



Index

A

- Accountability, 9
 - board of directors, 267
 - and business case, 215
- Activity-based costing (ABC), 229, 230
- Advanced modeling, 239, 243
 - advantages and disadvantages of, 244
 - portfolio balancing, 249
- Advantages of effective IT management, 8, 9
- Albin, James J., 33
- Analysis of investments, 18, 19
- Analytical hierarchy process, 195, 239, 254
- Appel, Willie, 156
- Applications
 - attributes, 159, 160
 - balancing the portfolio and tradeoffs, 252–254
 - categories of, 24
 - cost attributes, 164
 - defined, 157
 - elements of, 157
 - migration patterns, 253
 - as part of asset portfolio, 24, 25, 142, 143
 - portfolio, 156–168
 - risk-related attributes, 165, 166
 - user information, 161, 162
 - value, benefits, and costs, 158
 - value statements, 161
- Approach to IT management, 1, 2, 30
- Approaches to IT portfolio management, 21–25
- Arbitrage pricing theory, 29
- Architecture
 - architecture review board, 105
 - enterprise architecture (EA) group, 88
 - problems with, 12
 - “spaghetti” architecture, 12
- Arthur Andersen, 73
- Arthur D. Little life cycle approach, 254
- Assessing IT portfolio (stage 4 of building IT portfolio)
 - assessment cycle, 236
 - gaps between target and current investment mix, 245, 246
 - measuring the portfolio, 234, 237–241
 - overview, 19–21
 - performance, 241–246
 - report, 244, 245
 - scoring methods, 239, 240
 - tasks, 234, 235
 - triggering events, 235–237
- Asset phase
 - application of Stage-Gate®, 110, 111
 - elements of, 145–168
 - overview, 13, 107
 - shortfalls, 14, 15
- Asset portfolio
 - commonality among subportfolios, 112–121
 - elements of, 142
 - and IT governance, 83
 - metrics, 54
 - overview, 21–22, 24–25, 107, 108, 142–145
 - planning, 210, 211
 - review of, 145
 - and software selection, 57

B

- Balanced scorecard, 229, 230, 241, 242
 - business alignment, 101
 - categories, 227
 - as communication tool, 264
 - for IT, 244, 245
 - performance management, 89, 90

- Balancing IT portfolio (stage 5 of building IT portfolio)
 - alternative investments, 255
 - changes
 - implementation of, 258, 260
 - selection and approval of, 254–258
 - communication, 261, 262
 - failure to balance, 248
 - models for, 251
 - outputs of balancing stage, 246, 247
 - overview, 20, 246–248
 - tradeoffs
 - analysis of, 249, 250
 - application portfolio, 252–254
 - discovery portfolio, 250, 251
 - project portfolio, 250, 251
 - tuning options, 249, 254, 255
 - Ballou, Melinda-Carol, 285
 - Baseline assessment
 - business-IT credibility and dependency, 189–192
 - capabilities, 194
 - portfolio management maturity, 59–64, 192–194
 - readiness, 187, 189, 190
 - Benchmarking, 10, 31
 - against competitors' investment balance, 255
 - peer benchmarking and performance assessments, 273
 - and performance measures, 200
 - Best practices
 - feasibility assessment, 127
 - governance process, 70
 - and planning, 39
 - project phase and gating process, 130
 - value, 31
 - Beta, 218, 219
 - Board of directors
 - and governance, 86, 89, 102
 - role of, 267
 - Booker, Michael, 130
 - Boston, Brad, 331
 - Boston Consulting Group (BCG), 152
 - growth share matrix, 254
 - Bottom-up approach, 21
 - governance, 90, 91
 - investment categories, 203, 204
 - Bruque, Sebastian, 16
 - Bubble charts, 115, 118
 - portfolio views, 228
 - Bucket method, 251
 - Budgets and budgeting. *See also* Costs
 - budget cycles, 248
 - and cutting costs, 9
 - impact of portfolio management, 21, 51
 - IT percentages, 8
 - spending, 10, 11
 - Building the IT portfolio
 - costs, 182, 184
 - factors to consider, 176
 - overview, 175–179
 - readiness assessment, 280–283
 - risk
 - categories and factors, 278, 279
 - generally, 181–183
 - stages. *See* Stages of IT portfolio management
 - value
 - categories and factors, 276, 277
 - generally, 180, 181
 - Business alignment, 10, 39, 80, 81, 208
 - balanced scorecard, use of, 101
 - and core competencies, 8
 - and portfolio management, 237
 - Business case, 10, 324, 325
 - and populating the portfolio, 215–217
 - project phase and Stage-Gate® process, 111, 112, 133, 134
 - Business continuity, 31, 181
 - Business performance indicators. *See also* Key performance indicators (KPIs)
 - understanding of and response to, 191, 192
 - Business process management systems, 12
 - Business process outsourcing, 162
 - Business process reengineering, 73
 - Business processes, 191
 - Business strategy, 177
 - alignment with, 237
 - business diagnostic, 280, 281
 - Business units, 72
 - Business value of IT, 8
 - Business vision, 52
- C**
- Capability assessment, 46
 - Capability maturity model (CMM), 149
 - development of, 43, 45
 - levels of, 45, 46, 59–64
 - Capital asset pricing model (CAPM), 29, 219
 - Carlson, Mike, 342, 343
 - Carnegie Mellon University, 43, 149
 - Carr, Nicholas, 6, 327
 - Case studies, 329
 - Cisco Systems, Inc., 330–334
 - In-Q-Tel, 335–338
 - Xcel Energy, 339–363
 - Center for Information Systems Research, 81, 83

