Index

ABC analysis for ordering and prioritizing, 130–133 Accessibility, 47 Accor, 26-27 Accountability, 223 Actual capacity, 171 Adjustable capacity, 183 Admission. 33 Agglomeration effect, 47–48 Airbnb, 39, 199 Airlines, 87 Amadeus, 87 Ambience design, 60 colors and finishes, 61 FF&E, 62 lighting, 61 American Automobile Association (AAA), 15, 201, 204 American Hotel and Lodging Association (AHLA), 66 American Society for Quality (ASQ), 224 Americans with Disabilities Act of 1990 (ADA), 58-59 Analysis ToolPak, 84 Analytical queuing models, 52 Appraisal costs, 203 Arrival process, 172, 175 Arrival rate, 172 Artificial intelligence (AI), 62, 120 Assembly line, 55 Assurance, 193 Attrition, 149-151 Auditing, 199-200 Availability, 15 Avero, 88

Back-of-house staff (BOH staff), 155 Balanced scorecard, 233 Balking, 180 Bottlenecks, 28–29, 55 Bottom-up method, 75 Brainstorming, 230 Brand experience, 35 Branding, 26 Breaks, 157 Building information model (BIM), 65 Bundling, 33 Business analytics, 232–233 Business process management system (BPMS), 233 Capacity, 73, 96, 170–172 analysis, 28 management, 170 planning, 52 Case by case, 205 Causal models, 77-79 Cause-and-effect diagrams (see Fishbone diagrams) Central reservation system (CRS), 106 Change guidelines, 235 motivators and hindrances, 234 natural, 233-234 pitfalls, 234-235 theory and management, 233 Channel placement, 32 Channels, 174 Chase demand strategy, 74, 102, 181 Chautauqua Institution, 25-26 Chili's Grill & Bar, 14, 184 Chipotle Mexican Grill, 55, 122 Choice Hotels, 47 CitizenM, 55 CLEAR, 186 Close-out or block (see Stop-sell) Closed inventory, 102 Closed to arrival (CTA), 102

Closed-loop feedback, 205 Cloud Kitchens, 57, 102 Colors, 61 Competitive analysis, 87 Competitive dimensions of operations strategies, 15-16 Complementary services, 184 Conditional spillover, 204 Constant level strategy, 102 Constraints, 170-172 Continuous innovation, 35–36 Control limits, 222 Convenience, 15 Coproduction, 29 Cost of poor quality (COPQ), 203-204 Cost of quality (COQ), 203 Cost of walk (COW), 101 Cost per occupied room (CPOR), 147 Cost-benefit analysis(seeDisplacement analysis) COVID-19, 2 crisis, 66 pandemic, 119-120 Critical adjacencies, 56 Cross-impact analysis, 76 Cross-training, 157 employees, 182 Cues, 28, 61 Customer, 202-203 expectation-management perception, 193-194 interface, 35 journey maps, 36 loyalty, 9-11 participation, 183 satisfaction, 10-11 Customer and delivery routes, 57 Customer engagement, 198-199 CE¹¹, 198 Customer experience management (CEM), 24, 34 framework, 34 Customer relationship management (CRM), 29

Cut-off date, 99 Daily schedules, 155-156 Data requirements for layout decisions, 49-52 Decision matrices, 123, 224 Decision support system (DSS), 96 Defects (see Service-problems) Define, Measure, Analyze, Improve, and Control (DMAIC), 220-222, 224-232 Delphi method, 76 Demand, 73 management, 172 Dependability, 15 Design capacity, 170 Detractors, 199 Dettol, 66 Disney, 31, 183, 186 Disney's free model, 183 Disneyland Resort, 31 Displacement analysis, 106 strategic capacity inventory with, 104 - 106Disruption, 119-120 Distribution channels, 103 principles of distribution channels management, 106-108 DoorDash. 57 Downstream flows, 118 Duetto's Scoreboard, 83-84 Dunkin. 3 Duration, 174

