

# INDEX

**NOTE:** Pages beginning with “PDF” are located in the online chapters.

## Symbols

10 percent rule, PDF:389  
user segmentation, PDF:507

## A

abandon rate, help desk calls, 144-145  
quantification, PDF:354  
accepting installation after physically  
installing new devices, 88  
access device charge backs, 381  
access devices, 23-24  
acquisition of, risk and security,  
235-236  
home office equipment, user segmenta-  
tion, PDF:437-440  
PCs, 24  
price, 25  
technology refresh, 188  
projects that increment the access  
device fleet, technology refresh,  
194-195

technology refresh, 194  
trading in, 182-183  
access technologies  
cell phones, PDF:415-416  
voicemail, PDF:416-418  
convergent technology, PDF:408-409  
CRTs, PDF:425-426  
desktops, PDF:401-403  
flat-panel monitors, PDF:425-426  
handheld devices, PDF:410-411  
asset management, PDF:413  
cost, PDF:412-413  
entitlement, PDF:412  
incremental devices, PDF:414-415  
refresh cycles, PDF:414  
security, PDF:411-412  
support, PDF:411  
laptops, PDF:403-406  
pagers, PDF:418-419  
smart phones, PDF:415-416  
voicemail, PDF:416-418  
tablets, PDF:406-408

- thin clients, PDF:419-421
    - PC blades, PDF:422-425
  - ACD (automated call distribution), 54
  - acquisition
    - of access devices, risk and security, 235-236
    - of product
      - electronic ordering, PDF:344
      - product mix, PDF:344
      - standards versus price list, PDF:345
    - of software. *See* software acquisition
  - acquisition product, thin client PC blades, PDF:422
  - acquisitions
    - divestitures and, 66
    - service-delivery strategies, 229
    - technology refresh, 202-203
  - adds, MACs, 97-98
  - adoption of user segmentation, 513-514
  - advance payment for disposal, end of life strategies, 183
  - aging servers, technology refresh, PDF:361
  - alignment of user segments to technologies, user segmentation methodology, PDF:392-393
  - antivirus software, 132
  - asset management, 119-121
    - antivirus software, 132
    - audits and true up, 132
    - cascading, 133
    - cost justification, 122-124
    - data migration, 133-134
    - dependency on, 59-61
    - entitlements, 132
    - financial asset management, leasing, 217
    - handheld devices, PDF:413
    - hardware asset management, 124
      - centralization, 128
      - detail level, 126-127
      - linkage into inventory control, 126
      - patch management, 125-126
      - proactive levels, 128-129
      - shrink rates, 125
    - harvesting licenses, 134
    - help desk dependency, 155
    - information, drill down, PDF:334-335
    - management tools, 135-137, PDF:317-318
    - operating systems, 131
    - process, 121-122
    - quantification, PDF:352-353
    - risk and security, 239-240
    - software programs that perform similar functions, 135
    - technology refresh, 197
  - asset tracking, 120
  - asset-management records, updating, 173
  - asset-management reporting, compliance, 62
  - asset management, software asset management, 129
    - high-water marks, 130-131
  - assumptions for loss, leasing (tactical approaches to service delivery), 214-215
  - audits, 132
    - software, 67
  - automated call distribution (ACD), 154
  - availability, help desks, 148
- ## B
- backups, disposition, 172-173
  - banking industry, lifecycle management, PDF:371-372
  - bias, service-delivery strategies, 230
  - “big bang,” technology refresh, 200-202
  - bronze service level, end-user segments, PDF:458
  - bundling tactical approaches to service delivery, 212-213

business applications, technology  
 refresh, 189  
 business continuity, 263-265  
 defined, 262  
 buying à la carte, tactical approaches to  
 service delivery, 211-212  
 “buying down” rate factors, tactical  
 approaches to service delivery, 217

## C

call center user segments, PDF:490  
 criteria, PDF:491  
 service levels, PDF:493-495  
 technology, PDF:492-493  
 call volumes, help desks (quantification),  
 PDF:353  
 cameras, risk and security, 247-248  
 cannibalizing maintenance and out-of-  
 warranty expenses, 114  
 captive leasing, 216  
 cascading, 133  
 versus disposition, 175-176  
 MACs, 98-101  
 desktops and laptops, 101  
 maintenance and out-of-warranty  
 expenses, 114  
 risk and security, 246  
 servers, PDF:362  
 cathode ray tubes (CRTs), disposition,  
 181-182  
 cell phones, PDF:415-416  
 voicemail, PDF:416-418  
 cellular broadband, PDF:310  
 centralization, hardware asset manage-  
 ment, 128  
 centralized controls, compliance, 64-65  
 centralized, campus model (MACs), 102  
 certification, images (staging and integra-  
 tion), 75  
 change agents, 162  
 lifecycle management, 30-31  
 changes, MACs, 98-101  
 desktops and laptops, 101  
 changing support model, PDF:311  
 organizational impact, PDF:311-312  
 charge back methodology, PDF:381  
 charge backs, PDF:396  
 CIO (chief information officer), 15  
 cleansing information, 174-175  
 client lifecycle management, 275-279  
 landmine avoidance, 279-281  
 never close on a negative, 281-283  
 clients, trust, 276  
 closed loop lifecycle planning, 13-18  
 distractions, 14-15  
 requirements of, 17-18  
 collaboration, business continuity, 264  
 commodities, 25  
 commodity suite, 8-9  
 communication  
 program management, 166  
 program managers, 160  
 compelling events  
 acquisitions and divestitures, 66  
 initiating lifecycle management, 29  
 software acquisitions, 66-67  
 compliance, software acquisition, 62  
 asset-management reporting, 62  
 basic order-agreement confusion, 65  
 centralized or decentralized controls,  
 64-65  
 lack of reconciliation resources, 64  
 lack of software reporting, 63  
 multiple paths for, 64  
 quantifying noncompliance, 63  
 components, staging and integration, 76  
 conflict, 276  
 consolidating, servers, PDF:364-365  
 consultants, staging and integration, 78  
 consumer experience, 278  
 networking, PDF:308  
 consumer markets, impact of, 32-33

