

# Index

## A

ABC, 330  
Accenture, 75–76, 97, 251, 334–335  
Accenture Learning, 182–185  
Adobe Acrobat, 99–100  
Adoption stages, 267–268, 347–351  
Ageless Learner, 359  
AICC standard, 103  
Airlines, 305–306  
Airport security training, 47  
Alerts, 179, 324–325, 333–334  
*Alice in Wonderland*, 298  
Amazon.com, 236  
*American Heritage Dictionary*, 18  
American Productivity and Quality Center, 280, 360  
American Society for Training and Development (ASTD), 249–250, 360  
Ancient myths, 33  
*Apollo* moon program, 75  
Apple Computer, 51, 86  
Application sharing, 327  
Apprenticing, 182  
Architecture, knowledge, 125–127  
Architecture, learning and performance, 67–104; background on, 67–69; blended learning and, 69–70, 82–87, 96–97, 205–208; building, 73, 95–97; change management in, 255–273; classroom training in, 80–81; coaching and mentoring in, 81–82; collaboration in, 157–192; formal and informal learning in, 82–84, 96–97; knowledge management in, 73–76, 105–156; leadership and, 59, 275–292; mastery levels and, 93–95; overview of, 57–58; performance support in, 79–80, 193–220; premises of, 70–72

Argyris, C., 41–42, 61  
Army Knowledge Online (AKO), 117  
ARPLE (Apple Reference Performance and Learning Expert), 86  
ASP, 102  
Aspen, 102  
Assembly line, 294  
Assessment. *See* Evaluation  
Asynchronous design: for e-learning, 19; for online communities, 191, 327  
AT&T, Training Test Consultant at, 199–200  
Attitudes, 263, 297  
Authoring tools, 100  
Authorware, 100  
Auto Club, 200  
Awareness stage, 267–268, 347–351

## B

Backchat, 184–185  
Barlow, J. P., 17, 33  
Barlow, N., 276, 288  
Baum, D., 187  
Beatles, the, 157  
Bell, A. G., 214, 309, 311  
Berra, Y., 6  
Bickerstaff, M. J., 75, 131–132, 133, 134  
“Big brother” activities, 166–167  
Blackberry, 62  
Blended learning: examples of, 86–92; expanded view of, 82–87, 96–97, 205–208; of formal and informal learning, 82–84, 96–97; impact of, on training programs, 246–247; limited view of, 69–70; of push and pull learning, 84–85; of training with collaborative learning, 186–187; work integration with, 205–208

Blogs, 173–174, 339–340  
 Boeing Corporation, 53  
 Bookmarks, 329  
 Books, on learning, e-learning, and performance improvement, 357–359  
 Bots, 335  
 Boutelle, S. W., 117, 152  
 Branch managers, 161  
 Brennan, M., 61  
 Bricklayer *versus* architect, 93–95  
 Brint.com, 360  
 Bristol-Myers Squibb (BMS), 75, 131–134  
 Britannica, 77  
 Buddy list, 183  
 Bujold, L. M., 235, 248  
 Business case creation, with electronic performance support system, 229–231  
 Business metrics, 236–238  
 Business singularity, 216–220

## C

Call centers, 114–115, 178  
 Capability: for e-learning, 25, 266–267, 315; for performance, 298  
 Case study—Monsanto, 97  
 Centers of excellence, 178  
 Centra, 101  
 CentreLearn, 102  
 Chambers, J., 12  
 Champions. *See* Sponsors  
 Change management, 255–273; adoption phases and, 267–268, 347–351; books on, 359; communications planning in, 59, 267–268, 347–351; defined, 256–257; importance of, 26, 320; for knowledge management initiatives, 111, 143; leadership of, 280–288; ongoing support for, 266; overview of, 58–59; sample plan for, 347–351; success factors for, 257–267; training's role in, 257, 265–266; Web sites on, 360  
 Channels, for electronic performance support systems, 240–241  
 Charter, 285  
 Chartered Institute for Professional Development, 263  
 Chatrooms, 173, 335–336  
 Cheerleading, 276–277  
 Chemist communities, 162  
 Chief learning officer (CLO), 222–223, 290  
 Chunks, 47  
 Cingular Wireless, 87–92, 96  
 CIO Magazine, 360  
*Civil Campaign*, A (Bujold), 235  
 Clark, J. R., 30  
 Classroom-based training: benefits of, 5; blended learning with, 69–70; for employee orientation, 48–49; history of, 67–68; integration of, with learning and performance solutions, 243–245; in learning and performance architecture, 80–81; limitations of, 44–46; role of, 21, 44. *See also* Virtual classroom  
 Classroom trainers. *See* Instructors  
 CLO Magazine, 360  
 CMS (content management system), 101, 102  
 CMS (course management system), 101, 102  
 CNN, 330, 333  
 Coaching: in learning and performance architecture, 81–82; in online community, 169–170; training managers in, 266  
 Coleman, D., 168, 169, 170, 171  
 Collaboration: books on, 358; in communities, 158–171, 189–192; culture of, 43–44, 167; examples of, 174–176; with experts and expertise, 174–185, 186–187; in governance, 284–287; of KM and IS departments, 153–156; in knowledge networks, 171–172, 337–338; in knowledge sharing and management, 77–78, 107–108, 134, 153–156, 157–192; nontechnical approaches to, 174; technologies for, 100–101, 157, 167, 172–174, 182–187, 327, 333–340; training and, 185–187, 191, 245; of training function with business operations, 7; Web sites on, 360. *See also* Technology for collaboration  
 Collaborative inquiry, 160  
 Colleges, cell phone costs and, 63  
 Communications strategy, in change management, 59, 267–268, 286, 347–351  
 Communications tools. *See* Technology for collaboration  
 Communispace, 169, 192  
 Communities and communities of practice, 77–78, 158–171; asynchronous

