

Index

A

absence of criticism 263
 after-service sharing 84
 AGFI (Adjusted GFI) 281, 282
 Americas Conference on Information Systems (AMCIS) 3
 artificial intelligence (AI) 292, 296
 Association for Information Systems (AIS) 13, 14, 15, 17, 18, 22, 23, 26
 asymmetric relationships 130
 asynchronous communication 180, 273
 asynchronous competition 307
 asynchronous environment 334, 336, 339, 342, 343
 asynchronous groups 335, 339, 342, 343
 Average Variance Extracted (AVE) 280
 awareness 182, 185, 186, 191, 192, 193

B

behavior patterns 106
 Blackboard 278, 279
 body of knowledge 1
 brainstorming idea quantity 335, 339, 340
 brainstorming ideas 332, 333, 334, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345
 bulletin boards 15
 business and information systems 255, 256, 257, 258, 259, 260, 261, 262, 267
 business application monitoring (BAM) 159
 business continuity planning (BCP) 324
 business-driven technology investment 76
 business dynamic 332
 business-IT alignment 296
 Business Process Execution Language (BPEL) 267, 269

Business Process Modeling Notation (BPMN) 267, 269
 business strategies 76
 business-to-business (B2B) 158, 159, 160, 172, 173
 business-to-business process outsourcing (B2BPO) 159

C

cancer drugs 31
 category managers 137
 CFI (Compatative-fit index) 281, 282
 client-server systems 185
 clustering 332, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 346
 cognitive models 155
 cognitive social capital 244
 cohesion 271, 272, 273, 275, 277, 278, 281, 282, 283, 285, 291,
 collaboration 233, 234, 235, 236, 237, 238, 239, 246, 250, 251, 252, 253, 255, 256, 257, 258, 263, 267
 collaboration costs 76
 collaboration environments 187
 collaboration models 103
 collaboration technology 146, 147, 155
 collaboration tool 318, 319, 322, 323, 324, 326, 328
 collaborative context 240
 collaborative design 255, 256, 257, 258, 259, 260, 261, 262, 266, 267
 collaborative design of business and information systems (CDBIS) 256
 collaborative EA management 318, 319, 322
 collaborative functions 249

Index

collaborative group effort 333
collaborative modeling 292, 293, 294, 295,
297, 299, 305, 311, 312
Collaborative Modeling Architecture 261, 262
Collaborative Modeling (CM) 263, 264, 265
collaborative modeling processes 292
collaborative process 334
Collaborative Product Commerce (CPCex) 87
collaborative relationships 5
collaborative support systems 332
collaborative systems 255
collaborative task 233, 234, 235, 242
collaborative technologies 158, 176
collaborative work 234, 237, 318, 333, 334,
339, 344, 345
collective programming 146
COMA (COLlaborative Modeling Architecture)
264, 265, 266, 269
commitment created among participants 293
common understanding 293
communication barriers 235
communication media 179, 180, 183, 189, 193,
273, 289
communication quality 233, 234, 235, 244, 253
communication technologies 233, 235, 236
communicative events 180
community 318, 322, 323, 326, 327, 328
community governance 214, 220, 221, 225,
226, 227
community of practice 199, 202, 203, 204,
209, 211
community population 218
Composite Reliability (CR) 280
Computation-Independent Model (CIM) 267
computer-assisted software engineering
(CASE) 314
computer-based tool 263
computer-based training (CBT) 35, 37
Computerized Reservation System (CRS) 88
computer-mediated communication (CMC)
176, 180, 192, 215, 272, 273, 277, 282,
283, 332
computer-supported cooperative work (CSCW)
178, 180, 181, 191, 192, 256, 258, 292
conceptual theories 1
Confirmatory Factor Analysis (CFA) 279

consent 293
constrained communication 244
consumer-goods sector 101
contextualization of communication 246
contextual richness 233, 234, 235, 247, 253
Continuous Replenishment Program (CRP)
131, 138
cooperatives 199, 208
cultural backgrounds 154
cultural differences 7

D

data coding 214, 216, 225
decision support systems 258, 259
delegation strategies 46
demand forecasting managers 137
DEMO (Dynamic Essential Modeling of Orga-
nization) 267
designing motivation 298, 300
design methodologies 255
dialogue games 292, 295, 299, 300, 303, 304,
308, 311
discussion forums 15
distributed decision-making systems 332
distributed global networks 82
distribution centres (DC) 137, 138
distribution channels 66, 76
distribution channel sharing 84
diversification 65, 66, 67, 68, 69, 70, 71, 72,
73, 74, 75, 76, 77, 78
double-blind reviews 2
dyadic relationships 128, 131, 132, 134, 135,
136, 137, 138, 139