continuous process improvement  
 (CPI), 156  
 lifecycle management, 31-32  
 contractors, staging and integration, 77  
 convergent technology, PDF:408-409  
 coordinating installation, 86  
 copiers, user segmentation, PDF:428-430  
 home office equipment, PDF:443-447  
 core applications, software acquisition, 54  
 core competencies, service-delivery  
 strategies, 226-227  
 cost, 25  
 drill down, PDF:337  
 handheld devices, PDF:412-413  
 hard costs, 26  
 of PMO (program management office),  
 163-164  
 transitional versus business as usual,  
 164-165  
 soft costs, 26-27  
 user segmentation, PDF:506-508  
 cost avoidance, 26  
 quantification, PDF:325-326  
 cost justification, asset management,  
 122-124  
 cost per call, help desk calls, 147  
 cost reduction, 26  
 quantification, PDF:325-326  
 CPI (continuous process  
 improvement), 156  
 credit cards, software licensing, 58  
 CRTs (cathode ray tubes), PDF:425-426  
 disposition, 181-182  
 user segmentation, PDF:450-451  
 current technology state  
 user segmentation methodology,  
 PDF:383-388  
 deliverables from user segmentation,  
 PDF:393-394  
 custom software, 69  
 technology-refresh cycle, 70  
 customization, images (staging and  
 integration), 76

## D

data integrity, disposition (risk and  
 security), 241  
 data migration  
 asset management, 133-134  
 disposition, 172-173  
 day extenders “heavy” user segments  
 criteria, PDF:470  
 service levels, PDF:471-472  
 technology, PDF:471  
 day extenders “light” user segments,  
 PDF:472  
 criteria, PDF:473  
 service levels, PDF:475-476  
 technology, PDF:474-475  
 day extenders user segments, PDF:468-470  
 DBD (diagnose-before-dispatch) tools, 143  
 de-installing, disposition, 172-173  
 dead on arrival (DOA), warranty and  
 maintenance, 110  
 decentralized controls, compliance, 64-65  
 decentralized model, MACs, 102  
 decision making in lifecycle management,  
 34-35  
 definitions of current-state user segments,  
 user segmentation methodology,  
 PDF:390-392  
 deliverables, user segmentation, PDF:393  
 current-technology state, PDF:393-394  
 end-user alignment, PDF:395-397  
 end-user definitions, PDF:394  
 future-technology considerations,  
 PDF:394  
 demand, ordering in advance of, 43-45  
 demanufacturing, disposition, 177  
 density, business case for (maintenance  
 and out-of-warranty expenses), 116  
 departmental applications, software  
 acquisition, 55  
 deployment, servers, PDF:363  
 depots, warranty and maintenance, 110  
 desk-side support calls, downtime, 271-272

- desktops, PDF:309
  - access technologies, PDF:401-403
  - changes, MACs, 101
  - versus laptops, installation, 90-91
    - high “touch” environment, 91-93
    - self-installation, 91
  - technology refresh, 193-194
  - warranty and maintenance, 109
- detail level, hardware asset management, 126-127
- device density, PDF:387
- devices
  - access devices, 23-24
  - de-installing, 86-87
  - disposition, 184
  - locked-down devices, 53
  - per employee, PDF:338
  - physically installing new devices, 88
    - accepting installation, 88
    - business-as-usual installation versus project deployment, 90
    - end-user satisfaction, 89
    - fundamental installation changes, 89
    - managing projects, 89
    - preparing prior systems, 88
- diagnose-before-dispatch (DBD) tools, 143
- direct order channel, 41-42
- disaster recovery, 261-263
  - global businesses, 263
- disposal, demanufacturing, 177
- disposition, 171
  - versus cascading, 175-176
  - cleansing information, 174-175
  - CRTs, 181-182
  - demanufacturing for disposal, 177
  - demanufacturing for sparing, 177
  - devices, 184
  - end of life strategies, advance payment for disposal, 183
  - hybrids, 178
  - industry specifics, 179
  - internal disposition strategies, 179-180
    - investments, 180
    - market changes, 181
  - moving to secure areas, 173
  - partners, 178-179
  - physically de-installing, migrating data, and backups, 172-173
  - quantification, PDF:339, PDF:355-357
  - remarketing, 176
  - residual value, 182
  - risk and security, 241
    - data integrity, 241
    - environment, 241
    - intellectual property, 242
    - PDAs, 242
    - personal privacy, 242
  - thin client PC blades, PDF:424
  - trading in older access devices, 182-183
  - updating asset-management records, 173
- disposition agents, choosing, 178-179
- disruption, technology refresh, 204
- distractions, closed loop lifecycle planning, 14-15
- divestitures, service-delivery strategies, 229
- DOA (dead on arrival), warranty and maintenance, 110
- docking stations, user segmentation, PDF:435-436
  - home office equipment, PDF:440-442
- document-shredding hardware, user segmentation, PDF:447-448
- downtime, 267-268
  - desk-side support calls, 271-272
  - help desk calls, 270-271
  - help desks, 149-150
  - old technology, 268-269
  - patch and release management, 271
  - quantification of, 272-274, PDF:328-329
  - technology refresh, 269
  - timing, 270

drill-down, quantification, PDF:331-333  
 asset-management information,  
 PDF:334-335  
 cost and headcount information,  
 PDF:337  
 existing service levels, PDF:336  
 help desk statistics, PDF:333-334  
 management tools, PDF:335-336  
 third-party relationships supporting  
 lifecycle, PDF:336

drive-by TCO, PDF:323

duration of calls, help desk calls, 145

duration of work, global staging and inte-  
 gration, 82-83

## E

e-auctions, image management, PDF:303

economic suite, 10-11

effort, required for staging and  
 integration, 74

electronic ordering, acquisition of  
 product, PDF:344

eliminating manufacturers' images,  
 PDF:300

embedded agents, PDF:318

emotions of global lifecycle, 259

employee purchase programs,  
 disposition, 179

end users  
 coordinating with installation, 86  
 role in MACs, 103-104  
 satisfaction with installation of new  
 devices, 89

end-of-life strategies, 183  
 advance payment for disposal, 183  
 mitigating risks through leasing, 184

end-user alignment, deliverables from user  
 segmentation, PDF:395-397

end-user definitions, deliverables from user  
 segmentation, PDF:394

end-user demand, technology refresh, 190

end-user downtime, 267-268  
 desk-side support calls, 271-272  
 help desk calls, 270-271  
 old technology, 268-269  
 patch and release management, 271  
 quantification of, 272-274  
 technology refresh, 269  
 timing, 270