- Central Computer and Telecommunications Agency (CCTA), 148
 - Change
 - adaptive companies and competitive advantage, 3, 326, 327
 - and baseline assessments, 41, 42
 - governance, role of, 266
 - internal and external challenges, 7, 8
 - and levels of IT spending, 8
 - management, 78, 149, 150
 - pace of, 1
 - perspectives on, 117
 - reasons for, 2, 3
 - resistance to, 25, 26, 321
 - responding to, 3, 4
 - Charter, 54, 55
 - approval of, 270
 - elements of, 201, 202
 - Chasm model, 127
 - Chief executive officer (CEO)
 - governance and mapping of top issues, 103
 - Sarbanes-Oxley compliance, 74
 - Chief financial officer (CFO), 72
 - obtaining support of, 47, 48
 - role of, 73
 - Sarbanes-Oxley compliance, 74
 - Chief information officer (CIO), 72
 - governance and mapping of top issues, 104
 - and planning phase, 41
 - role of, 3, 21, 77–79
 - historical background, 72
 - and regulatory requirements, 74–77
 - and Sarbanes-Oxley compliance, 74, 75
 - Christensen, Clayton, 127
 - Cisco Systems, Inc., 327
 - case study, 330–334
 - Clinger-Cohen Act, 76
 - CobiT (control objectives for information and related technology), 31, 70, 91–93
 - Collaboration, 328
 - business management and IT, 4
 - importance of, 4, 5
 - and information value, 328
 - and work flow, 316, 317
 - Communication (stage 6 of building IT portfolio)
 - and assessment stage, 273
 - consistency, 262
 - dashboards, use of, 263
 - employees, 264, 265
 - focus of, 261
 - importance of, 4, 20, 117, 260, 263
 - and information value, 328
 - between IT and business, 4
 - media for, 265, 266
 - plan overview, 266
 - planning, 55–57
 - and portfolio balancing stage, 261, 262
 - reporting mechanisms, 265
 - stakeholders
 - analysis, 261
 - identifying, 262–264
 - tasks, 262, 263
 - tools, 263, 264
 - Compliance
 - CobiT as framework for, 92
 - governance policy, 66
 - issues of key stakeholders, 48
 - regulatory, 165
 - Sarbanes-Oxley, 9, 74–76, 97, 98, 364, 365
 - Compustat, 123
 - Concept maturation, 128
 - Configuration management, 78
 - Consolidation of portfolio, 256, 257
 - Contingent portfolio programming (CPP), 251
 - Control objectives for information and related technology (CobiT), 31, 70, 91–93
 - Cooper, Dr. Robert G., 108, 130
 - Core competencies, 3
 - and business alignment with IT, 8
 - Correlation, 28
 - COSO, 70
 - Costs. *See also* Budgets and budgeting and building IT portfolio, 182, 184
 - cost avoidance, 276
 - fixed costs, converting into variable costs, 12, 184
 - spending on IT, 10, 11
 - variable versus fixed costs, 143
 - Creating IT portfolio (stage 3 of building IT portfolio)
 - inventories, 18
 - metrics, defining, 225–230
 - overview, 18, 19, 211, 212, 233
 - populating the portfolio, 212–217
 - risks and results, identifying, 217–225
 - screening process, 18, 19
 - tasks, 213
 - Critical success factors (CSFs)
 - and defining metrics, 199, 200
 - Customer relationship management, 328
 - portfolio interrelationships, 210, 211
 - Customer surveys, 272
- D**
- Dashboards, 200, 325
 - and asset portfolio reviews, 145–146
 - Mercury Interactive, 354
 - selection dashboard, 117, 120