Early intervention, 205 Econometric models, 79 Economic order quantity (EOQ), 127 formula, 127–130 Economic standards, 147–148 Economies of scale, 126 Education, 25–26 Effective capacity, 171 Efficiency, 171 80/20 rule (*see* Pareto principle) Empathy, 193 Empirical rule, 228 Employees, 30 retention and productivity, 10 satisfaction, 10 Enterprise resource planning systems (ERP systems), 134 Entertainment, 26 Environmental psychology, 61 Ergonomics, 58 Errors, 87 Escapism, 26 Esthetic, 26 Evaluation scoring, 123 EVEN Hotels, 61, 87 Excel, 84 Excess demand, 73 Excess supply, 73 Experience realms, 25 Experiential platform, 34–35 Explicit services, 8 Exponential smoothing, 81-82 with trend adjustments and/or seasonal adjustments, 82-83 External accountability, 201 External factors, 47, 76 External failure costs, 204 External service value, 10 Facilitating goods, 7 Facility layout, 53 process flow analysis, 55-57 space allocation strategies, 53–55 Factic, 84 Fairmont Washington, D.C., Georgetown, 27, 63 Fair Labor Standards Act (FLSA), 155 FASTPASS, 183 Finishes. 61 First come, first served (FCFS), 175 First in, first out (FIFO), 175 Fishbone diagrams, 218–219 Five Whys, 218 Fixed labor hours, 146 Fixed payroll costs, 146 Flexible schedule techniques, 156–157 Flowcharting, 215 Flowcharts, 36 Fluctuating demand, 85 Food and beverage (F&B) labor strategies, 152-155 outlets. 54 Forbes Travel Guide, 15, 201 Forecast errors, 83 Forecasting, 72, 75 factors, 76 hospitality demand and supply, 73 - 74methods, 76-84 Four Seasons Hotels & Resorts, 15 French Laundry, 15 Front-of-house staff (FOH staff), 155 Full-pattern length of stay, 103 Full-time equivalents (FTEs), 149 Furniture, fixtures, and equipment (FF&E), 62

Galaxy's Edge, 31 Gamechanger by Duetto, 83-84 Gemba walks, 219-220 Generation Z, 55 Ghost kitchens, 57 Global distribution system (GDS), 87, 107 Global Entry, 186 Google, 15 Grand Hyatt Baha Mar, 61 GrubHub, 57 Guest experiences analyzing experiential world of customer, 34 brand experience, 35 components of, 24-34 continuous innovation, 35-36 customer interface, 35 designing, 34-36 experiential platform, 34-35 modeling and visualizing, 36-37 Guest problems causes of, 202-203 consequences, 203-204 resolution of, 204-206

Hard costs. 204 Hard Rock Café, 27, 38 Hawthorne effect, 220 Hillstone Restaurant Group, 61 Hilton CleanStay Initiative, 66 Hilton Gro, 87-88 Hilton Hotels & Resorts, 8, 27, 66 Historical analogy, 77 Holding costs, 126, 128 Homes & Villas by Marriott International (HVMI). 39 Hospitality characteristics, 73 decisions and processes, 8 demand and supply, 73 industry, 2 managing demand, 74 managing supply, 74 operations management, 2 service concepting, 8-9 service-profit chain, 9-11 supply chain management, 118 - 120Hôtel Ritz Paris, 18 Hurdle prices, 88 Hyatt Hotels & Resorts, 66 Hybrid layout, 57 IDeaS G3 by SAS, 83 Ideation, 202 Implicit services, 8 Incidental fees, 33 Innovation, 202 Inspecting, 199-200 Instrumental experiences, 196 InterContinental Hotels Group, 61 Internal accountability, 201 Internal factors, 47, 76 Internal failure costs, 203 Internal service quality, 10 International Organization for Standardization (ISO), 123, 195 Internet of things (IoT), 65 Inventory control

allocating capacity among different customer groups, 99 main products and ancillary products and services, 99-100 management and principles of space inventory, 102-108 overbooking, 100-102 and planning, 98-102 and space optimization, 96-98 Inventory management, 125 (see also Project management) alternative methods, 133-135 optimizing, 127-133 role and scope, 125-127 Inventory profile, 127 Inventory-based restrictions, 102 - 103Irregular shift scheduling, 156-157

Jamba Juice, 34–35 Jockeying, 180

Kaizen, 35, 215 Key performance indicators (KPIs), 233 KFC, 17 Kitchen United, 57

Labor hours, 146 Labor investment, 158 Labor productivity, 144-146 Labor scheduling effective planning of, 155 flexible schedule techniques, 156-157 FLSA. 155 labor investment, 158 lateral service, 157-158 managing scheduling challenges and real-time decision making, 158 scheduling, 155-156 Labor standards, 148–149 Labor strategies, 151

food and beverage labor strategies, 152-155 lodging labor strategies, 151-152 Lag capacity strategy, 181 La Quinta Motor Inns, 48 Lateral service, 157-158 Layout decisions, data requirements for, 49-52 Lead capacity strategy, 181 Leadership support, 223 Lean, 215-220 applying, 224-232 blending, 222 implementing, 223 manufacturing, 215 production, 215 toolbox, 224 tools, 215-220 Level capacity strategy, 74, 180–181 Lighting, 61 Little's Law, 52, 178 Location decisions, 46 location selection, 46-48 site selection. 48–49 Lodging labor strategies, 151–152 Long-term forecasting, 75 Low variable to fixed cost ratio, 86 Lysol, 66 Malcolm Baldrige National Quality Award, 239 Man-hours per occupied room (MHPOR), 151 Management by walking around (MBWA), 219 Management perception-service specification, 194 Manufacturing resource planning II systems (MRP II systems),