end-user satisfaction, help desk calls,  
 147-148

end-user segments, PDF:453-457  
 bronze service level, PDF:458  
 call center user segments, PDF:490  
 criteria, PDF:491  
 service levels, PDF:493-495  
 technology, PDF:492-493

day extenders "heavy" user segments  
 criteria, PDF:470  
 service levels, PDF:471-472  
 technology, PDF:471

day extenders "light" user segments,  
 PDF:472  
 criteria, PDF:473  
 service levels, PDF:475-476  
 technology, PDF:474-475

day extenders user segments,  
 PDF:468-470

essential personnel user segments,  
 PDF:498  
 criteria, PDF:498-499  
 service levels, PDF:501-502  
 technology, PDF:499-500

executive user segments, PDF:458  
 criteria, PDF:459  
 service levels, PDF:461-462  
 technology, PDF:460

gold service level, PDF:457

IT user segments, PDF:495  
 criteria, PDF:495-496  
 service levels, PDF:497-498  
 technology, PDF:496-497

- office worker user segments, PDF:476
    - criteria, PDF:476-477
    - service levels, PDF:477-479
    - technology, PDF:477
  - platinum service level, PDF:457
  - remote office user segments, PDF:479
    - criteria, PDF:479
    - service levels, PDF:481-483
    - technology, PDF:479-481
  - research and development user segments, PDF:483
    - criteria, PDF:483-484
    - service levels, PDF:485-487
    - technology, PDF:484-485
  - road warrior user segments, PDF:462-463
    - criteria, PDF:463-465
    - service levels, PDF:467-468
    - technology, PDF:465-466
  - silver service level, PDF:458
  - software development user segments, PDF:487
    - criteria, PDF:487-488
    - service levels, PDF:489-490
    - technology, PDF:488-489
  - end-user self-help, help desks, 151-152
  - entering warranty and maintenance operations, 117
  - entitlement, 235
    - handheld devices, PDF:412
  - entitlements, asset management, 132
  - environment, disposition (risk and security), 241
  - escalations, help desk calls, PDF:146
  - essential personnel user segments, PDF:498
    - criteria, PDF:498-499
    - service levels, PDF:501-502
    - technology, PDF:499-500
  - evergreen state, warranty and maintenance, 108
  - executive user segments, PDF:458
    - criteria, PDF:459
    - service levels, PDF:461-462
    - technology, PDF:460
  - exiting warranty and maintenance operations, 117
  - expense management, technology refresh, 192
  - experience
    - global experience, program management, 168-169
    - program managers, 160
- ## F
- factory services, staging and integration (quantification), PDF:348
  - faxes, user segmentation, PDF:428-430
    - home office equipment, PDF:443-447
  - financial asset management, tactical approaches to service delivery, 217
  - first-call resolution, 142-143
    - help desks, quantification, PDF:354
  - flat-panel monitors, PDF:425-426
    - user segmentation, PDF:450-451
  - flexibility
    - program managers, 161
    - standards, 42
  - forecasts, 49-50
  - forgiveness for condition, leasing, 216
  - fourth- and fifth-year warranties, warranty and maintenance, 111
  - future planning, pilots (interoperability and prototyping), PDF:289-290
  - future-technology considerations
    - deliverables from user segmentation, PDF:394
    - user segmentation methodology, PDF:388-390

## G

global businesses, disaster recovery, 263  
 global disposal, 241  
 global experience, program management, 168-169  
 global fulfillment, 48-49  
 global lifecycle, 249-252  
   centralization of specific lifecycle-management operations, 255-257  
   emotions, 259  
   global service levels, 252-253  
   part numbers, 257-258  
   program management, 167-168, 253-255  
   RFIs, 258  
   RFPs, 258  
 global part numbers, 257-258  
 global program management, 253-255  
 global service levels, 252-253  
 global software, lifecycle dependencies, 68  
 global staging and integration, 81-82  
   duration of work, 82-83  
   timing of work, 82  
 global user segmentation, PDF:509-512  
 gold disks, image management, PDF:299  
   eliminating manufacturers' images, PDF:300  
   updates, PDF:300-301  
 gold service level, end-user segments, PDF:457

## H

handheld devices, access technologies, PDF:410-411  
 asset management, PDF:413  
 cost, PDF:412-413  
 entitlement, PDF:412  
 incremental devices, PDF:414-415  
 refresh cycles, PDF:414  
 security, PDF:411-412  
 support, PDF:411

hard costs, 26  
   versus soft costs, quantification, PDF:324  
 hardware asset management, 124  
   centralization, 128  
   detail level, 126-127  
   linkage into inventory control, 126  
   management tools, PDF:317-318  
   patch management, 125-126  
   proactive levels, 128-129  
   shrink rates, 125  
 harvesting licenses, 68, 134  
 headcount information, drill down, PDF:337  
 health-care industry, lifecycle management, PDF:373-374  
 help desk calls, downtime, 270-271  
 help desks, 139-140, PDF:315  
   automated call distribution (ACD), 154  
   availability, 148  
   CPI (continuous process improvement), 156  
   dependency on asset management, 155  
   desk-side support calls, downtime, 271-272  
   downtime, 149-150  
   end-user self-help, 151-152  
   future of, 156-157  
   how many to have, 140-141  
   maintenance and out-of-warranty expenses, 116-117  
   metrics, 141-142  
     abandon rate, 144-145  
     cost per call, 147  
     duration of calls, 145  
     end-user satisfaction, 147-148  
     escalations, 146  
     first-call resolution, 142-143  
     number of calls, 142  
     number of rings before pickup, 148-149