E

EA development 319, 321, 322, 326, 328
EA information 319, 320, 321, 322, 323, 324,
326, 328
EA information gathering 321, 322, 323, 328
EA management 318, 319, 321, 322, 323
EA models 320, 321
e-business 65
e-business environments 65
e-Collaboration systems 176, 179
e-collaboration technologies 234, 252

e-commerce 199, 200, 201, 202, 208, 209, 211, 212, 215, 216, 217, 228
 E-commerce technologies 199
 economic opportunities 163
 effective communication 274
 efficient consumer response (ECR) 115, 116
 electronic business media 164
 electronic collaboration (e-collaboration) 1-12, 30, 31, 32, 39, 40, 41, 42, 43, 81-91, 95, 96, 97, 98, 99, 145, 146, 147, 149, 153, 154, 155, 158, 160, 174, 176-184, 187, 189, 190, 192, 193, 234, 235, 237, 239, 252
 electronic collaboration (e-collaboration) tools 30
 electronic commerce 199
 electronic cooperation (EC) 9, 81, 82, 84, 85, 87, 88, 89, 90, 92, 94, 95, 96, 97
 electronic cross-company collaboration 158, 160
 electronic cross-organizational collaboration 160, 172
 electronic data interchange (EDI) 159
 electronic information sharing (EIS) 9, 81, 82, 84, 89, 92, 95, 96
 electronic learning networks 200
 electronic meeting systems (EMS) 258, 259, 260, 261, 262, 263, 267
 electronic network 211
 electronic technologies 235
 embedding 201, 202, 211
 enacted dialogue games 292
 Engineering Collaboration and Innovation Management 87
 engineering design 160
 enterprise architecture (EA) 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328
 enterprise modeling 292, 318
 enterprise ontology (EO) 324
 entrepreneurial communities 200, 211
 entrepreneurial information resource environment 200
 entrepreneurial infrastructure 201
 entrepreneurial networks 199, 200, 202, 204, 210, 211, 213
 entrepreneurship 199, 200, 201, 211, 212, 213

European oil companies 147
 experimental game-like procedures 292
 external factors 128, 132, 135

F

face-to-face interaction 241, 244
 face-to-face teams 271, 289
 facility sharing 83
 factorial MANOVA 339, 340
 fantasy communities 215
 fast-moving consumer goods (FMCG) 102, 109, 110, 113, 115
 feminine culture 146, 149, 153
 feminine societies 146
 firm performance 65, 66, 67, 68, 69, 70, 71, 73, 74, 75, 76, 78
 FTF communication 273

G

game metaphor 295, 296, 297
 GEQ (Group Environment Questionnaire) 275
 GFI (Goodness of fit index) 281, 282
 global integration 30, 31, 34
 globalization 3, 4
 global organizations 145
 global software 47, 48, 49, 51, 52, 64
 global team building 14
 global virtual marketing teams 3
 goals of modeling 298
 gross domestic product (GDP) 14, 18, 19, 20, 21, 22, 23, 24, 25, 26
 group communication support systems (GCSS) 236
 group decision support systems (GDSS) 236, 258, 259
 group dynamics 249
 group support systems (GSS) 145, 146, 155, 156, 235, 236, 259, 332, 333, 334, 335, 336, 337, 338, 339, 345, 346
 groupthink 334, 335, 342, 343
 groupware 178, 180, 181, 185, 191, 192, 193, 318

H

Hawaii International Conference on Systems Science (HICSS) 3

Index

human-computer interaction 255
human-human interaction 217, 255
human interaction 294
human-IT alignment 296
human resources departments 31, 33

I

IDEF (Integrated Computer-Aided Manufacturing Definition) 259
inadequate communication 235
industry structures 127, 128, 134
information and communications technologies (ICT) 8, 30, 31, 32, 33, 34, 35, 36, 38, 39, 40, 41, 42, 296, 314
information economy 332
information exchange 247, 249
information exploitation capability (IEC) 9, 81, 82, 84, 85, 89, 90, 91, 92, 94, 95, 96
information quality 214, 216, 217, 218, 220, 221, 222, 223, 225
information sharing 15, 28, 81-90, 92, 94, 95, 96, 97, 101-122
information system design 255
information system development (ISD) 51
information systems (IS) 2, 7, 8, 12, 16, 17, 22, 65, 66, 67, 68, 69, 75, 78, 81, 83, 84, 85, 90, 154, 192, 216, 217, 218, 227, 231, 255, 266
information systems (IS) researchers 16
information technology (IT) 177, 180, 215, 218, 219, 246, 255, 296, 312, 318, 320, 324, 325, 326, 327
intellectual capital 83
interaction programming 164
interactive support tools 294
interactive systems 294, 297
intermediary goals 298
inter-organizational information systems (IOIS) 81, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 96, 97, 98
interorganizational (IO) relationship 125, 129, 130
inter-organizational learning 83
interorganizational systems (IOS) 3, 9, 10, 11, 101-119, 124-139

interorganizational variables 110, 112, 113, 114, 115
inventory management 103
inventory systems 86
IS architecture 318
IS models 255
IT artifact 177
IT capital 66, 67
IT departments 34
IT diffusion 17
IT facilitates 75
IT-focused WKC's 218
IT infrastructures 134
IT investments 6, 8, 66, 67, 73, 76
IT managers 154
IT-mediated human-human interaction 255
IT payoffs 73
IT performance 76
IT returns 73
IT skills 73
IT spending 65, 66, 70, 71, 72, 74, 75, 76

