
data repository 135, 136
data sources 302, 303
data transform 261, 264, 265, 275
data transform module 264
DD based 31
decision-making 243, 251, 252, 253
decision-making process 292, 302

degree algorithm 269, 271, 273, 275
Department of Trade and Industry (dti) 209
design/manufacture knowledge 263, 264
design-supporting 47
developing country context 106
development process 47
development software 263
DFD 30, 31
diagrammatic representation 213
diffusion concept 226
diffusion model 224, 225, 228, 229, 235,
 237, 371
diffusion-of-innovation 224
diffusion-of-innovation models 224
digital archiving 120
digitization 99
document management 120, 129, 130
DOI model 225
dynamic knowledge-creating environment 218
Dynamic properties 179
dynamic resource collecting method 273

E

e-business 159, 170, 262, 263, 373
e-business context 159
e-business environment 262
ECM solutions 120
ECM systems 120, 121, 125, 129, 130
economic globalization 262
EIS relevant 185
electronic commerce (EC) 278
electronic media 212
eliminate disparate systems 1
e-mail functionalities 127
e-mail marketing 209
embrained knowledge 206
emergent literature 204
end-users 81, 84
end-user support 241, 242
end-user training 241
engineering asset management
 291, 292, 294, 301, 303, 304
Engineering asset management organizations
 (EAMOs) 292
engineering method 31, 32, 34, 37, 38, 39,
 40, 42, 43

- enterprise 322, 323, 324, 356, 325, 326, 358, 328, 361, 363, 364, 335, 366, 368, 376, 379, 381, 384, 385
- enterprise architecture 323, 334, 370
- enterprise architecture CIMOSA 175
- enterprise content management system 120
- enterprise information 263
- enterprise information systems (EISs) 32, 174, 175
- Enterprise Java Beans (EJBs) 282
- enterprise resource planning (ERP) 1, 15, 16, 134, 135, 152, 374, 381
- enterprise resource planning (ERP) systems 1, 13, 18, 27, 46, 99, 120, 134, 224, 374
- enterprise strength monitoring solutions 278
- enterprise systems 120, 121, 123, 125, 128, 129, 130, 131, 133, 370
- enterprise-wide dimensional model 303
- enterprise-wide information system 293
- enterprise-wide scale 299
- entity model 215
- entrepreneurial cultures 228
- ERP acquisition 100, 101
- ERP activities 57, 60, 62, 66, 67
- ERP activity 65
- ERP adoption 21, 25, 27, 113, 114, 115, 117, 224, 225, 235, 369, 377
- ERP applications 235
- ERP applications vendors 191
- ERP approach 147, 148, 150
- ERP bibliography 62, 70, 373
- ERP competence centre 84
- ERP consultants 63
- ERP customization 32, 37
- ERP end users 37
- ERP functionality 29, 30, 35, 40, 191, 192
- ERP implementation 1, 3, 4, 5, 6, 8, 9, 10, 11, 13, 15, 19, 20, 21, 23, 24, 25, 27, 28, 354, 30, 31, 356, 32, 37, 38, 39, 40, 366, 44, 371, 380, 100, 102, 104, 115, 116, 117, 134, 135, 137, 138, 141, 142, 144, 145, 150, 151, 150
- ERP implementation process 80
- ERP implementation project 57, 58, 59, 60, 61, 62, 64, 66, 68, 69
- ERP implementation projects 57, 58, 59, 60, 61, 64, 65, 69, 367
- ERP implementations 1, 2, 4, 7, 8, 9, 11, 12, 13, 81, 82, 84, 362, 95, 368, 96, 97
- ERP installation 23
- ERP knowledge 11
- ERP lifecycle 137, 138, 145
- ERP market 1, 225, 230, 235
- ERP maturity 29, 30, 35, 38, 40, 43
- ERP maturity model 29, 30, 39, 40, 42
- ERP maturity model (EMM) 29, 30, 35, 39, 40, 41, 43
- ERP-oriented environment 12
- ERP package 81, 84, 87, 88, 89, 91, 93, 94, 95, 96
- ERP package software 81, 84, 88, 93, 95, 96
- ERP performance gap 193
- ERP phase 65
- ERP problems 135, 136, 138
- ERP product 99, 102, 103, 104, 189
- ERP project 32, 35, 37, 42, 57, 58, 59, 60, 61, 62, 63, 64, 66, 70, 72, 73, 376, 380, 384, 81, 84, 86, 87, 88, 90, 92, 95, 97, 104
- ERP Project Life Cycle Stages 63
- ERP project manager 81, 84, 87, 88, 90, 95
- ERP projects 29, 30, 31, 32, 34, 35, 37, 38, 39, 40, 42, 43
- ERP project success 1
- ERP purchase decision 106
- ERP radicaless 228
- ERP research 100
- ERP resources 11
- ERP selection 99, 100, 101, 102, 106, 108, 114, 115, 117, 118, 356, 367, 377
- ERP software 2, 5, 10, 12, 13, 23, 29, 32, 37, 38, 40, 42, 43, 84, 355, 101, 102, 103, 106, 110, 365, 113, 114, 117, 119, 384, 115, 116
- ERP software suppliers 62
- ERP solution business 103
- ERP solutions 189
- ERP spending 1
- ERP suppliers 224
- ERP suppliers' marketing strategy 224