- versus* synchronous design for, 191, 327; case for, 189–192; critical success factors for, 164–167, 190–191; defined, 159–160, 189–190; in electronic performance support system, 232–233; examples of, 162–164, 168–171; experts in, 179; facilitation of, 166, 191; functions of, 159–160; knowledge networks *versus*, 171, 172; for leadership development program, 168–171; membership in, 165–166, 190; role of expertise and, 107–108; technologies for, 172–174, 191; training and, 185–187, 191; uses and challenges of, 328; value of, 158–159, 186, 191–192; vertical and horizontal, 160–162, 328  
 CompanyCommand.com!, 162–163  
 Competitive advantage, 54, 134  
 Competitive Analysis Community of Practice, 232–233  
 Compliance issues, 63  
 Computer-based training (CBT), 12, 19, 67–68; electronic performance support systems combined with, 199–200  
 Cone, J., 290–291  
 Conference Board, The, 121  
 Connectors, 166  
 Consistency, electronic performance support systems for, 197–198  
 Constituencies. *See* Stakeholders  
 Consulting firms, knowledge management in, 119–120, 134–139  
 Content domains: for knowledge, 125–126; for online catalogues, 112–113; scaling across, 239–240  
 Content management, 322–323  
 Content types and sources, 330–331  
 Content value, in communities, 165  
 Continuous lifelong learning, 8  
 Cost effectiveness, of e-learning, 22  
 Costner, K., 22  
 Costs: of classroom training, 45; of electronic performance support systems, 243  
 Course catalogues. *See* Online catalogues  
 Course vendors, 100  
 Creative Labs, 116–117  
 Credibility, 268, 283  
 Cross, J., 72, 97, 186, 188, 206, 215, 216, 220  
 Cruss, P., 290  
 Culinary Institute of America, 294  
 Current state, 300  
 Customer care organizations, knowledge management in, 114–115  
 Customer contact planning, 223–233  
 Customer relationship management (CRM): electronic performance support systems and, 210; knowledge management in, 115–116; selling solutions for, integrated system for, 223–234  
 Customer support, knowledge management in, 116–117  
 Customization, 197
- ## D
- Dakota Indians, 278  
 Dalai Lama, 105  
 Dashboards, 194, 331  
 DDI (Development Dimensions International), 15  
 Dell Computer, 77, 119  
 DeLong, D., 75, 97  
 Designing Web-Based Training, 104  
 DestinationKM, 360  
 Developmental opportunities, 261  
 Dewey Decimal System, 77  
 DiamondCluster International, 134–139  
 Dickelman, G., 203–204, 215  
 Directories, 329  
 Discussion forums and threads, 100, 173, 184, 335–336  
 Disruptive technologies, 62, 63–64  
 Distribution lists, 179  
 Diversity, classroom training and, 45  
 Document management, 322  
 Documentum, 102  
 Dolezalek, H., 33  
 Dragoon, A., 269  
 Drucker, P., 24, 33, 61, 78, 97, 130, 152  
 Drug regulatory failures, 132–133  
 Dublin, L., 33, 34, 36, 54, 61  
 DuPont, BMS acquisition of, 131–132
- ## E
- Early adopters, 259–260, 265  
 Early successes, 242  
 Economic conditions: future of e-learning and, 16, 17; organizational success and, 38  
 Editors, 110  
 Edmunds, 77, 125