K

key account managers 137
know-how 200, 202, 212
knowledge acquisition 214, 215, 216
knowledge base 318
knowledge-based capabilities 211
knowledge domain 215
knowledge management 239, 241, 248, 249
knowledge transfer 31, 33, 36, 37, 38, 39
know who 202
know why 202

L

language skills 302
leader behaviors 49
leader-member exchange 210
light-weight formal models 292
likelihood of goal attainment (LGA) 145, 148, 149, 150, 151, 152, 153, 154
line managers 52
listserv 15
logical component (l-component) 164, 165
logistic planners 137
logistics managers 137

logistics planning managers 137
lower-cost labor 47

M

mailing lists 15, 27
managed file transfer (MFT) 159
managerial expertise 66
MANOVA 339, 340
market opportunities 76
masculine culture 146, 149
masculine societies 146
masculinity-femininity dimension 146, 149
media reference models 158, 160, 164
media richness 233, 234, 235, 242, 244, 245, 249, 250, 251, 253
medical management 34, 38
method engineering as game design 311
Model-Driven Architecture (MDA) 267, 269
modeling as a game 292, 295
modeling goals 298, 302, 311
modeling wizards 293
multicultural teams 154
multiple business lines 66

N

negotiation support systems (NSS) 258
networked readiness index (NRI) 19, 24, 25
normalized clustering error (NCE) 337, 339, 341
novice modelers 292, 293, 295, 300, 301, 302, 309, 311, 312

O

online communities 13, 14, 15, 17, 18, 19, 20, 24, 26, 27
online community of practice (CoP) 13
online exchanges 199
online professional communities 13, 14, 15, 24, 26
online sessions 186
ontologies 318, 324, 326
operational modeling 294, 296, 300
operational modeling methods 294
organizational component (o-component) 164, 165

organizational experimentation 201
organizational memory 233, 234, 235, 237, 240, 242, 247, 248, 253
outsourcing 233, 235, 237, 241

P

partial least squares (PLS) 111, 112
Participant-driven GSS (PD-GSS) 333, 334, 335, 345
participative design 255
Participative Enterprise Modeling (PEM) 262
parts sharing 83, 84
performance 271, 272, 274, 275, 276, 277, 278, 282, 283, 285, 286, 287, 288, 289, 291,
personal information management (PIM) 185, 186, 188
physical component (c-component) 164, 165
Platform-Independent Model (PIM) 267
Platform-Specific Model (PSM) 267
point-of-sales (POS) 102, 104
point-to-point installations 158
pragmatic focus 302, 303
PRIME 294, 315
product management 31, 33, 34
professional kinship 14
pro-sharing norms 214, 220, 221, 224, 227, 228

Q

quantity of brainstorming ideas 332, 333, 334, 336, 339, 343, 344
quantity of ideas 263

R

real-time collaboration (RTC) 185, 188, 189, 193
real-time collaboration systems 188, 193
real time interactions 294
real-world applicability 158, 160
reference models 158, 160, 164, 173, 174
relational social capital 244
relative individual goal attainment (RIGA) 147
requirements elicitation (RE) 233, 234, 235, 236, 239, 240, 241, 242, 243, 244, 247, 248, 250, 251, 252

Index

requirements quality 233, 235, 243, 245, 247, 248, 253
research methods 1
research opportunities 154
resource-based view (RBV) 105, 106, 107
Resource Description Framework (RDF) 323, 324, 330
return on assets (ROA) 68, 69, 71, 74, 75
return on investment (ROI) 132
richer media environments 249
RIM framework 264
RMSEA (Root Mean Square Error of Approximation) 281, 282
rules, interactions and models (RIM) 264