- Dashboards (*Continued*)
 use of in communication, 263
 Xcel Energy, 339, 343, 354, 355
- Data. *See also* Information and data collection, 211, 212, 214
- Databases, 324, 325
 centralized, 113
 mining, 113, 115
- Decision (probability) trees, 243
- Dedrick, Jason, 14
- Dell Computer, 327
- Diagnostics, 280–283
- Diffusion of innovation model, 127
- Disaster recovery plan, 181
- Discovery phase
 application of Stage-Gate®, 110, 111
 elements of, 124–128
 fuzzy front end, 13, 111, 121, 122
 overview, 13, 22, 107
 project phase compared, 113
 shortfalls, 14, 15
- Discovery portfolio
 commonality among subportfolios, 112–121
 discovery phase. *See* Discovery phase
 fuzzy front end, 121
 and IT governance, 83
 metrics, 53
 overview, 21–23, 107, 121–124
 planning, 210, 211
 technology readiness level, 124
- Disruptive technology curves, 127
- E**
- e-business, 73
- Earned value analysis (EVA), 229, 230
- eBusiness Value Dial, 112
- Economic value added, 241
- Edgett, Scott J., 130
- Efficient Frontier, 28, 29, 243, 257–259, 287
- Elton, Edwin J., 29
- Enron, 73
- Enterprise application integration (EAI), 211
 and value, 223
- Enterprise architecture (EA) group, 88
- Enterprise program management, 24
- Enterprise program management office (EPMO), 86, 88
- Enterprise resource planning (ERP), 73, 328
 vendors, 287
- Executive steering committee (ESC), 86–88, 105, 267
 governance and mapping of top issues, 105
 performance management, 89, 90
- Expectations management, 41
- Expected commercial value, 241
- F**
- Feasibility stage, 126, 127
- Federal CIO Council, 76
- Federal Express, 327
- Federalism of IT, 91
- Financial models, 239
 advantages and disadvantages of, 242
 common models, 241
 portfolio balancing, 249
- Financial portfolio management
 IT portfolio management compared, 27, 28
- Financial portfolios
 and IT portfolios, 323
- Fisher-Pry model, 127
- Fixed costs, 184, 255
- Function point, 229, 230
- Future trends
 adaptive companies and technologies, 327, 328
 IT and competitive advantage, 326, 327
- Fuzzy front end. *See* Discovery phase
- G**
- Game plan (stage 1 of building IT portfolio)
 baseline assessment, 187–194
 chart, 188
 documentation, 201, 202
 goals, identifying, 185
 objectives, defining, 194–196
 overview, 18, 185–187
 process metrics, defining, 196–201
- Gates. *See* Stage-Gate®
- General Accounting Office (GAO), 29, 30
- Goals
 identifying, 185
 of IT portfolio, 3, 4
 of IT portfolio management, 17
- Gogel, Ray, 339–342, 363
- Gompertz model, 127
- Governance (stage 7 of building IT portfolio)
 approaches, 90, 91
 board of directors, 86, 89, 102
 business focus for IT, 71–80
 business-IT alignment, 80, 81
 centralized versus decentralized approach, 90, 91
 and change, 266
 chief information officer, role of, 74–79, 104
- CobiT. *See* CobiT (control objectives for information and related technology)
- corporate, 66