- Effectiveness, 54
- Efficiency, 54
- Einstein, A., 37, 76, 234
- E-commerce, knowledge management in, 116–117
- E-enablement, 12
- eLearning Guild, 215, 360
- E-learning: architecture for, 67–104; books on, 357–359; change management for, 58–59, 255–273; collaboration and, 157–192; definition of, 72; embedded in work, 193–220; evaluation of, 234–238, 249–252; future of, 15–18, 32, 189; history and evolution of, 3–4, 12–18, 67–68, 309–311; hype about, 12–13, 289–292; integration of, in smart enterprises, 51–53; knowledge management and, 105–156; leadership for, 59, 275–292; lessons learned about, 7–8; myths of, 18–23, 33–35; organizational phases of, 2; paradigms for, traditional *versus* smart-enterprise, 51–53; persistence of, 5; positive *versus* negative views on, 15–18; realities of, 5–6; rethinking and redefining, 26–30, 72–82, 302–306, 309–311; the smart enterprise and, 37–64; status of, post-Internet bubble, 13–15, 68; strategic role of, 30–32, 287–288, 289–292, 305; terms for, 19; training *versus*, 3–4, 11, 19, 71, 316–317; warning signs for, 24–26, 304, 313–320; Web sites on, 359–360
- E-learning Consortium, 64
- E-Learning Post, 360
- E-learning Tools and Technology, 104
- E-mail, 100; for collaboration, 172, 173, 333; examples of, 333–334; to identify and access experts, 179, 181; uses and challenges of, 333
- Electronic performance support systems (EPSS), 80, 194–202; benefits of, 196–198; categories of, 195–196; common examples of, 194–195; critical success factors for, 201–202; evaluation of, 234–238; IBM case example of, 208–214; knowledge management and, 196, 199; learning and, 198–201; in learning and performance architecture, 79–80; lessons learned about, 213–214; opportunities for, 214–215; performance-centered design and, 202–214; scaling, 197, 238–243; scope expansion of, 241–243; telecommunications company case example of, 221–252; training and, 245. *See also* Performance support
- E-rooms, 185
- E-workplace, 6
- Element K, 100
- Illuminate, 101
- Employee morale, 273
- Employee orientation, 48–49
- Employee portals, 128–130
- Engineer community, 163
- Ensemble Collaboration, 220
- Enterprise resource planning system, 203–204
- Enterprise software, 217
- Entitlements, 326
- Environment, performance: changing, to improve performance, 294–298, 303; overview of, 59–60
- EPSS Central, 360
- Ernst & Young, 74
- Ethical requirements, 63
- Evaluation and assessment: of e-learning initiatives, 24–26, 316–317; of e-learning readiness and executive team alignment, 280, 353–356; of individual learning and performance improvement, 25; of learning and performance programs, 234–238, 249–252; questions for, 250–251; reasons for, 249–250
- Excel, 99–100
- Exclusiveness, in communities, 165–166
- Executive alignment, 279–280, 353–356
- Executive communities, 161
- Executive support: for communities, 166; for e-learning, 22, 26, 29, 59, 258, 275, 279–280, 286; governance capability and, 284–285; leadership and, 275–292; sponsorship and, 275–280, 319; value proposition for, 281
- Expedia, 121
- Experts and expertise: accessing, 179–182, 211, 212, 226; blending training and, 186–187; capturing knowledge from, 78–79, 123–124, 138, 182; in classroom training, 45; demand management for, 181; false experts and, 177–178, 180; finding and filtering, 174–176, 177–180, 328; incentives

for, 180; instant messaging with, 182–185; managing, 179–182; non-experts and, 177, 180; pointing to, 181; publishing, 181; questions for, 124; role of, 107–108, 110, 176–177; rotating, 180–181; software for finding and accessing, 179; for tacit knowledge, 123–124; working with, 176–182

Extranet, knowledge management system on, 148–149

ExxonMobil, BestNets of, 163

## F

Face-to-face training. *See* Classroom-based training

Facilitators, 166, 191

Factory quality control, 198–199

False experts, 177–178, 180

FAQs (frequently asked questions), 181

Favilla, E., 152

Fear of technology, 264

Feldman, S., 97

Filters, 325, 326

Financial performance support tool, 230–231

First responders: knowledge management systems for, 117–118; learning approaches of, 72

Flash, 100

Flexible scheduling, 45

Ford, H., 294

Foreman, S., 153, 156

Formal learning: exclusive focus on, 25; informal learning *versus*, 25, 82–84, 96

Fournies, F., 295

Franklin, B., 284

Front-loaded costs, 243

## G

Galagan, P., 4, 8

Games, 48, 64

Garcia, G., 305

Gartner Group, 6, 8, 38, 42, 60, 61, 96, 98

Geographic dispersion, 47, 50; knowledge management solution for, 134–139

GeoLearning, 101

Gery, G., 98, 194, 195, 202, 205, 215, 220

Gibran, K., 151, 309

Gilbert, T., 295, 307

Gladwell, M., 166, 188

GlaxoSmithKline, 291

Global management consulting firm, knowledge management in, 134–139

Google, 212

Governance: of e-learning systems, 26, 59, 284–287, 318–319; of knowledge management systems, 145–146, 341–345; principles of, 285–286

Government agencies, knowledge management in, 117–118

GPS navigation systems, 200

Grateful Dead, 17, 305

Grebow, D., 187, 188

Greek myths, 33

Grocery checkers, e-learning program for, 26–31

Groupware, 172–174

Grudin's Law, 193

## H

H-E-B Grocery, 26–31

Hackett, B., 152

Hamel, G., 276, 288

*Handful of Sand on the Shore*, A (Gibran), 309

Handheld devices, 197

Help desks: electronic performance support systems for, 197; for employee support, 264; experts in, 178