Index

ERP system 3, 4, 5, 7, 8, 10, 11, 12, 18, 19, 20, 21, 22, 23, 24, 25, 26, 29, 30, 32, 34, 35, 37, 38, 39, 40, 42, 43, 45, 46, 47, 48, 51, 54, 55, 58, 356, 358, 368, 370, 371, 375, 385
ERP team 38, 40, 42, 43
ERP users 22, 26, 48, 54
ERP vendors 29, 30, 35, 43, 103, 104, 113, 116, 140, 141, 142, 145, 361
ERP worldwide 225
established theory 203, 220
evolutionary BI system 300
evolutionary BI system development 300
evolutionary information 297
explicit knowledge 204, 205, 213, 219
exploratory factor analysis (EFA) 7
exploratory research 247
eXtensible HTML (XHTML) 268
eXtensible Stylesheet Language Transformations (XSLT) 268
external alignments 227, 228
external consultants 81, 94
external influence 224, 229, 231, 234, 235
External-influence Model 232
external influence source 224
externalization 205
extraction, transformation and loading (ETL) 302

F

face-to-face exchanges 227
fact-based analysis 302
financial management 189
focus group 46, 48, 49, 50, 51, 54
four-stage procedure model 128
Functional evaluation 103
functionality-based model 308
functionality-based Web service discovery 308
functional silo 226
fundamental tool 156

G

Gain Business Generic Business Process 327, 328
Gain Business Role 328
GAMS model 197

GAMS modeling language 197
GCViewer 282
generalization hierarchy strategy 269
Generalized Enterprise Reference Architecture and Methodology (GERAM) 183
general model 105, 119, 384
general systems theory 324
generic 322, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 356, 358
generic enterprise reference architecture 323
generic object-oriented enterprise modeling process (GOOEMP) 322
generic reusable business object modeling (GR-BOM) 326
generic solution 103
geographic dispersion 137, 143
global CIOs 30
global effect 165
global expenditure 100
globalization 99
globalized view 189
global level 224
global practices 104
global sourcing 105
go-live 21, 81, 86, 92
governance framework 291, 296, 297
graphical user interface (GUI) 198
grid architecture 121
group culture 211
group structure 105

H

hardware 4, 6, 10, 13, 278, 279
hardware layer 123
hardware platform 191
heuristic evaluation 49, 50, 54
hierarchical approach 125
hierarchical levels 125, 127
hierarchical structure 181
hierarchy organization 272
hierarchy tree 264, 269, 270, 271, 272, 273
homogeneity 25
human-oriented 175, 186
human resources 2, 103, 114, 135, 136, 138, 141, 189, 244
human resources data 226