- defined, 65
 - demands on companies, 67
 - enterprise architecture (EA) group, 88
 - enterprise program management office (EPMO), 86, 88
 - executive steering committee. *See* Executive steering committee (ESC)
 - framework, 83
 - functions, 66
 - governing bodies, 86–89, 102–105, 267, 326
 - implementing, 93–95
 - importance of IT governance, 73
 - internal diagnostic, 281, 282
 - IT investment committee, 86
 - and IT portfolio management, 66
 - IT strategy committee, 86
 - management issues, 99–101
 - maturity level assessment, 68–70
 - overview, 17, 20, 81–91, 324
 - performance management, 89, 90
 - policy
 - development and compliance, 66
 - and principles, 84, 85, 269, 270
 - and portfolio management process, 269
 - principles, 84, 85, 269, 270
 - role of, 66
 - role of IT, 67, 68
 - Sarbanes-Oxley. *See* Sarbanes-Oxley Act
 - self-diagnosis checklist, 68–70
 - steps in developing governance mechanisms, 267
 - structure for, 86–89
 - tasks and activities in developing, 267, 268
 - triggers, 270
 - Graham-Leach-Bliley Act, 76
 - Grow-the-business investments, 206, 207, 210, 219, 325
 - and budget cycle, 248
 - Growth
 - allocation of resources to, 204, 205
 - grow-the-business investments. *See* Grow-the-business investments
 - Growth share matrix, 254
 - Gruber, Martin, 29
 - Gunther McGrath, Rita, 123
 - Gurbaxani, Vijay, 34
- H**
- Health Insurance Portability and Accountability Act (HIPAA), 76
 - Higgs Report, 76
 - Historical background
 - of IT, 71–74
 - of IT management, 2
 - Human capital. *See also* People, focus on
 - as element of asset portfolio, 142
 - portfolio, 154–156
 - Hybrid approach, investment categories, 203, 204
- I**
- IBM, 341, 343
 - In-Q-Tel, 327
 - case study, 335–338
 - Industrial Research Institute, 123
 - Information and data
 - data collection, 211, 212, 214
 - as part of asset portfolio, 142, 143
 - portfolio, 150–154, 210
 - Information Systems Audit and Control Association, 31, 91
 - Infrastructure
 - as element of asset portfolio, 142, 143
 - portfolio, 146–147
 - Innovation, 122, 123
 - Xcel Energy scoring criteria, 125
 - Intangible assets and importance of IT, 70, 71
 - Intel Corporation, 112, 114, 122
 - Internal control report, 74
 - Internal rate of return, 241
 - Inventories
 - of IT investments, 18
 - of resources, 225
 - Inventories of IT investments, 18
 - Investment categories, defining, 203–205
 - ISO 900X, 70
 - IT Governance Institute, 86, 89
 - IT Infrastructure Library (ITIL), 70, 148
 - IT investment council, 267
 - IT service delivery, 215
 - IT steering committee, 105, 267
 - ITIL, 70, 148
- K**
- Kaplan, Robert S., 89, 241
 - Key performance indicators (KPIs)
 - as communication tool, 264
 - and defining metrics, 199, 200
 - Key performance measures, 26, 27
 - Kleinschmidt, Elko J., 130
 - Koen Peter, 124
 - Kraemer, Kenneth L., 14
- L**
- Leadership, support of, 208, 209
 - Legacy systems, 9, 11, 74
 - Legal issues and human capital management, 156
 - Legislation, 74–77