Heraclitus of Ephesus, 219

Hermre, A., 262

Hessan, D., 4, 8, 187, 189, 192

Hewlett-Packard (H-P), 106

Hidden agenda, 278–279

Hill, N., 112, 152

Holmes, O. W., 159, 305

Homeland security training, 48

Horton, W., 99, 104

Hosted (ASP) solutions, 102

Hotel front-desk training, 48

Human resource departments: knowledge management in, 118, 122; performance-centered design in, 203–204

Human-technology interface, books on, 359

Hype, 12–13, 289–292

## I

IBM: CRM system of, 210; Manager Jam event of, 336; On-Demand Workplace of, 208–214, 270–273; presence

- awareness software of, 211–212; Signature Selling Method (SSM) of, 210; solution sales force of, 209–210; WebSphere portal of, 210
- IDC Research, 17, 33, 75
- Identity, in community, 160, 164–165
- “If you build it, they will come” myth, 22, 35
- IMS standard, 103
- Incentives: for adopting new initiatives, 260–261; for community participation, 165; for experts, 180; for knowledge sharing, 180, 261; for performance, 59–60, 111, 295, 297
- Industrial Revolution, 219
- Industry-specific content sources, 330–331
- InfoMedia Designs, 156
- Informal learning: *versus* formal learning, 25, 82–84, 96; in learning and performance architecture, 82–84; pull learning and, 85. *See also* Workplace learning
- Information repositories: overview of, 76–77; for project work, 136. *See also* Knowledge management
- Information storage: knowledge convergence and, 124–127; knowledge management *versus*, 108–109. *See also* Knowledge management
- Information technology (IT) departments: electronic performance support systems in, 197, 198; for employee technical support, 264; getting advice from, 103–104; involving, in knowledge management system, 149, 153–156; knowledge management departments *versus*, 153–156; knowledge management in, 118–119
- Information Week*, 15
- Innovation lag, 8
- Instant messaging (IM), 62–63; for accessing experts, 182–185; backchat in, 184–185; for collaboration, 173, 334–335; effective use of, 184–185; examples of, 182–185, 334–335; security issues of, 184; uses and challenges of, 334–335
- Instructional design: authoring tools for, 100; books on, 358; for e-learning, 25, 316; experts and, 186; role of, in electronic performance support systems, 201; role of, in learning and performance solutions, 247; Web sites on, 359–360
- Instructors: quality of, 45; role of, in learning and performance solutions, 247; using, as experts, 182
- Intellectual capital, 134, 136–137
- Interdependencies, 44
- Internal content, 330
- Internal/External Communications (IEC), 86–87, 98
- International Society for Performance Improvement, 360
- Internet: bubble collapse of, 13–15, 68; evolution of e-learning and, 12–18, 67–68
- Internet Time Group, 188, 220, 360
- Interwoven, 102
- Intranet, knowledge management system on, 148–149
- Invention, 309–311
- Investment in e-learning: executive support and, 22; performance results and, 5–6
- iPod, 203
- ## J
- Japanese car manufacturers, 38
- Jargon, 7
- Java Developers Community, 167
- Johnson, H., 97
- Johnson, S. (Samuel), 128
- Johnson, S. (Steven), 108, 152
- ## K
- Kanter, R. M., 16, 33, 167, 188
- Kao, G., 61
- Kaplan, R., 248
- Kaplan-Leiserson, E., 188
- Karrer, T., 33
- Kay, A., 255, 268–269
- Kennedy, J. F., 275, 288
- Kilpatrick’s evaluation levels, 220, 251, 291
- Kim, K., 98
- KM World, 360
- Knowledge: course-centric *versus* knowledge-centric view of, 112–114; explicit or codified, 123; importance of, in smart enterprises, 39–40, 53–54; lost, 75–76; pace of change in, 45, 177,