- reporting, 146
- top ten calls, 143-144
- politics and organizational
  - behavior, 151
- quantification, PDF:353-355
- remote help desks, 141
- remote-control help desk, PDF:316-317
- risk and security, 239
- service levels, 155-156
- service-delivery strategies, 152-153
- statistics, drill down, PDF:333-334
- Stealth IT, 150
- thin client PC blades, PDF:423
- user segmentation, 140
- high “touch” environment, desktops versus laptops, 91-93
- high-speed Internet access, PDF:432
- high-water marks, 130
  - inventory off-network, 131
  - software titles and software manufacturers, 130-131
- holistic approach to user segmentation, PDF:508-509
- home office equipment, user segmentation, PDF:436-437
  - access devices, PDF:437-440
  - CRTs, PDF:450-451
  - docking stations, PDF:440-442
  - document-shredding hardware, PDF:447-448
  - flat-panel monitors, PDF:450-451
  - office furniture, PDF:442-443
  - printers, scanners, faxes, copiers, and multifunction devices, PDF:443-447
  - supplies, PDF:448-450
- home offices
  - formal versus informal, PDF:438-440
  - risk and security, 244
- home PCs, user segmentation, PDF:431-433
- hot backups, 43

- hybrids (combining delivery alternatives)
  - disposition, 178
  - service-delivery strategies, 220
  - staging and integration, 79

## I

- IMAC (installs, moves, adds, and changes), 237
  - risk and security, 237-238
  - thin client PC blades, PDF:423
- image management, PDF:296
  - creators and supporters of images, PDF:296-297
  - defined, PDF:295
  - e-auctions and multivendor environments, PDF:303
  - gold disks, PDF:299
    - eliminating manufacturers’ images, PDF:300
    - updates, PDF:300-301
  - management tools, PDF:297-299
  - number of images, PDF:302-303
  - refresh strategy, PDF:303-304
    - life of operating system, PDF:304
- images
  - creators and supporters of, image management, PDF:296-297
  - staging and integration, 75
    - certification, 75
    - customization, 76
- impact of downtime, 273
- implementing lifecycle management, 11-12, 30-31
  - activities, 12-13
- in-sourcing, interoperability and prototyping, PDF:288
- incremental devices, handheld devices, PDF:414-415
- indirect order channel, 41-42
- industries, disposition, 179
- information, cleansing, 174-175

- inhibitors to user segmentation, PDF:515-524
  - insourcing
    - help desks, 153
    - service-delivery strategies, 208-209
    - staging and integration, 77
  - installation, 85
    - coordinating, 86
    - de-installing existing device, 86-87
    - desktops versus laptops, 90-91
      - high “touch” environment, 91-93
      - self-installation, 91
    - impact of other access devices, 93
    - migrating data, 87
    - physically installing new devices, 88
      - accepting installation, 88
      - business-as-usual installation versus project deployment, 90
      - end-user satisfaction, 89
      - fundamental installation changes, 89
      - managing projects, 89
      - preparing prior systems, 88
    - quantification, PDF:349-350
    - Stealth IT, 93-94
  - installs, moves, adds, and changes (IMAC), 237
    - risk and security, 237-238
    - thin client PC blades, PDF:423
  - insurance industry, lifecycle management, PDF:370-371
  - integration of suppliers, 47-48
  - intellectual property, disposition (risk and security), 242
  - internal disposition strategies, 179-180
    - investments, 180
    - market changes, 181
  - Internet, high-speed access, PDF:432
  - Internet downloads, risk and security, 247
  - interoperability, quantification, PDF:346-348
  - interoperability and prototyping, PDF:287
    - insourcing, PDF:288
    - pilots, PDF:288-289
      - one-offs, PDF:291-292
      - planning for future, PDF:289-290
      - standards process, PDF:289
      - suppliers’ key roles in, PDF:290-291
      - technical, PDF:292-293
  - inventory
    - maintenance and out-of-warranty expenses, 114
    - risk and security, 243
  - inventory control, 120
  - inventory management, 121
  - inventory off-network, high-water marks, 131
  - IT solution, PDF:397
  - IT user segments, PDF:495
    - criteria, PDF:495-496
    - service levels, PDF:497-498
    - technology, PDF:496-497
- L
- landmine avoidance, 279-281
  - laptops, PDF:309
    - access technologies, PDF:403-406
    - changes, MACs, 101
    - technology refresh, 193-194
    - warranty and maintenance, 109
  - laptops versus desktops, installation, 90-91
    - high “touch” environment, 91-93
    - self-installation, 91
  - leading mitigating end-of-life risks, 184
  - leasing
    - tactical approaches to service delivery, 213
      - assumptions for loss, 214-215
      - leasing partners, 215-216
      - like-for-like conversion, 214
      - technology refresh, 198

leasing partners, tactical approaches to service delivery, 215-216

licenses, harvesting, 68, 134

licensing

- disposition, 180
- software, 56-57
- credit cards, 58

lifecycle

- global lifecycle. *See* global lifecycle versus TCO, quantification, PDF:329-331

lifecycle focal point, quantification, PDF:340

lifecycle management, 1-2

- in banking industry, PDF:371-372
- as best practice, 27-28
- change agents, 30-31
- changes, quantifying, 25-27
- continuous process improvement, 31-32
- defined, 3
- in health-care industry, PDF:373-374
- implementing, 11-12, 30-31
- lifecycle activities, 12-13
- in insurance industry, PDF:370-371
- making decisions consciously, 34-35
- in pharmaceutical industry, PDF:368-369
- pilots, 31
- proof of concept, 31
- reasons for initiating, 29
- in retail industry, PDF:374-375
- in small/medium-size businesses, PDF:376-377
- software, 67
- global, 68

“like for like”

- leasing, tactical approaches to service delivery, 214
- technology refresh, 199-200

linkage into inventory control, hardware asset management, 126

location, staging and integration, 79

- business-as-usual approach versus project approach, 81
- customizing service-delivery approach, 81
- manufacturers, 80
- off-site, 80
- on-site, 79-80
- resellers/partners, 80

locked-down devices, 53

## M

MACs (moves, adds, and changes), 95

- adds, 97-98
- changes, 98-101
- desktops and laptops, 101
- how many to have, 102
- centralized, campus model, 102
- decentralized model, 102
- remote model, 103
- impact of technology, 95-96
- moves (formal), 96-97
- moves (informal), 97
- quantification, PDF:350-351
- role of end users, 103-104

maintaining software, 58

- dependency on asset management, 59-61
- patch management, 61
- version control, 59

maintenance

- out-of-warranty expenses and, 112-113
- cannibalizing, 114
- cascading, 114
- help desks, 116-117
- inventory, 114
- maintenance implications, 115
- service-delivery strategies, 115-116
- sparing, 114
- quantification, PDF:351-352