I

- IBM WebSphere Application Server 283, 284
- imitation hypothesis 225, 229, 237, 371
- imposing sanctions 180
- individual cognition 205
- industry type 106, 113, 114
- informal aspects 182
- information and communications technology (ICT) 100
- information engineering (IE) 323
- information mapping technology 265
- information quality 240, 245
- information systems 239, 240, 241, 243, 247, 256, 257, 258, 259, 260, 322, 354, 323, 324, 357, 361, 363, 367, 367, 370, 372, 374, 381, 383, 386
- information systems community 217
- information systems design 301
- information systems (IS) 99, 100, 156, 239
- information systems (IS) success model 99
- information technology 2, 8, 10
- Information Technology Infrastructure Library (ITIL) 279
- information technology (IT) 3, 100, 108, 109, 240
- information technology (IT) projects 37
- information technology (IT) utilization 100
- information theory 324
- infrastructure performance 295, 297, 298
- innovation diffusion theory (IDT) 157
- Institute for Supply Management (ISM) 6
- integration of enterprise systems 120, 133, 370
- interactive knowledge warehouse 203, 204, 207, 208, 209, 210, 213, 214, 221, 373
- interactive virtual assembly system 273
- intercommunication module 272
- inter-enterprise collaborative operations 228
- internal arrangements 227, 228
- internalization 205
- international competition 121
- International Journal of Enterprise Information Systems (IJEIS) 18, 19
- Internet-based sales 261, 275, 276
- interorganizational information systems 214
- inter-organizational levels 225
- interpersonal channels 225, 227, 235
- interpersonal communication 229, 231
- inter-related systems 158
- intranet-based repository 208
- intranet infrastructure 216
- intranet solution 216
- inventory data 226
- inventory levels 191, 193, 201
- IS adoption 158
- IS contributions 240, 256
- IS impact 239, 240, 242, 243, 244, 245, 252, 254, 255, 256, 257
- IS investments 242, 244
- IS literature 293
- IS management practices 240
- IS manager 244, 247
- isomeric/isomorphic data 265
- isomeric/isomorphic product data 261, 264, 268, 275
- IS organizational impact 239, 244, 245, 246, 247, 249, 250, 251, 252, 253, 254, 256, 257
- IS organizational impact factors 239, 245, 251, 252, 253
- IS organizational level 239, 253, 257
- IS organizational unit 241
- IS planning 241, 244
- IS sophistication 239, 241, 243, 246, 247, 248, 250, 251, 252, 253, 256, 257
- IS strategic planning 242
- IS strategy 239, 241, 242, 246, 247, 248, 250, 251, 252, 253, 257
- IS success 239, 240, 241, 242, 243, 244, 245, 247, 248, 249, 251, 252, 253, 254, 256, 257
- IS success factors 239, 240, 242, 244, 245, 247, 248, 251, 252, 253, 254, 256, 257
- IS unit 241, 243, 244, 246, 248, 250, 252, 254
- IT industry 293
- IT infrastructure 139, 204, 205
- IT infrastructure project 204
- IT investments 242, 243
- IT issues 19

Index

IT landscape 129
IT products 244
IT services 279
IT-system development 81
IT training 3, 4, 242, 246, 247, 248, 250,
252, 256

J

Jack-of-all-trades 48, 49, 52
Java applications 283
Java based enterprise applications 278, 280
Java EE application 284, 286, 287, 289
Java Message Service (JMS) 282
Java Virtual Machine (JVM) 282
Java Virtual Machine Profiling Interface
(JVMPi) 283
Java Virtual Machine Tool Interface (JVMTI)
283
just-in-time (JIT) 191

K

Kadrosi 203, 204, 205, 207, 208, 209, 210,
211, 212, 213, 214, 215, 216, 217,
218, 219, 220
Kaiser Normalization (KMO) 108
key component 106
key factors 2
KM users 37
knock-out criteria 87
knowledge analysis 50
knowledge assets 205
knowledge base 263, 264, 265, 268
knowledge codification 219
knowledge creation 205, 206, 207, 221, 375
knowledge gaps 216, 217, 219, 220
knowledge intensive 207
knowledge management 204, 211, 216, 217,
218, 219, 220, 221, 222, 235, 354,
373, 379, 380, 382
knowledge management (KM) 30, 34, 37
knowledge management systems (KMS)
241, 243, 256
knowledge representation 215, 216, 221, 376
knowledge transfer partnerships (KTPs) 209

knowledge warehouse 203, 204, 205, 207,
208, 209, 210, 211, 212, 213, 214,
215, 216, 217, 218, 219, 220, 221,
373
knowledge warehouses 209
knowledge worker 207
Kuwaiti context 240, 256
Kuwaiti organizations
239, 245, 246, 252, 253