- Life cycle of IT, 13–15, 107, 108
 Arthur D. Little life cycle approach, 254
 asset phase. *See* Asset phase
 and asset relationships, 256, 257
 discovery phase. *See* Discovery phase
 project phase. *See* Project phase
 Stage-Gate® process, 108–112
- M**
- MacMillan, Ian, 123
 Mainstay Partners, 14
 Management information systems (MIS), 71, 72
 Management process, assessment of (stage 8 of building IT portfolio)
 overview, 270, 271
 performance assessments, comparing, 272, 273
 portfolio changes, 258, 259
 program execution, 271
 report, 271, 273, 274
 tasks and activities, 271, 272
- Mapping
 and portfolio balancing, 258
 road-mapping, 127, 196
 Sarbanes-Oxley compliance road map, 97, 98
 of top issues, 103–105
 United Management Technologies, investment strategic map, 197
- Markowitz, Dr. Harry, 28
 Mathematical programming, 251
 Maturity levels
 baselines, 148
 IT governance, 68–70
 management maturity, 192–194
 maturity models, 149, 326
 portfolio management, 59–64
 and software selection, 289, 290
- McDonough, Edward, 141
 McKinsey & Company, 122
 Medina, Jose, 16
 Mercury Interactive, 115
 dashboards, 354
 IT Governance Center, 343
 IT Governance Solution, 331
- Mercy Health Partners, 33, 34
 META Group, 156
 Metrics, 10, 11, 325
 business IT measurements, 228
 categories of, 227
 dashboards. *See* Dashboards
 defining, 225–228
 financial portfolio management, 27, 28
 investment success, 208
 key performance measures. *See* Key performance measures
 measurement methods, 229, 230
 measuring the portfolio, 237
 performance management, 89
 planning phase, 53, 54
 process improvement, 53
 process metrics, defining, 196–201
 program execution assessment, 271
 scorecards. *See* Scorecards
 value delivery, 53
- Microsoft Excel, 57, 167
 Miller, Bruce, 196
 MIT Center for Information Systems Research, 81, 83
 Modern portfolio theory, 28, 29
 Monte Carlo simulation, 243, 254
 Moore, Geoffrey, 127
 Multiattribute value tree (MAVT) analysis, 239
 Must-meet criteria, 130
- N**
- National Aeronautics and Space Administration (NASA), 124
 Net present value, 241, 276
 New Basel Capital Accord (Basel II), 76
 New product development, 13. *See also* Project phase
 Nolan, Richard, 127
 Nonnumeric models, 240, 241
 Norton, David P., 89, 241
- O**
- Objectives
 and allocation of resources, 205
 defining, 51, 52
 and execution assessment, 270
 identifying, 40, 41
 portfolio management, 151, 194–196
 subportfolios, 210
- Off-the-shelf technologies, 9
 Office of Management and Budgeting (OMB), 29, 30
 Exhibit 300, 76
 and metrics, 226, 227
- On-demand adaptive model, 143, 145, 327
- Operations
 operational diagnostic, 283
 running the business, resources allocated to, 204–206. *See also* Run-the-business investments
- Opportunity generation stage, 126
 Options. *See* Real options