- thin client PC blades, PDF:423
  - useful life, technology refresh, 192-193
  - management
    - program management, risk and security, 240
    - service-level management, service-delivery considerations, 222-223
    - vendor management, service-delivery considerations, 222
  - management tools, PDF:315-316
    - asset management, 135-137
    - drill down, PDF:335-336
    - future of, PDF:320-321
    - hardware/software asset management, PDF:317-318
    - image management, PDF:297-299
    - program management, 167
    - remote-control help desk, PDF:316-317
    - risk and security, 240
    - service-delivery strategies, 227-228
    - toolsets, PDF:318
      - productizing, PDF:319
      - user segmentation, PDF:514-515
  - management toolsets, PDF:318
    - productizing, PDF:319
  - managing projects, installation of new devices, 89
  - manufacturers, staging and integration, 78
  - market changes, internal disposition strategies, 181
  - marketing, program management, 166
  - maturity, program managers, 161
  - mean time before failure (MTBF), 108
  - mergers
    - service-delivery strategies, 229
    - technology refresh, 202-203
  - metrics, help desks, 141-142
    - abandon rate, 144-145
    - cost per call, 147
    - duration of calls, 145
    - end-user satisfaction, 147-148
    - escalations, 146
    - first-call resolution, 142-143
    - number of calls, 142
    - number of rings before pickup, 148-149
    - reporting, 146
    - top ten calls, 143-144
  - migrating data
    - disposition, 172-173
    - installation, 87
  - mitigating end-of-life risks, leasing, 184
  - mobility, PDF:308-309, PDF:432
    - networking, laptops and desktops, PDF:309
    - PDAs, PDF:309
  - moves (formal), MACs, PDF:96-97
  - moves (informal), MACs, PDF:97
  - moves, adds, and changes. *See* MACs
  - moving to secure areas, disposition, 173
  - MTBF (mean time before failure), 108
  - multifunction devices, user segmentation, PDF:443-447
  - multiple suppliers versus sole suppliers, 38-40
  - multivendor environments, image management, PDF:303
  - multivendors, service-delivery considerations, 224-225
- ## N
- net new, 172
  - networking, PDF:307-308
    - consumer experience, PDF:308
    - laptops and desktops, PDF:309
    - mobility, PDF:308-309
    - PDAs, PDF:309
  - next-generation security, PDF:312-313
  - refresh rates, PDF:312
  - remote access, PDF:310
    - cellular broadband, PDF:310
    - changing support model, PDF:311-312
    - WiFi Internet access, PDF:311

next-generation security, PDF:312-313  
 noncompliance, quantifying, 63

## O

objections to user segmentation, 524-525  
 obsolescent, 115  
 office furniture, home office equipment  
 (user segmentation), PDF:442-443  
 office worker user segments, PDF:476  
 criteria, PDF:476-477  
 service levels, PDF:477-479  
 technology, PDF:477  
 on-site delivery, staging and integration  
 (quantification), PDF:349  
 one-offs, pilots (interoperability and proto-  
 typing), PDF:291-292  
 operating system software, 55-56  
 operating systems, 131  
 life of, PDF:304  
 optimization, quantification, PDF:339  
 order channels, direct and indirect, 41-42  
 order-agreement confusion, compliance, 65  
 ordering in advance of demand, 43-45  
 organizational impact, changing support  
 model (remote access), PDF:311-312  
 out-of-cycle technology refresh, 195-196  
 out-of-warranty expenses, maintenance  
 and, 112-113  
 cannibalizing, 114  
 cascading, 114  
 help desks, 116-117  
 inventory, 114  
 maintenance implications, 115  
 service-delivery strategies, 115-116  
 sparing, 114  
 out-tasking  
 help desks, 153  
 service-delivery strategies, 209-210  
 outsourcing  
 help desks, 153  
 service-delivery strategies, 210-211  
 staging and integration, 78

## P

paggers, PDF:418-419  
 paradigm shifts, user segmentation,  
 PDF:512-513  
 adoption of, PDF:513-514  
 manageability tools, PDF:514-515  
 partnered leasing, 215  
 partners, disposition, 178-179  
 patch and release management,  
 downtime, 271  
 patch management, 61, PDF:302  
 hardware asset management, 125-126  
 PC blades, thin clients, PDF:422-425  
 acquisition product, PDF:422  
 disposition, PDF:424  
 help desks, PDF:423  
 IMAC, PDF:423  
 maintenance, PDF:423  
 software, PDF:423  
 staging and integration, PDF:423  
 technology refresh, PDF:424  
 PCs  
 business or personal, 52-54  
 core applications, 54  
 departmental applications, 55  
 personal software, 55  
 preference software, 55  
 home PCs, user segmentation,  
 PDF:431-433  
 not commodities, 24-25  
 PDAs, PDF:309  
 disposition, risk and security, 242  
 help desks, quantification, PDF:355  
 quantification, PDF:338-339  
 performance, technology refresh, 188-189  
 peripherals  
 risk and security, 247-248  
 staging and integration, 76  
 third-party peripherals, 45-46  
 personal privacy, disposition (risk and  
 security), 242

- personal software, software acquisition, 55
- personnel, risk and security, 245
- pharmaceutical industry, lifecycle management, PDF:368-369
- phased technology refresh, PDF:200-202
- pilots
  - interoperability and prototyping, PDF:288-289
  - one-offs, PDF:291-292
  - planning for future, PDF:289-290
  - standards process, PDF:289
  - suppliers' key roles in, PDF:290-291
  - technical, PDF:292-293
  - lifecycle management, 31
- platforms, service-delivery considerations, 223
- platinum service level, end-user segments, PDF:457
- PMO (program management office), 11, 163
  - cost, 163-164
    - transitional versus business as usual, 164-165
    - global program management, 253-254
  - point-of-sale services, 47
  - politics, help desks, 51
  - portfolios, services, 47
  - preference software, software acquisition, 55
  - preparing systems for new installations, 88
  - price, 25
    - technology refresh, 188-189
  - price lists versus standards, 42-43
  - prices of access devices, technology refresh, 188
  - pride of ownership, service-delivery considerations, 224
  - printers, user segmentation, PDF:428-430
    - home office equipment, PDF:443-447
  - printing, risk and security, 244-245
  - proactive levels, hardware asset management, 128-129
  - product mix, acquisition of product, PDF:344
  - productizing, management toolsets, PDF:319
  - program management, 159
    - global complexities, 167-168
    - global experience, 168-169
    - global program management, 253-255
    - internal or external, 165-166
      - marketing and communications, 166
    - management tools, 167
    - versus project management, 162
    - risk and security, 240
  - program management office (PMO), 11, 163
    - cost, 163-164
      - transitional versus business as usual, 164-165
      - global program management, 253-254
  - program managers, 160
    - change agent and, 162
    - communications, 160
    - flexibility, 161
    - industry and business knowledge, 161
    - maturity in decision making, 161
    - prerequisite experience, 160
    - training credentials, 160
  - project management versus program management, 162
  - projects
    - incrementing access device fleet, technology refresh, 194-195
    - managing installation of new devices, 89
  - proof of concept, 31
  - proposals, never close on a negative, 281-283
  - proprietary software, 69
    - technology-refresh cycle, 70
  - prototyping, quantification, PDF:346-348
  - purchasing initiatives, 39