- 270–272, 293; skills in learning and, 53–56; tacit, 123–124, 159
- Knowledge access, 110, 127–130, 326
- Knowledge architecture, 125–127
- Knowledge capture, 123–124, 182, 186
- Knowledge communities. *See* Communities
- Knowledge convergence, 124–127
- Knowledge exchange, 108, 159
- Knowledge management, 105–156; access in, 110, 127–130, 326; applications of, 114–121, 342–345; books on, 358; collaboration and, 107–108, 134, 157–192; components of, 76–79; defined, 73–74; importance of, 75–76; incentives for, 180, 261; in learning and performance architecture model, 73–76; objectives of, 74; organizational benefits of, 121–122; performance-centered design and, 204; performance support and, 196, 199; in sales force training program, 91; scale of, 110; terms for, 108; training and, 111, 112–114, 244–245, 329; traps in, 108–112; use and abuse of, 106–112; Web sites on, 360. *See also* Technology for knowledge management
- Knowledge management development: components and activities of, 144–150, 341–345; design and development phase in, 143, 344; diagnosis phase in, 140, 141–142, 341–342; flowchart of, 140; framework for, 139–150; implementation phase in, 143, 345; solution-definition phase in, 140, 142–143, 342–343; systematic process of, 140, 141–143, 341–345; team approach in, 150–151. *See also* Technology for knowledge management
- Knowledge management (KM) staff, 139
- Knowledge management solutions: building, 131–150, 341–345; collaboration on, 153–156; components and activities of, 144–150, 341–345; features, functionalities, and challenges of, 321–331; global consulting firm example of, 134–139; lessons learned from, 133–134; management and governance of, 145–146, 341–345; pharmaceutical company example of, 131–134; procedures for, 146–147, 342–345; rapid prototyping of, 140, 143–144; strategic objectives for, 144–145, 151; technical infrastructure for, 148–149, 342–345; in telecommunications company case study, 224–233; tools for, 99–100, 147–148. *See also* Technology for knowledge management
- Knowledge networks, 77–78, 107–108, 171–172; tools for building, 173, 337–338
- Knowledge repositories, building, 122–131
- Knowledge sharing, 108
- KnowledgeBridge, 102
- Korean car manufacturers, 38
- L**
- Labels, 23–24, 283
- Larson, J., 309, 312
- Lauber, R., 91
- LCMS (learning content management system), 101–102
- Leadership: books on, 359; of change management, 280–288; of communities, 166, 191; governance area of, 26, 59, 284–287; for learning and performance, 59, 275–292, 303; sponsors and, 275–280, 319; support of, 22, 26, 29, 59, 166, 258; training, in new learning system, 266; Web sites on, 360
- Leadership development, online communities for, 168–171, 191
- Learners: exclusive focus on, 23; “just-enough” needs of, 34–35; knowledge skills and, 53–56; as performers, 23–24, 283
- Learning: books on, 357; collaboration and, 157–192; formal and informal, 82–84, 96–97; integration of, with work, 193–220; mastery levels and, 93–95; performance support and, 198–220; push *versus* pull, 84–85; realities of, 5–6, 70–72; speed of change and, 1; training *versus*, 3–4, 11, 19, 71, 302; Web sites on, 357–358; work flow, 218–220
- Learning champions, 275. *See also* Sponsors
- Learning communities. *See* Communities
- Learning culture: change management for, 253–273; collaboration and, 43–44,

157, 167; knowledge management and, 134; in smart enterprises, 39, 43–44, 303

Learning organization, 41–42, 134. *See also* Smart enterprise

Learning technology. *See* E-learning; Technology for learning

Learning tools: embedded, 80, 90, 96, 196, 202–214; interdisciplinary approach and, 96–97. *See also* Technology for collaboration; Technology for knowledge management; Technology for learning

LearningCircuits, 360

Leavitt, P., 97

Legal requirements, 63

Lewis, N., 270, 273

Lexus Automobile Company, 86–87

Lexus Labs, 86–87

Libraries, 77

Lincoln, A., 257

LMS (learning management system), 101–102

Lotus Notes, 291

Lucent Technologies, 69

## M

Macromedia Breeze, 101

Mager, R., 300, 307

Malone, T., 219

Management systems, 101–102

Managers: expertise sharing and, 178–179; support from, for e-learning initiatives, 258; training, in new learning initiatives, 266

Mapping, electronic performance support systems for, 200–201

MapQuest, 200

Masie, E., 62, 64

Masie Center, 64

Massy, W., 13, 33

Mastery levels, 93–95

Mavens, 166

McKula, L., 138

Mentoring, 81–82

*Merriam-Webster's Collegiate Dictionary*, 70

Message consistency: classroom training and, 46; in global knowledge management system, 137

Message spreaders, 166

Meta Group, 60

Metatags, 126–127, 325, 326

Microsoft LiveMeeting, 101

Microsoft Word, 99–100

Military training, 48, 162–163, 198

Millennial generation, 63–64

Miller, J., 174–176

Mobile technologies, 62–63

Mobility, in knowledge management systems, 326

Molex Corporation, 54–56

Mosher, B., 258

MSNBC, 333

“My MSN,” 128

“My Yahoo,” 128

Myths of e-learning, 18–23, 33–35

## N

NASA, 75

Negative attitudes, 263, 297

NETg, 100

Networks: business singularity and, 216–220; knowledge, 77–78, 107–108, 171–172, 337–338

*New York Times*, 13, 330

9/11 Commission, 43

Nonexperts, 177, 180, 198

Norman, D., 246, 248

Norton, D., 67, 97, 215, 248

## O

Oakes, K., 289, 292

Obstructionists, 278–279

O'Dell, C., 114, 152, 280, 288

O'Driscoll, T., 206, 212, 215

Office hour software, 179

Online booking, 194

Online catalogues: content domain organization of, 112–113; knowledge-centric organization of, 113–114; quantity *versus* quality in, 20–21