L

Large-scale 300
large-scale survey result 297
lifecycle-oriented customization 261, 273
lifecycle-oriented product 261, 262, 273, 275
lifecycle-oriented product customization ser-
vice 261, 273, 275
life-time constraints 193, 194, 197
linear program (LP) 194
linear regression 231
linking theory 209
literature review 245
literature study 62
logical structure 266
logic-based specification language 174
logistic curve 230
long-term relationships 228
long-term solution 300, 302

M

make-to-order (MTO) 190
management decision-making 19
management information systems (MISs) 247
management software 156, 157, 160, 161,
162, 164, 165, 167, 173
managerial decisions
177, 178, 181, 182, 184
managerial literature 178
managing director 142
manufacture resources 263
manufacturing process 268
market-leading applications 262
market-oriented departments 181
mass media 225, 227, 230, 231, 235
mass-media communication 229
material management 103

material requirement planning (MRP) 23
 mathematical models 114, 115
 MCFP problem 194, 195, 196, 197, 200
 mean time between failures (MTBF) 279
 mean time to repair (MTTR) 279
 media enterprise 219
 M-ERP interface 51, 52
 M-ERP screen 48
 M-ERP users 48
 meta-analysis 242, 259, 372
 meta-data 312
 metadata model 303
 meta-information 51, 55
 methodology 59, 63, 64, 70, 376
 M-form organization structure 231
 MIC annual report 235
 migration path 101
 mixed influence 224, 229, 234
 Mixed-influence Model 232
 mixed-integer programming problem (MIP)
 194
 mixed model 234, 235
 mobile marketing 213
 modeling framework 179, 186
 Modeling methods 176
 modelling imagery 131
 Modern information systems 32
 MPS data 193
 multi-commodity aggregate production plan-
 ning (MCAP) 194
 multi-commodity fine-grain production plan-
 ning (MCFP) 194
 multi-dimensional CSFs 304
 multi-dimensional factors 303
 multidimensional structure 164
 multi-function Bitumen-concrete paver
 271, 272
 multi-perspective user validation 37
 multiple platforms 292
 multi-tiered 278, 280

N

national arena 82
 National Association of Accountants (NAA) 6
 noise model 232, 233, 234
 Nominal Group Technique (NGT) 65

non-adopters 158, 170, 373
 non-disclosure conditions 203
 Non-functional requirements 34
 non-measurable benefits 166
 non-necessity 22
 non-response bias 161
 non-response rate 22

O

object interaction diagram 330
 object model 215, 216
 object-orientation modeling 323
 object-oriented model 322, 325, 330, 332
 object-oriented paradigm 324, 325
 object-oriented representational model 327
 office environment 218
 office manager 49
 Office of Statistics (OFS) 22
 online analytical processing (OLAP) 292
 ontology 175, 179, 353, 308, 309, 311,
 312, 313, 315, 316, 317, 318, 319,
 320, 321, 375, 377
 ontology-aware 308
 open-ended questions 63
 open source (OS) 189, 191, 192, 193, 201
 operational problems 2
 operational system prototype 197
 order transaction 131
 ordinary least square (OLS) 225
 organic organization 182
 organic organizational form 182
 organisational knowledge
 203, 221, 222, 375, 383
 organisational memory 209
 organizational adoption 225
 organizational benefits 241, 244, 259, 373
 organizational buying theory 115
 organizational changes 2, 226
 organizational characteristics 236
 organizational commitment
 241, 244, 252, 253, 255
 organizational constraints 185
 organizational documents 179
 organizational effectiveness 241, 243
 organizational efficiency 99, 100
 organizational functions 228

Index

organizational goals 176, 179, 180
organizational impact 239, 240, 243, 244,
245, 246, 247, 249, 250, 251, 252,
253, 254, 256, 257
organizational interdependence 244
organizational knowledge
205, 206, 220, 222, 359, 381
organizational linkages 244
organizational performance 239, 240, 241,
242, 243, 244, 245, 246, 254, 255,
256, 257
organizational resources 181
organizational structure 35, 241, 244, 253,
254, 255, 257, 299, 301
organizational tasks 182
organizational types 240
organization knowledge engineer 308
organization-oriented view 183
organizations managers 181
organization theories 174, 175
organization units 35
organization-wide coordination 189
out-of-the-box remote monitoring 283