- Organization chart
 - and IT/IS group, 80
 - IT organizational models, challenges of, 82
- Outputs
 - of balancing stage, 246, 247
 - defined, 132
 - project phase gates and stages, 132–140
- Outsourcing, 9, 12
 - and business perceptions of IT, 190
 - business process, 162
 - and IT governance, 83
- Overview of IT portfolio management, 17–27, 321–326
- P**
- Pacific Edge Software, 34, 117
- Pareto principle, 212, 334
- Partnering and shared services, 9
- Payback periods, 239, 276
- People, focus on, 25–27, 47, 117, 321. *See also*
 - Human capital
 - IT portfolio management as people process, 177–179
- Performance management, 89, 90, 100, 101
- Performance measurement. *See* Metrics
- Pictorial diagrams, 251
- Planning for IT portfolio management, 39, 40, 58
 - baseline assessments, 41, 42
 - capability assessment, 46
 - capability maturity model (CMM), 42–46
 - levels of, 59–64
 - communication planning, 55–57
 - maturity levels, 59–64
 - metrics. *See* Metrics
 - objectives
 - defining, 51, 52
 - identifying, 40, 41
 - refining, 49–52
 - and software selection, 58
 - overview, 18
 - processes involved, 40
 - project charter, 54, 55
 - readiness assessment, 42, 43
 - scope, 49–51
 - software selection, 57, 58
 - stakeholder analysis, 47, 48
 - task planning, 55
- Planning stage (stage 2 of building IT portfolio)
 - investment classifications, 206–209
 - investment strategy, 202–209
 - overview, 202
 - portfolio structure, 209, 210
 - subportfolios, 210, 211
 - task planning, 203
- Policy
 - as foundation for governance, 84
 - types of, 85
- Portfolio management software
 - assessment of
 - considerations, 286
 - overview, 285, 286
 - assessment of vendors
 - advanced criteria, 304–319
 - functional capabilities, 292–295
 - methodology, 292–303
 - performance criteria, 299–303
 - presence criteria, 295–299
 - consolidation of vendors, 288
 - convergence of features, 288
 - market, 286–288
 - market niches, 287
 - opportunity and demand management, 295
 - portfolio management, 293, 294
 - portfolio management tool suites (PMTS), 287
 - process management, 294, 295
 - program management, 292, 293
 - project management, 292
 - provider evaluation, advanced criteria for
 - architecture, 304, 305
 - billing and invoicing, 319
 - collaboration and work flow, 316, 317
 - data management, 307, 308
 - estimation, 318
 - expense management, 318
 - initiation and categorization, 309, 310
 - integration, 305, 306
 - optimization and progress management, 318
 - performance measurement, 312–314
 - planning and scheduling, 317
 - portfolio adjustment, 314, 315
 - prioritization, 310, 311
 - project cost and accounting, 319
 - reporting and visualization, 315, 316
 - resource management, 317
 - scope management, 317, 318
 - security, 306, 307
 - time management, 318
 - view management, 308, 309
 - resource management, 294
 - selection of, 201, 289–292
 - suites, 287
 - use of in documenting applications portfolio, 167, 168
 - vendors, 287, 288

- Portfolio structure, planning, 209, 210
 - Portfolio views, 228, 230 *See also* Bubble charts, pictorial diagrams, and views
 - financial views, 232
 - graphic representation, 228
 - purpose of, 231, 232
 - Positioning options, 123
 - Processes
 - portfolio, 148–150
 - Processes for managing IT portfolio, 17, 26
 - IT Infrastructure Library (ITIL), 148
 - operational success, 148, 149
 - processes defined, 148
 - stages of, 18–21
 - Productivity
 - and focus on people, 25–27
 - index, 239
 - Productivity paradox, 14, 16, 17
 - summary of studies on, 36, 37
 - Profitability index, 239
 - Program management, 24
 - Project charter, 54, 55
 - Project failures, 11
 - Project initiation form, 129, 130
 - Project management, 23, 24
 - project defined, 128
 - Project Management Institute (PMI), 11, 128
 - Project phase, 13, 107
 - discovery phase compared, 113
 - elements of, 130–142
 - key factors in managing, 140, 141
 - shortfalls, 14, 15
 - Stage-Gate® process, 130–140
 - stages and gates in, 13, 109, 130–140
 - transition to operations, 141, 142
 - Project portfolio, 21, 23, 24, 107, 325
 - commonality among subportfolios, 112–121
 - and IT governance, 83
 - metrics, 53, 54
 - overview, 128, 129
 - planning, 210, 211
 - project initiation form, 129, 130
 - project phase. *See* Project phase
 - and software selection, 57
 - ProSight, Inc., 115, 116
 - Pure plays, 73
- R**
- RACI (responsible, accountable, consulted, and informed), 70
 - Readiness assessment, 42, 43
 - baseline assessment, 187, 189, 190
 - diagnostics, 280–283
 - discovery phase, 128
 - Real options, 123, 184, 243
 - Regulatory compliance, 165. *See also* Sarbanes-Oxley Act
 - Regulatory environment, 74–77
 - Reports
 - assessment and execution report, 273, 274
 - as communication tool, 264
 - Request for information (RFI)
 - for software, 57
 - software vendors, 290, 291
 - Request for proposal (RFP)
 - for software, 57
 - software vendors, 290, 291
 - Request for quotation (RFQ)
 - software vendors, 290, 291
 - Research and development
 - and discovery phase, 122
 - statistics on, 123
 - Resistance to change, 25, 26
 - Resource management, 100
 - inventory of resources, 225
 - Return
 - categories of, 224
 - IT returns, study results, 36, 37
 - and resources, inventorying and allocating, 225
 - and risk, 224, 225
 - Return on invested capital (ROIC), 16
 - Return on investment (ROI), 27, 73, 74, 79, 80, 239, 276
 - Risk
 - assessment, 31, 254
 - beta, 218, 219
 - business, 278, 279
 - categories and factors, 278–279
 - CobiT. *See* CobiT (control objectives for information and related technology)
 - customer, 279
 - defined, 181
 - diversifying, 28, 31, 34
 - expected risks and results, identifying, 217–225
 - and investment categories, 218–222
 - low-risk/high-risk balance, 141
 - management, 31, 100, 181, 182
 - operational, 279
 - planning, 28–33
 - and portfolio management, 183
 - positive and negative, 181
 - project, 279
 - resources, 225, 279
 - and return, 217, 218
 - and reward, 28, 236
 - risk/reward impact analysis, 236
 - scenario planning, 32, 33