## Q

quantification, PDF:323  
 client devices per employee, PDF:338  
 cost reduction and cost avoidance,  
 PDF:325-326  
 defined, PDF:323  
 disposition, PDF:339  
 downtime, 272-274, PDF:328-329  
 drill-down, PDF:331-333  
 asset-management information,  
 PDF:334-335  
 cost and headcount information,  
 PDF:337  
 existing service levels, PDF:336  
 help desk statistics, PDF:333-334  
 management tools, PDF:335-336  
 third-party relationships supporting  
 lifecycle, PDF:336  
 hard versus soft costs, PDF:324  
 lifecycle focal point, PDF:340  
 lifecycle versus TCO, PDF:329-331  
 optimization, PDF:339  
 risk, PDF:326-327  
 TCO versus lifecycle, PDF:329-331  
 wireless devices and PDAs,  
 PDF:338-339  
 quantification matrix, PDF:340-342  
 acquisition of product, PDF:343  
 electronic ordering, PDF:344  
 product mix, PDF:344  
 standards versus price list, PDF:345  
 acquisition of software, PDF:345-346  
 asset management, PDF:352-353  
 disposition, PDF:355-357  
 help desks, PDF:353-355  
 installation, PDF:349-350  
 interoperability and prototyping,  
 PDF:346-348  
 MACs, PDF:350-351  
 risk, PDF:357  
 sample calculations, PDF:342-343

staging and integration, PDF:348  
 factory services, PDF:348  
 on-site delivery, PDF:349  
 summary of total, PDF:357  
 warranty and maintenance,  
 PDF:351-352  
 quantifying  
 lifecycle management changes, 25-27  
 noncompliance, 63

## R

reasons for initiating lifecycle  
 management, 29  
 references, service-delivery strategies, 229  
 refresh cycles, handheld devices, PDF:414  
 refresh rates, PDF:312  
 refresh strategy, image management,  
 PDF:303-304  
 life of operating system, PDF:304  
 regulations, 34, 275  
 remarketing, disposition, 176  
 remote access, PDF:310  
 cellular broadband, PDF:310  
 changing support model, PDF:311  
 organizational impact, PDF:311-312  
 user segmentation, PDF:434-435  
 WiFi Internet access, PDF:311  
 remote help desks, 141  
 remote model, MACs, PDF:103  
 remote office user segments, PDF:479  
 criteria, PDF:479  
 service levels, PDF:481-483  
 technology, PDF:479-481  
 remote-control help desk, PDF:316-317  
 reporting help desk calls, PDF:146  
 request for information (RFI), 10, 39  
 global lifecycle, 258  
 technology refresh, 203-204  
 request for proposal (RFP), 10, 39  
 global lifecycle, 258  
 technology refresh, 203-204

- research and development user segments, PDF:483
  - criteria, PDF:483-484
  - service levels, PDF:485-487
  - technology, PDF:484-485
- resellers/partners, staging and integration, 78
- residual values, disposition, 182
- retail industry, lifecycle management, PDF:374-375
- RFI (request for information), 10, 39
  - global lifecycle, 258
  - technology refresh, 203-204
- RFP (request for proposal), 10, 39
  - global lifecycle, 258
  - technology refresh, 203-204
- risk, quantification, PDF:326-327, PDF:357
- risk and security, 233-234
  - acquisition of access devices, 235-236
  - asset management, 239-240
  - cascading, 246
  - disposition, 241
    - data integrity, 241
    - environment, 241
    - intellectual property, 242
    - PDAs, 242
    - personal privacy, 242
  - help desks, 239
  - home offices, 244
  - IMAC, 237-238
  - Internet downloads, 247
  - inventory, 243
  - management tools, 240
  - peripherals, 247-248
  - personnel, 245
  - printing, 244-245
  - program management, 240
  - software, 236-237
  - staging and integration, 237
  - stewardship, 245-246
  - technology refresh, 243-244
  - warranty and maintenance, 238

- road warrior user segments, PDF:462-463
  - criteria, PDF:463-465
  - service levels, PDF:467-468
  - technology, PDF:465-466
- roles
  - of end users, MACs, 103-104
  - of user segmentation, warranty and maintenance, 111-112

## S

- safety stock, 43
- satisfaction
  - client lifecycle management, 278
  - end-user satisfaction, help desk, 147
  - warranties, 106
- scaling, disposition, 178-179
- scanners, user segmentation, PDF:428-430
  - home office equipment, PDF:443-447
- secure areas, moving to, 173
- security
  - handheld devices, PDF:411-412
  - next-generation security, networking, PDF:312-313
  - risk. *See* risk and security
- selecting disposition agents, 178-179
- self-installation, desktops versus laptops, 91
- self-maintenance, 107-108
- self-warranty, 107-108
- server consolidation, PDF:364-365
- server management, PDF:363
- servers, PDF:359-361
  - aging of, PDF:361
  - cascading, PDF:362
  - consolidating, PDF:364-365
  - deployment, PDF:363
  - managing, PDF:363
  - service-delivery strategies, PDF:365-366
  - staging and integration, PDF:362-363