Online collaboration. *See* Collaboration

Online communities. *See* Communities

Online help resources, 196, 266

Online meeting tools, 100, 101

Online training: advantages and disadvantages of, 46–49; advent of, 19; limitations of, 46–50, 71. *See also* E-learning; Training

Open source tools, 103

Oppenheimer Funds, 62

Oracle/PeopleSoft, 129  
 Organizational charts, 161  
 Outsmart Evolution, 102

## P

Pace of change. *See* Speed  
 Palmisano, 215  
 Partner-supplier relationships, 119, 286  
 Pathlore, 101  
 Paul, L., 188  
 Peer coaching, 63  
 Peer identification, 164–167  
 Peer pressure, 169  
 Performance analysis, 124, 209–210, 298–300  
 Performance barriers: analysis of, 298–300; business *versus* human, 299; types of, and possible interventions, 295–298  
 Performance-centered design, 193–194, 202–214; blended learning and, 205–208; case example of, 208–214; lessons learned about, 213–214  
 Performance domains, 125–126  
 Performance gap, 300  
 Performance improvement: books on, 359; broadened perspective on, 300–306; business metrics for, 236–238; importance of, 5–6, 23–24, 40–41, 289–290; interventions for, 296–298; nonlearning approaches to, 293–298, 303; performance analysis for, 298–300; of sales force training program, 91–92; the smart enterprise and, 39, 41, 71–72, 300–302; success factors for, 38–39; team and individual, 40–41; as ultimate value proposition, 71–72; Web sites on, 360  
 Performance measures: business metrics and, 236–238; for hypothetical electronic performance support system, 234–238; importance of, 71–72; user satisfaction, 235–236; using multiple, 234–235  
 Performance needs: e-learning focus on, 25, 314–315; linking knowledge management to, 110–111  
 Performance reviews, millennial generation and, 63–64  
 Performance support, 193–220; categories of, 195–196; external, 195; extrinsic, 195–196; intrinsic, 196; in learning

and performance architecture, 79–80.  
*See also* Electronic performance support systems  
 Perks, 261  
 Personal financial management tools, 194  
 Personalization, in knowledge management systems, 325  
 Peters, T., 1, 8  
 Pharmaceutical chemists, communities of, 162  
 Pharmaceutical company, knowledge management in, 131–134  
 Pipe, P., 300, 307  
 PLATO, 67  
 PlatoonLeader.army.mil, 162  
 Platt, L., 106  
 Players, 279  
 Pogo, 293  
 Portals, 128–130; DiamondCluster's Knowledge Center, 135; functionalities and challenges of, 321–322; IBM's On Demand Workplace, 211–212; personalization and, 325  
 Power grabs, 285  
 Powered Performance, 55  
 PowerPoint, 99–100, 228  
 Preference phase, 267–268, 347–351  
 "Presence awareness" software, 211–212  
 Presentation preparation, electronic performance support system for, 228–229  
 Prioritizing, 263–264, 299–300  
 Privacy, 166–167, 337–338  
 Produce Challenge (H-E-B Grocery's e-learning program), 26–30  
 Product-launch Weblog, 339–340  
 Professional services firms, knowledge management in, 119–120, 134–139  
 Profiles and profiling software, 179, 211–212, 325  
 Project work, knowledge management system for, 135–139  
*Prophet, The* (Gibran), 151  
 Publishing, in knowledge management systems, 324, 326  
 Pull learning, 84–85  
 Punishment, 165, 260, 297  
 Push learning, 84–85

## Q

Q Innovation, 156  
 Qexchange, 248

Qualitative evaluation techniques, 236  
 Quality control, 322  
 Quicken, 194

## R

Railroads, 305–306  
 Rapid prototyping, 140, 143–144, 213  
 Readiness assessment, of executive team alignment, 280, 353–356  
 Recession, 38  
 Recognition, 261, 295  
 Redundancy reduction, 237, 284  
 Reinvention, 304–305  
 Relationships: development of, in communities, 170; knowledge sharing in, 77–78  
 Resistance, 255, 256–257, 264; from early adopters, 259–260; fear of technology and, 264; inability to change *versus*, 266–267; timeframe for, 265  
 Resource planning, 282  
 Retailer Web conferencing, 337  
 Retention, 295  
 Retirees, lost knowledge and, 75–76  
 Reuters, 330  
 Rewards: for adopting change, 260–261; for community participation, 165; for performance, 59–60, 295, 297. *See also* Incentives  
 Roberts-Witt, S. L., 172, 188  
 Rogers, W., 256  
 ROI Calculator, 230–232  
 Role models, 258, 261  
 Rosenberg, M., 152  
 Rosenfeld, E., 182–185  
 Rossett, A., 41, 60, 96, 98, 200, 221, 248, 249, 252, 302, 307