and success probability, 222
 technology, 278
 Road-mapping, 127, 196
 Roche, Elizabeth, 156
 Rogers, Everett, 127
 Role of IT management, 3, 4
 Ross, Jeanne W., 80
 Run-the-business investments, 325
 and budget cycle, 248
 resources allocated to, 204–206
 and risk, 219
 subportfolios, 210

S

S-curve model, 127
 Saaty, Thomas L., 195
 Sarbanes-Oxley Act
 CobiT as framework for compliance, 92
 compliance and role of IT, 9, 75, 76
 Xcel Energy system, 364, 365
 compliance road map, 97, 98
 corporate governance, 66
 provisions of, 74–76
 and return on investment, 80
 Scenario planning, 115, 119, 127, 243
 portfolio balancing, 249, 253
 probabilities, 33
 risk management, 32, 33
 trade-offs, determining, 250
 Scope of IT portfolio management, 49–51
 Scorecards, 31, 200, 242
 balanced scorecard. *See* Balanced scorecard
 business alignment, 184, 185
 investment review, 115, 116
 portfolio scorecard, 237, 238
 risk comparison, 220
 risk scoring method, 221, 222
 Scoring methods, 239, 240, 249
 Scoring models, 130–132
 Scouting options, 123
 SEI capability maturity model (CMM), 70, 229
 Sensitivity analysis, 239
 Service levels, 255
 Services-oriented development of applications (SODA), 12
 Seven-Eleven, 327
 Seven-Eleven Japan Co., 326, 327
 Shared services, 9
 Sharpe, William, 29
 Should-meet criteria, 130
 Simulation approaches, 239, 240, 243
 advantages and disadvantages of, 244
 portfolio balancing, 249
 Six Sigma, 9, 229, 230