- service levels
  - bronze service level, end-user segments, PDF:458
  - call center user segments, PDF:493-495
  - day extenders “heavy” user segments, PDF:471-472
  - day extenders “light” user segments, PDF:475-476
  - drill down, PDF:336
  - essential personnel user segments, PDF:501-502
  - executive user segments, PDF:461-462
  - global service levels, 252-253
  - gold service level, end-user segments, PDF:457
  - IT user segments, PDF:497-498
  - office worker user segments, PDF:477-479
  - platinum service level, end-user segments, PDF:457
  - remote office user segments, PDF:481-483
  - research and development user segments, PDF:485-487
  - road warrior user segments, PDF:467-468
  - silver service level, end-user segments, PDF:458
  - software development user segments, PDF:489-490
- service-delivery strategies, 207-208
  - bias, 230
  - considerations for, 220
    - declaring core competencies, 226-227
    - infrastructure personnel, 225
    - management tools, 227-228
    - mergers, acquisitions, and divestitures, 229
    - multivendor or sole supplier, 224-225
    - platforms, 223
    - pride of ownership, 224
    - role of procurement, 221
    - service-level management, 222-223
    - vendor management, 222
    - whom do you trust, 226
  - help desks, 152-153
  - hybrids, 220
  - insourcing, 208-209
  - maintenance and out-of-warranty expenses, 115-116
  - out-tasking, 209-210
  - outsourcing, 210-211
  - planning for the end of relationships, 230-231
  - references, 229
  - servers, PDF:365-366
  - tactical approaches, 211
    - bundling, 212-213
    - buying à la carte, 211-212
    - “buying down” rate factors, 217
    - financial asset management, 217
    - leasing. *See* leasing
    - overall structures, 217
    - utility, 218-219
    - virtualization, 219-220
  - service-level management, service-delivery considerations, 222-223
  - services, point-of-sale services, 47
  - shrink rates, hardware asset management, 125
  - silver service level, end-user segments, PDF:458
  - skills, required for staging and integration, 74
  - small/medium-size businesses (SMB), life-cycle management, PDF:376-377
  - smart phones, PDF:415-416
  - voicemail, PDF:416-418
  - SMB (small/medium-size businesses), life-cycle management, PDF:376-377
  - soft costs, 26-27
    - versus hard costs, quantification, PDF:324

- software
  - acquisition of, quantification, PDF:345-346
  - audits, 67
  - custom or proprietary software, 69
    - technology-refresh cycle, 70
  - harvesting licenses, 68
  - having several software packages that perform similar functions, 135
  - importance of, 136
  - licensing, 56-57
    - credit cards, 58
  - lifecycle dependencies, 67
    - global, 68
  - risk and security, 236-237
  - thin client PC blades, PDF:423
- software acquisition
  - acquisitions and divestitures, 66
  - business PC or personal PC, 52-54
    - core applications, 54
    - departmental applications, 55
    - personal software, 55
    - preference software, 55
  - compelling events, 66-67
  - compliance, 62
    - asset-management reporting, 62
    - basic order-agreement confusion, 65
    - centralized or decentralized controls, 64-65
    - lack of reconciliation resources, 64
    - lack of software reporting, 63
    - multiple paths for, 64
    - quantifying noncompliance, 63
  - operating system software, 55-56
  - software licensing, 56-57
    - credit cards, 58
  - software maintenance, 58
    - dependency on asset management, 59-61
    - patch management, 61
    - version control, 59
- software applications, technology refresh, 189
- software asset management, 129
  - high-water marks, 130
  - inventory off-network, 131
  - software titles and software manufacturers, 130-131
  - management tools, PDF:317-318
- software development user segments, PDF:487
  - criteria, PDF:487-488
  - service levels, PDF:489-490
  - technology, PDF:488-489
- software maintenance, 58
  - dependency on asset management, 59-61
  - patch management, 61
  - version control, 59
- software manufacturers, high-water marks, 130-131
- software rights, 132
- software titles, high-water marks, 130-131
- sole suppliers versus multiple suppliers, 38-40
- spares inventory, 43
- sparing
  - demanufacturing, 177
  - maintenance and out-of-warranty expenses, 114
- staging and integration, 71-72
  - components and peripherals, 76
  - coordinating with installation, 86
  - effort, 74
  - global staging and integration, 81-82
    - duration of work, 82-83
    - timing of work, 82
  - images, 75
    - certification, 75
    - customization, 76

- location of work, 79
    - business-as-usual approach versus project approach, 81
    - customizing service-delivery approach, 81
    - manufacturers, 80
    - off-site, 80
    - on-site, 79-80
    - resellers/partners, 80
  - quantification, PDF:348
    - factory services, PDF:348
    - on-site delivery, PDF:349
  - risk and security, 237
  - servers, PDF:362-363
  - skills, 74
  - statement of work, 73-74
  - thin client PC blades, PDF:423
  - tools, 74-75
  - who should perform the work, 76-77
    - consultants (outsourcing), 78
    - contractors (on-site), 77
    - hybrid (combining delivery alternatives), 79
    - internal (insourcing), 77
    - manufacturers, 78
    - resellers/partners, 78
  - standards versus price lists, 42-43
  - standards process, pilot's role in (interoperability and prototyping), PDF:289
  - statement of work, 41, 73-74
  - statistics, warranty statistics, 106
  - Stealth IT
    - help desks, 150
    - installation, 93-94
  - stewardship, risk and security, 245-246
  - suppliers
    - integration of, 47-48
    - key roles in pilots, interoperability and prototyping, PDF:290-291
    - sole suppliers versus multiple suppliers, 38-40
  - supplies, user segmentation, PDF:448-450
  - support, handheld devices, PDF:411
  - support matrix, PDF:386
  - surveys, user segmentation, PDF:525-528
    - home connectivity, PDF:526
    - technology preferences, PDF:526
    - workplace, PDF:525
- T
- T&M (time and material), 116
  - tablets, access technologies, PDF:406-408
  - tactical approaches to service-delivery, 211
    - bundling, 212-213
    - buying à la carte, 211-212
    - “buying down” rate factors, 217
    - financial asset management, 217
    - leasing. *See* leasing
    - overall structures, 217
  - TCO (total cost of ownership), 2, 21, PDF:323
    - drive-by TCO, PDF:323
    - versus lifecycle, quantification, PDF:329-331
  - TCO standardization, technology refresh, 202
  - technology
    - call center user segments, PDF:492-493
    - day extenders “heavy” user segments, PDF:471
    - day extenders “light” user segments, PDF:474-475
    - essential personnel user segments, PDF:499-500
    - executive user segments, PDF:460
    - impact on MACs, 95-96
    - IT user segments, PDF:496-497
    - office worker user segments, PDF:477
    - remote office user segments, PDF:479-481
    - research and development user segments, PDF:484-485