## S

Saba, 101  
 Saint-Onge, H., 109, 152, 164  
 Saint-Onge Alliance, 164  
 St. Paul Companies, Knowledge Exchange of, 163–164  
 Sales force automation suite, 90  
 Salespeople: blended learning for, 86–92; communities of, 190; electronic performance support systems for, 196–197, 209–210; indicators for learning needs of, 87–88; knowledge management for, 120–121; learning and performance strategy for, in hypothetical case study, 221–252; performance-centered design for, 209–210  
 “Salespeople” (messengers), 166  
 San Diego State University, 252  
 “Sandbox,” 138  
 SAP, 129  
 Scalability: of electronic performance support systems, 197, 238–243; of training, 45  
 Scenarios, in online training, 47–48  
 Schank, R., 236, 248  
 Schön, D., 41–42, 61  
 Scope expansion, of electronic performance support systems, 241–243  
 SCORM (Sharable Content Object Reference Model), 100, 103  
 Search functions, 64, 323  
 Second-wave adopters, 259–260  
 Section 508, 103  
 Security, 326  
 Selection, employee, 295  
 Selix, G., 281, 288  
 Senge, P., 11, 32, 41–42, 60  
 September 11, 2001, 43, 117  
 Service technician communities, 163  
 Sheldon, K., 41, 60, 221, 248, 307  
 Silo organization, 43–44  
 Simplification of work, 196–197  
 Simplistic approach, 7–8, 19–20  
 Simulations, 47–48, 64, 87  
 SkillSoft, 100  
 Sloman, M., 15, 33, 269  
 Smart enterprise suite, 42  
 Smart enterprises, 37–64; challenges of, 303–304; change management in, 58–59; characteristics of, 39–41; collaboration in, 157–192; communications strategy in, 59, 267–268; components of, 37, 57–60; defined, 39; e-learning in, 51–55; framework of, 56–60, 300–302; knowledge management in, 105–156; leadership for learning and performance in, 59, 275–292; learning and performance architecture of, 57–58, 67–104; learning to learn in, 53–54; moving toward, 302–306; organizational success and, 38–39; origins of concept, 41–42; performance environment in, 59–60, 294–298, 303; principles for building, 304–305; stages of, 54; technological

- foundation for, 50–51; training function in, 42–43; workplace learning in, 49–50
- Smith, J. M., 56
- Snooping, 166–167, 337–338
- Social software, 172–174, 185. *See also* Technology for collaboration
- Soft skills training, 21
- Software developers: communities of, 161; role of, in electronic performance support systems, 201
- Software wizards, 196
- Spectator-sponsors, 276–277
- Speed: as business metric, 237; of change, 1, 177; governance and, 286–287, 288; of information change, 45, 270–272, 293; online work environment and, 208, 270–272; of time, 219
- Sponsors, 275–280, 319; executive alignment and, 279–280, 353–356; styles of, 276–279
- Spying, 166–167, 337–338
- Stakeholders and constituencies: in electronic performance support systems, 213–214, 238–239; external, 286; involving, in design and implementation, 262–263; involving, in governance, 285; involving, in knowledge management solutions, 142; prioritizing and scaling across, 238–239; satisfying all, 23; support from, 22, 111. *See also* Executive support
- Standards, technical, 100, 103
- Star Wars*, 68
- Steering committee, 262–263
- Storytelling, 176, 182
- Strategy: e-learning in context of, 30–32, 287–288, 289–292; e-learning leadership and, 287–288, 289–292, 305; knowledge management in context of, 109, 144–145, 151, 341–345; knowledge management's role in supporting, 121; planning, for e-learning initiatives, 281–282; technology focus *versus*, 20, 24–25, 313–312
- Successes: importance of early, 242; telling stories of, 259, 261, 268, 277, 283, 291
- Sugrue, B., 98
- SumTotal Systems, 101, 292
- Sun Microsystems, Java Developers Community of, 167
- Supervisors: preparing, 89–90; support from, 258
- Supplier relationships, 119, 286
- Surgery, electronic performance support systems for, 198
- Surowiecki, J., 158, 187
- Sviokla, J., 152
- Synchronous design: for e-learning, 19; for online communities, 191
- Syndicated content, 330–331
- Systematic approach, of the smart enterprise, 40
- ## T
- T + D Magazine, 290
- Tacit knowledge: communities for, 159; experts for, 123–124
- Tasks, linking roles to, 226–228
- Tax Cut, 79
- Tax-filing support, 79, 198
- Taxonomy of knowledge, 126–127
- Teams: collaborative culture and, 44; importance of, 40–41; knowledge management development, 150–151
- Technical infrastructure, for knowledge management, 148–149
- Technology for collaboration: for accessing experts, 182–185, 187; in communities of practice, 172–174; functionalities and challenges of, 327, 333–340; and online meetings, 100–101; role of, 157, 167
- Technology for knowledge management: collaborative tools for, 100–101, 157, 167, 172–174, 182–187, 327; in development process, 342–345; in global consulting firm, 137–138; information systems departments and, 153–156; role of, 107, 109–110; selection of, 99–100, 147–148
- Technology for learning: changes in, 62–64; effective use of, in smart enterprises, 40; fear of, 264; as foundation, 50–51, 71; limitations of online training and, 46–50; overemphasis on, 18–21; overinvestment in, 19–20; overreliance on, 7, 11; strategy and, 20, 24–25, 313–314; tips for choosing, 99–104. *See also* E-learning; Learning tools; Online training