S

safety stock levels 103
sales data 103, 104
sales force training 30, 31, 32, 33, 34, 37, 41
sales forecasts 137
sales management 31, 33, 34, 41
Sales Management and Report Tracking System (SMARTS) 88
sales representatives 31, 38
Samsung Product Development Management (SPDM) 87
satisfaction 271, 272, 276, 277, 278, 282, 283, 288, 290, 291
satisfaction phenomenon 147, 154
scope economies 65, 76
semantic collaboration environment 318, 319, 327
semantic collaboration tool 318, 319, 322, 323, 328
semantic-syntactic focus 302, 303, 304
sense of community 216, 220, 221, 225, 226, 227, 229
serious games 292
SIDE (Social Identity and Deindividuation) 272
simulation and modeling IS 292
Situational Method Engineering (SME or ME) 293, 294
small and medium enterprises (SME) 84, 99
small business information systems (SBIS) 199, 200, 201, 202, 203

social capital 82, 199, 200, 201, 202, 204, 205, 206, 207, 210, 211, 212
social community sphere 164
social exchange theory 107
social gender roles 146
Social Identity (SI) 272
social interactions 13, 217, 218, 225
social learning networks 199
social networking 13
social networks 15, 200, 204, 211
social relationships 271, 272, 273, 282, 283
social software 187
social technologies 199, 200, 201, 202, 205, 206, 207, 209, 210, 211
socio-technical design 255
socio-technical systems 255, 257, 262
software development 46, 47, 48, 54, 55, 56, 59, 60, 61
software development projects 46
software engineering 164
software team leaders 47, 51
software teams 46, 47, 48, 49, 52, 53, 54, 55, 62, 63, 64
stakeholders 31, 33, 34, 164, 165, 168, 171
statistical software 276
strategic directions 65, 67, 68, 70, 71, 72, 73, 74, 75
structural equation modeling (SEM) 111
Structural Model Equation (SEM) 280, 281
success factors 214, 215, 216, 218, 220, 225, 227, 228, 230
supply chain management (SCM) 2, 9
supply chains 2, 3, 4, 5, 6, 9, 10, 11, 66, 76, 101, 102, 103, 104, 113, 115, 117, 118, 119, 121, 122, 124, 125, 126, 127, 128, 130, 137, 138, 139, 140, 142, 144
surface level interface design 300
synchronicity 332, 333, 334, 335, 336, 339, 340, 343
synchronous communication 185, 186, 188, 189
synchronous competition 307
synchronous groups 334, 336, 339, 342
system quality 214, 216, 217, 218, 220, 221, 223, 224, 225, 226, 227
systems analysis methods 292

systems integration 176

T

task-media fit (TMF) 7, 30, 31, 32, 35, 36, 41, 42

task structures 162, 163, 164, 165, 167, 170

team leaders 46, 48, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 62, 63

team members 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 59, 60, 61, 62, 63

team satisfaction 46, 58, 59

technological environments 2

technology mediated interaction 233

technology-supported collaboration 146, 147, 148, 153, 155

technology trends 176

text-based collaboration 187

text-based communication 185, 186

theoretical frameworks 1, 3

TIP theory 274, 275

TIP (Time-Interaction-Performance) 274, 275, 287

tooling 292

tool support 262, 263

top-down, integrated (TDI) 262

top-management level 111

top-management support 106

transaction-cost economics (TCE) 105, 108

transaction costs 34

transaction technologies 199

transfer of knowledge 14

trust 271, 272, 273, 275, 276, 277, 278, 281, 282, 283, 286, 287, 288, 289, 290, 291

U

Unified Modeling Language (UML) 257, 264, 267, 269

Uniform Resource Identifier (URI) 324

user-centered design 256, 267

utility goals 298

V

Vendor Managed Inventory (VMI) 137, 138

verbal communication 334, 336

video conferences 186

virtual community 215, 216, 217, 218, 226, 227, 228, 229, 230, 231

virtual environment 47, 182

virtual settings 47

virtual software team leadership 46, 63

virtual software team management 47

virtual software teams 46, 47, 48, 51, 53, 54, 63

virtual team leadership 47, 51

virtual team leadership skills 47

virtual team members 272, 274, 275, 277, 278, 282, 283, 284, 288

virtual team performance 46, 52, 53, 58, 59, 60

virtual teams 1, 2, 3, 4, 5, 6, 8, 11, 12, 31, 32, 42, 43, 44, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 176, 192, 271, 272, 273, 274, 275, 276, 277, 279, 282, 283, 284, 285, 286, 287, 288

virtual work 176, 191

virtual workspaces 32

voice-over-IP 189

W

Wal-Mart 137, 138, 139, 140, 141, 144

Web 2.0 322, 328

Web-based information systems 226

web-based knowledge communities (WKC)s 214, 215, 216, 217, 218, 220, 221, 222, 223, 224, 225, 226, 227, 228

Web-based training (WBT) 35, 37

Web-logs 15

Web Ontology Language (OWL) 323, 324, 330

web technologies 235

Wiki 233, 234, 235, 236, 237, 238, 239, 240, 242, 245, 246, 247, 248, 249, 251, 253

Wiki-based systems 233, 234, 235, 236, 237, 238, 239, 240, 242, 245, 246, 247, 248, 249

Wiki-technology 239, 240, 248, 253

WKC success 214, 216, 217, 218, 221, 225, 227

World Bank 147, 156