P

paradox 99, 100
participatory design (PD) 82
PDM module 272
perceived ease 156, 160

perceived usefulness (PU) 156, 157, 160, 163,
168, 169, 360, 365
performance indicators (PIs) 185
performance monitoring infrastructure (PMI)
284
performance-oriented view 183
personalized software 54
personnel performance 188
pervasive infrastructure 226
phantom BOMs 192
physical knowledge repository 212
physical knowledge store 212
physical repository 208
pilot 89
planned production 188, 189, 190, 191,
192, 194, 198

point-to-point 121
political context 244
polymorphism 325
post-implementation stages 62
power-related actions 175
power-related concepts 174, 175, 186
PRAC pattern 328, 329
predicate-based languages 183
procedure model 120, 125, 127, 128, 129,
130, 131, 132, 133, 370
process model 80, 85, 86, 87, 97, 374
process model analysis 80
process-oriented 183, 186
process-oriented view 183, 186
processual knowledge 219
product configuration 261, 263, 264, 265,
268, 269, 271, 272, 273, 274, 275,
276
product constructs 102, 106
product data transform 261, 275
product experience 99, 106
product hierarchy tree
264, 269, 271, 272, 273
production planning 103
production plans 226
production schedule 188, 190, 194, 195
production scheduling functions 193
production seat system 194
product lifecycle 261
product planner 49, 53
product-process centered 106
product variation 262
professional environment 54, 55
professional knowledge 210, 213
professional service automation (PSA) 228
profitable-to-promise (PTP) 192
program design language (PDL) 31
project champion 145, 150
project management 2, 9, 10, 13, 103
project management team 145
project manager 59, 73, 77
project support 2, 12
project team composition 291, 296, 297
proliferation 204
Promax 108, 110
prototype tool 188, 189, 191, 193

pseudonym 84
 public organizations 354, 240, 355, 241,
 243, 244, 245, 247, 252, 253, 255,
 256, 257
 pull-based controls 190

Q

quality control 189
 quality of services (QoS) 280
 quantity to quality 292
 questionnaire-based survey 19

R

Radio Frequency Identification (RFID) 225
 raw source code 121
 real time extensions 31
 real-time information 2
 real-time sharing 87
 real-world activities 49
 re-architect 303
 relational-oriented philosophy 105
 representational model 325, 327, 331, 332
 requirements engineering method (REM)
 29, 35, 37, 38, 39, 43
 requirements engineering (RE) 30, 35
 requirements engineering (RE) method 30
 requirements engineering validation system
 (REVS) 31
 requirements language processor (RLP) 31
 research frameworks 240
 resolution of process 35
 resource collection 261, 265, 266
 resource collection method 261, 265, 266
 resource-intensive process 299
 resource management 87, 89, 90, 264
 resources database 266
 Resource share 261
 re-usage 121, 130
 rotation method 108

S

SAP Requirement Engineering (SAPRE) 35
 SAP's global ATP (GATP) 192
 self-configuring 287, 288, 289
 self-diagnosis 120, 121, 122, 123, 124,
 131, 133, 366, 370

self-healing 278, 286, 287, 288, 289
 self-healing application monitoring 278
 self-optimization 287, 288, 289
 semantic discovery 309
 semi-finished goods inventories 193
 service index 121
 Service Level Agreement (SLA) 279
 service organization 262
 service orientation 121
 service-oriented architecture (SOA) 101, 120,
 128, 130, 131
 service oriented concept 128
 service oriented integration 128, 132
 service platform
 261, 262, 273, 274, 275, 276
 silver bullet 36
 six-stage model 63
 skeletal structure 214
 small and medium sized enterprises' (SMEs)
 18, 31, 39, 47, 114, 261, 262
 small-scale applications 281
 SMEs 18, 19, 20, 21, 22, 23, 24, 25, 26,
 27, 371, 380
 SOA approach 121
 Socialization 205
 social science 175
 social structure 236
 social system 225, 226, 227, 229
 social theories 175, 176
 society for information management 1
 sociology 174, 175
 socio-technical approach 82
 socio-technical challenge 135
 socio-technical design 82, 90, 91, 94
 socio-technical implications 94
 socio-technical model 64
 socio-technical options 80, 93, 94, 95
 socio-technical research 82
 socio-technical solution 93
 software 2, 3, 4, 5, 6, 10, 11, 12, 13
 software change 33
 software development
 32, 34, 35, 36, 45, 377
 software development process 35
 software engineering 30, 32, 33, 34
 software intrinsic 102