- Telecommunications case study. *See* True Telecom
- Telecommunications industry, recession and, 38
- Telecommuting, 295
- Telephone invention, 309
- Thompson, E. J., 188
- Thompson, J., 43
- Time constraints: classroom training and, 46; of experts, 179–180
- Timeframe: for adapting to change, 265; for community membership, 161–162; for e-learning, 8; for integrated learning and performance systems, 243
- Titus Maccius Plautus, 171
- Tobias, C., 251, 252
- ToolBook, 100
- TopClass, 101
- Training: as change management tool, 257, 265–266; collaboration and, 185–187, 191, 245; formal and informal, 82–84, 96–97; impact of blended learning on, 246–247; instant messaging in, 185; integration of, with learning and performance solutions, 243–245; knowledge management and, 111, 112–114, 244–245, 329; learning *versus*, 3–4, 11, 19, 71, 302; limitations of, 44–50, 71; performance-centered design and, 204–205; role of, in organizations, 44–51; in smart enterprises, 42–43; work design and, 207–208; work-learning integration and, 207–208, 243–247. *See also* Classroom-based training; Online training
- Training departments: information systems departments and, 153–156; interdisciplinary approach in, 96–97
- Training Magazine*, 15
- Training needs assessment, 124
- Training Test Consultant, 199–200
- TripTiks, 200
- True Telecom (hypothetical telecommunications company) case study: background on, 221–222; customer contact planning in, 223–234; knowledge management system in, 224–234; performance and business metrics in, 234–238; scaling in, 238–243; training program integration in, 243–245
- Tufts University, online account management tool at, 174–176
- TurboTax, 79, 198
- ## U
- Understanding phase, 267–268, 347–351
- Unilever, Leaders into Action program of, 168–171
- U.S. Army, 117, 162–163
- U.S. Coast Guard, 251
- U.S. Declaration of Independence, 285
- U.S. government: knowledge management in, 117; online training in, 47–48
- U.S. Transportation Security Administration, 47
- University of Illinois, 67
- User manuals, 195, 203, 207
- User satisfaction measures, 235–236
- ## V
- Value proposition: for e-learning initiatives, 71–72, 261–262, 281; for knowledge management, 143
- Van Buren, M. E., 15, 33, 74, 97, 269
- Virtual classroom training, 19, 81; technological tools for, 100, 101
- Virtual communities. *See* Communities
- Virtual rooms, 136
- Virtual work arrangements, 50
- Vision, 280–281
- Vogt, E., 4, 8, 187
- ## W
- Walking-dead sponsors, 277–278
- Wallace, D., 109, 152
- Waller, A., 169
- Warning signs, 24–26, 304, 313–320
- Watercooler conversations, 130, 158
- Weapons, high-tech, 198
- Web-based training, 19. *See also* E-learning; Online training; Training
- Web-Based Training Information Center, 360
- Web browser platform, 12
- Web conferencing, 172, 173, 327, 336–337
- Web sites: on e-learning and performance, 359–360; as information repositories, 76, 77; portal, 128–130
- WebCT, 101
- WebEx, 101
- Weblogs, 173–174, 339–340
- WebMD, 77, 125, 334

- Welch, J., 38  
Wenger, E., 159–160, 187  
“Who Wants to Be a Millionaire?” 158  
Wiki, 174  
Wins, showcasing, 283. *See also* Successes  
Work and work processes: blended learning and, 205–208; disruption of, for learning, 195–196, 206, 207; electronic performance support systems (EPSS) in, 193, 196–220; learning embedded in, 80, 90, 96, 193–220, 270–273; performance-centered design and, 193–194, 202–214; poor design of, 297; simplification of, 196–197  
Work cloud, 218–219  
Work flow, in knowledge management systems, 323–324  
Work flow learning, 218–220  
Work-life balance, 295  
Workload reduction: for experts, 179–180; for performance improvement, 298  
Workplace: as factor in performance, 294–298; as virtual work world, 6  
Workplace learning: for grocery checkers, 28–31; importance of, 25, 49–50, 317–318; in learning and performance architecture, 82–84; reality of, 70–71; for sales personnel, 89–90; in smart enterprises, 49–50. *See also* Informal learning  
World War II pilots, 219
- X**
- Xerox, Eureka! online communities of, 163
- Y**
- Yoda, 68
- Z**
- Zeller, S., 61  
Zemsky, R., 13, 33