Software. *See also* Applications
 collectors and agents, 211, 212
 portfolio management. *See* Portfolio management software
 providers, assessment of. *See* Portfolio management software
 selection of, 57, 58
 Software Engineering Institute (SEI), 43, 149
 Spital, Francis, 141
 Sribar, Val, 156
 Stage-Gate®
 and discovery phase, 124–128
 In-Q-Tel, 337
 and IT life cycle, 108–112
 and project phase, 130–140
 requirements for effective gates, 110
 Stages of IT portfolio management
 chart, 186
 overview, 18–21, 184, 185
 stage 1 (game plan), 185–202
 stage 2 (planning), 202–211
 stage 3 (creating), 211–233
 stage 4 (assessing the portfolio), 234–246
 stage 5 (balancing), 246–260
 stage 6 (communicating), 260–266
 stage 7 (governance and organization), 266–270
 stage 8 (assessing management process), 270–274
 Stakeholders
 approval of charter and governance, 270
 asset portfolio reviews, 145
 communication with, 56, 57
 feedback from, 210
 level of support, 47, 48
 meeting needs of, 209
 readiness assessment, 187, 189
 values, 180
 views, 238
 Standard & Poors, 123
 Standard operating procedure, 200
 Statistics on IT investments, 10, 11
 research and development, 123
 Stepping stone options, 123
 Strategic alignment, 99
 Strategic business unit (SBU) approach, 208
 Strategic information system plans (SISPs), 72
 Subportfolios, 21, 22
 applications. *See* Applications
 asset portfolio. *See* Asset portfolio commonality, 112–121
 discovery portfolio. *See* Discovery portfolio and IT governance, 83

Subportfolios (*Continued*)
 planning, 210, 211
 project portfolio. *See* Project portfolio
 Success probability, 222
 Supply-chain management, 328

T

2004 R&D Trends Forecast, 123
 Task plan, 55
 Technology adoption models, 127
 Technology council, 105
 Technology forecasting, 127
 Technology readiness level (TRL), 124
 hardware and software, 171–174
 Teradyne, Inc., 137–140
 Tools
 for analyzing information and data, 17. *See also* Software
 portfolio management, 17
 Top-down approach
 funding, 21
 governance, 90, 91
 investment categories, 203
 Total quality management (TQM), 229, 230
 Trade-offs
 portfolio balancing
 application portfolio, 252–254
 discovery portfolio, 250, 251
 project portfolio, 250, 251
 steps, 249, 250
 Transform-the-business investments, 204–207,
 210, 219, 325
 and budget cycle, 248
 Transition from project phase to operations,
 141, 142
 Treacy, M., 177
 Triggers
 identifying, 235
 monitoring, 235, 236
 risk/reward impact analysis, 236
 Trust, 78, 90
 Tuning options, 249

U

Uncertainty. *See* Risk
 United Management Technologies, 180, 181
 business alignment scorecard, 185
 investment strategic map, 197
 Portfolio Optimizer, 257–259
 U.S. Department of Treasury, metrics used by,
 226, 227
 USA Patriot Act, 76
 User satisfaction, 272
 Utilization rates
 average server and storage utilization, 144

underutilized fixed assets, harvesting, 143,
 145

V

Value
 and building the IT portfolio, 180, 181
 categories and factors, 222–224, 276–277
 delivery, 99, 100
 drivers, 180, 181
 four E's of business value, 227
 of IT portfolio management, 5, 28–33
 scoring ranges for value factors, 224
 Value Measuring Methodology, 76
 Value tree analysis, 239
 Variable costs, 184, 255
 model, 143, 145
 Vendors. *See* Portfolio management
 software
 Views
 bubble charts, 228
 financial views, 232
 graphic representation, 228
 portfolio views, 228, 230
 purpose of, 231, 232
 selecting and approving portfolio changes,
 257–258
 stakeholders, 238

W

Wal-Mart, 327
 Waterfall approach, 18
 Web services, 12, 143
 Web sites
 Office of Management and Budget,
 information on Exhibit 300, 76, 77
 Stage-Gate®, 108
 Weill, Peter, 80, 83
 What-if analysis, 17, 115, 119, 246
 portfolio balancing, 249, 251
 Wiersma, F., 177
 Work activities
 defined, 132
 project phase gates and stages, 132–140
 Worldcom, 73

X

Xcel Energy, 75, 76, 327
 business case outline, 134
 case study, 339–363
 innovation scoring criteria, 125
 Sarbanes-Oxley, compliance with,
 364–365

Y

Y2K, 73, 76