Index

software modifications 138, 143, 148, 149
software process management 37, 43
software project 3
software projects 30, 31, 32, 34, 37, 38, 39
software requirements specification (SRS)
 31, 33
software solution 29
software system 124, 128, 235
software technologies 278
software tools 36, 264, 265
software training 4
software vendor 113
source code 120, 121, 123, 124, 125, 127,
 128, 131
source code layer 124
source-code usage 124
specification and description language (SDL)
 31
stakeholders 33, 35, 43
standard ERP system 80, 84
standardisation 203
state charts 31
state-of-the-art IS 159
static structure 197
step-by-step transformation 128
storyboarding 215, 220
strategic apex 177
strategic enhancement 204
strategic ERP constructs 7
strategic media solutions 214
strategic planning 292
strategic tool 207
strategy business planning 324
structuralist perspective 205
sub-phase 31
Sun Microsystem 4
Superior-subordinate relations 178
Supply chain management functionality 192
supply chain management (SCM) 6, 30, 31,
 34, 103, 228, 264
supply chain management (SCM) software 30
supply chain systems 37
support quality 99, 106, 108, 113, 115
syntax-based 309
system administrator 308, 318
system framework 302

system integration architecture 32, 37
system maintenance modules 264
system quality 99, 106, 108, 110, 111, 113,
 240, 245
system resources 289
systems development efficiency 244
systems integration 6
system use 240

T

tacit knowledge 205, 206, 207, 213
TAM framework 160
TAURUS system 34
Technical architecture 103
technical material 211
technical resources 242
technological compatibility (TC) 158, 160
technological culture 158
technological decisions
 177, 178, 179, 180, 181, 182
technological development
 158, 159, 161, 164
technology acceptance model (TAM)
 99, 100, 106, 156, 157
technology-oriented 186
technology training 4, 5
TE generalizability 218
Temporal Trace Language (TTL) 179, 184
theoretical frameworks 218
Theory of Planned Behaviour (TPB) 157
Theory of Reasoned Action (TRA) 157
Theory of Reasoned Action, (TRA) 157
time-based view 65
traditional data warehouse 205
transactional data 29
transaction-oriented 105
transactions processing systems (TPSs) 247
tree management module 273
tree node 271
tree-structure 268, 273, 275
typology 49

U

UDDI 308, 309, 310, 311, 313, 315, 317,
 318, 319, 320, 321, 353
UML diagram 287

Unified Modeling Language (UML) 327
 user-centered approach 48
 user-centered methods 47
 user-focused methods 46, 48
 user-oriented change management
 291, 296, 297, 299
 user participation 83, 96, 97, 356, 358, 368
 user satisfaction 240, 242, 245, 257, 258,
 354, 365

V

variance inflation factor (VIF) 110
 vendor constructs 102
 vendor criteria 102
 vendor evaluation 104
 vendor selection 99, 107, 108, 111, 112,
 114, 115, 278, 285
 viral marketing 213
 virtual assembly systems 272
 virtual product configuration
 265, 272, 273, 274, 275
 virtual product configuring 264
 virtual reality modeling language (VRML) 273

W

warehouse 203, 204, 205, 207, 208, 209,
 210, 211, 212, 213, 214, 215, 216,
 217, 218, 219, 220, 221, 373
 Web -based developments 215
 Web-based infrastructure 215

web-based interactive visualization environ-
 ment 272
 Web procurement 156, 157, 158, 160, 162,
 165, 166
 Web production 213
 Web service 353, 308, 309, 312, 313, 315,
 316, 317, 319, 320, 321, 376
 web service architecture 127
 web service description language 128, 131
 Web service directory 308
 Web services 120, 131, 132, 133, 353, 308,
 309, 356, 313, 316, 317, 364, 320,
 321, 376, 380
 Web service (WSDL) 309
 Western-based investigations 239
 white-noise model 233, 234
 WS description 309

X

XML-based data mapping model 261
 XML-based object-oriented mapping 273
 XML language 268, 275
 XML template 268

Y

Y2K 224, 225, 230, 231, 234, 235

Z

Zachman framework 175
 zero-one goal programming 115