- road warrior user segments,
  - PDF:465-466
- software development user segments,
  - PDF:488-489
- technology refresh
  - access devices, 194
  - asset management, 197
  - “big bang,” 200-202
  - business and software applications, 189
  - defined, 187
  - desktops, 193-194
  - disruption, 204
  - downtime, 269
    - timing, 270
  - end-user demand, 190
  - laptops, 193-194
  - leasing, 198
  - “like for like,” 199-200
  - mergers and acquisitions, 202-203
  - out-of-cycle technology refresh,
    - 195-196
  - performance, 188-189
  - phased technology refresh, 200-202
  - price, 188-189
  - price of access devices, 188
  - projects that increment the access
    - device fleet, 194-195
  - RFIs, 203-204
  - RFPs, 203-204
  - risk and security, 243-244
  - servers, PDF:361
  - TCO standardization, 202
  - thin client PC blades, 424
  - upgrades, 196
  - useful life, 192
    - warranty or maintenance, 192-193
  - Y2K, effect of, 191-192
- technology-refresh cycle, custom
  - software, 70
- thin clients, PDF:419-421
  - interoperability and prototyping, quan-
    - tification, PDF:347
  - PC blades, PDF:422-425
    - acquisition product, PDF:422
    - disposition, PDF:424
    - help desks, PDF:423
    - IMAC, PDF:423
    - maintenance, PDF:423
    - software, PDF:423
    - staging and integration, PDF:423
    - technology refresh, PDF:424
- third-party leasing, 215
- third-party peripherals, 45-46
- third-party relationships supporting
  - lifecycle, drill down, PDF:336
- time and material (T&M), 116
- timeframes for implementing lifecycle
  - management, 12-13
- timing, technology refresh (downtime), 270
- timing of work, global staging and
  - integration, 82
- tools
  - DBD tools, 143
  - for staging and integration, 74-75
  - management tools. *See* management
    - tools
- total cost of ownership. *See* TCO
- trading in older access devices, 182-183
- training credentials, program
  - managers, 160
- “true up,” 133
- trust, 276
  - service-delivery strategies, 226

## U

- updates, image management, PDF:300-301
- updating asset-management records, 173
- upgrades, technology refresh, 196
- uplifted warranties, 112
- uptime, 267
- useful life, technology refresh, 192
  - warranty or maintenance, 192-193

- user segmentation, PDF:382
    - 10% rule, PDF:507
    - access technologies. *See* access technologies
    - convergent technology, PDF:408-409
    - cost paradigms, PDF:506-508
    - deliverables, PDF:393
      - current-technology state, PDF:393-394
      - end-user alignment, PDF:395-397
      - end-user definitions, PDF:394
      - future-technology considerations, PDF:394
    - docking stations, PDF:435-436
    - end-user segments. *See* end-user segments
    - global user segmentation, PDF:509-512
    - help desks, 140
    - holistic approach, PDF:508-509
    - home office equipment, PDF:436-437
      - access devices, PDF:437-440
      - CRTs, PDF:450-451
      - docking stations, PDF:440-442
      - document-shredding hardware, PDF:447-448
      - flat-panel monitors, PDF:450-451
      - office furniture, PDF:442-443
      - printers, scanners, faxes, copiers, and multifunction devices, PDF:443-447
      - supplies, PDF:448-450
    - home PCs, PDF:431-433
    - inhibitors to, PDF:515-524
    - objections to, PDF:524-525
    - paradigm shifts, PDF:512-513
      - adoption of user segmentation, PDF:513-514
      - manageability tools, PDF:514-515
    - printers, copiers, faxes, and scanners, PDF:428-430
    - remote access, PDF:434-435
    - surveys, PDF:525-528
      - home connectivity, PDF:526
      - technology preferences, PDF:526
      - workplace, PDF:525
    - thin clients, PDF:419-421
      - PC blades, PDF:422-425
    - warranty and maintenance, 111-112
      - uplifted warranties, 112
    - wireless devices, PDF:434
  - user segmentation methodology, PDF:383
    - alignment of user segments to technologies, PDF:392-393
    - current technology state, PDF:383-388
    - definitions of current-state user segments, PDF:390-392
    - future-technology considerations, PDF:388-390
  - utilities, service-delivery strategies, 218-219
- ## V
- value suite, 9-12
  - vendor management, service-delivery considerations, 222
  - version control, software maintenance, 59
  - virtualization, service-delivery strategies, 219-220
  - voicemail, cell phones and smart phones, PDF:416-418
- ## W
- warranties, 106
    - out-of-warranty expenses and maintenance, 112-113
      - cannibalizing, 114
      - cascading, 114
      - help desks, 116-117
      - inventory, 114
      - maintenance implications, 115
      - service-delivery strategies, 115-116
      - sparing, 114
    - quantification, PDF:351-352
    - statistics, 106
    - uplifted warranties, 112
    - useful life, technology refresh, 192-193

- warranty and maintenance, 105-106
  - depots, 110
  - desktops, 109
  - DOA, 110
  - enter/exit, 117
  - evergreen state, 108
  - four- and five-year warranties, 111
  - laptops, 109
  - maintenance and out-of-warranty expenses, 112-113
    - cannibalizing, 114
    - cascading, 114
    - help desks, 116-117
    - inventory, 114
    - maintenance implications, 115
    - service-delivery strategies, 115-116
    - sparing, 114
  - risk and security, 238
  - role of user segmentation, 111-112
    - uplifted warranties, 112
  - self-warranty and self-maintenance, 107-108
- WiFi Internet access, PDF:311
- wireless capacity, PDF:309
- wireless devices
  - quantification, PDF:338-339
  - user segmentation, PDF:434

## X-Y-Z

- Y2K, 2, 21
  - effect on technology refresh, 191-192