134 Markovian queueing models, 174, 176 Marriott International, 15, 27, 29, 39, 62, 66–67, 87–88, 151 Marriott's Global Cleanliness Council, 66–67 Mass services, 4 Match capacity strategy, 181 Material requirements planning system (MRP system), 133-134 Maximizing efficiency during peaks, 181-182 Maximum length of stay (MaxLOS), 103Mayo Clinic's Infection Prevention and Control team, 66 McDelivery, 17-18 McDonald's, 15, 17–18, 29, 126, 185 Mean absolute deviation (MAD), 83 Mean absolute percent error (MAPE), 83 Mean squared error (MSE), 83 Michelin Guide, 201 Medieval Times Dinner & Tournament, 26 Medium-term forecasting, 75 Midwest hotel, 165 Millennials, 55 Minimum length of stay (MinLOS), 102 - 103Minute per room (MPR), 148 Moments of truth, 28 Mood. 26-27 Moxy Hotels, 55 Multiple regression models, 78–79 21c Museum Hotels, 26 Mystery shopping, 199-200

N-period moving average, 80 Naive approach, 80 Near-field communication (NFC), 133 Net Promoter Score (NPS), 199 No-shows, 74 North American Association of Food Equipment Manufacturers (NAFEM), 53

Objectives of business, 50 Occupancy, 98 Offshoring, 120 Olive Garden, 29 On-call employee, 157 One Yield, 87 Online reputation management, 200 Online travel agencies (OTAs), 106 Open inventory, 102 OpenTable, 200 Operating supplies and equipment (OS&E), 31 Operations strategy, 13 for hospitality services, 13-16 Opportunity costs, 204 Ordering costs, 128 Organizing idea, 8 Overbooking, 74, 100-102 Overtime, 157 Pain points, 36 Panera Bread, 29 Pareto principle, 130 Pars, 126 Part-time employees, 156, 182 Payroll expenses, 145–146 Perception management, 180 Performance improvement, 202 Perishable inventory, 85 Personal protective equipment (PPE), 119 Personalization, 15 Physical environment, 31, 60 Physical ergonomics, 58 Physical inventory, 125 Plan, Do, Check, Act cycle (PDCA cycle), 222, 237-238 Planning for expansion, 59-60 Point-of-sale systems (POS systems), 88, 155 Poisson process, 173, 175 Prevention costs, 204 Price, 15 Pricing, 184 Prioritization matrix, 231 Process flow analysis, 55-57 diagram, 36 Process mapping, 215-216 Process-oriented layout, 56

Procurement, 120–122 Product, process, people, physical evidence, place, promotion, and price (Seven Ps), 25-34 Product sold in advance, 86 Product-oriented layout, 55 Productivity, 144-145 standards, 147-148 Professional services, 4 Project charter, 220 Project management, 235(see also Inventory management) five processes, 235-236 project formation, 237-238 unique aspects of projects, 237 Promoters, 199 Promotion, 184 Property management system (PMS), 96-97, 155 Proprietary reviews, 200-201 Props, 31 Psychology of waiting, 179–180 Public goods and services, 48 Purchasing cost, 130

Quality, 15 control, 195 improvement, 195 management system, 195 Quality assurance alternative tools and methods, 200-201 auditing, inspecting, and mystery shopping, 199-200 customer engagement, 198-199 external accountability, 201 ideation and innovation, 202 internal accountability, 201 for management, 201 for measurement, 195 NPS, 199 performance improvement, 202 SERVQUAL, 196-197 surveying, 196 Quantity demanded, 50 Queue

discipline, 175 management, 180 moderating capacity, 180-183 moderating demand, 183-184 Oueueing fundamentals of queueing theory, 172 - 175mathematical models for, 175 - 178Queuing theory, 52 Quick-service restaurant (QSR), 53 Rack rate, 98 Radio-frequency identification (RFID), 65, 133 Rainforest Café, 27 Rate fences, 103 Rate parity, 107 Real-time decision making, 158 Regression models, 78–79 Relative location problem, 56 Relatively fixed supply, 85 Reliability, 193 Renaissance Hotels, 27 Reneging, 180 Rental equipment, 182 Reputation, 15 Request for proposal (RFP), 97 Reservations systems, 183–184 Reshoring, 120 Residence Inn, 27 Resolution of guest problems, 204-206 Resources, 223 Responsiveness, 193 Restaurants, 88 Return on investment (ROI), 158, 222 Revenue, 87 Revenue management (RM), 96 Revenue per available room night (RevPAR), 87 Revenue per available seat hour (RevPASH), 87, 152 Revenue per available seat mile (RevPASM), 87

Revenue per available time-based inventory unit (RevPATI), 97-98 Ritz London, The, 18 Ritz-Carlton Hotel Company, The, 7-8, 18, 27, 32, 157, 181, 199, 239 Root cause analysis (see Five Whys) Routing, 50 Royal Caribbean, 240 Sabre reservation system, 87 Safety, 15 stock, 120 Sample business analytics tools for forecasting, 83-84 Sample sizes, 221 SAS, 84 Scheduling, 155–156 (see also Labor scheduling) challenges, 158 systems, 183-184 work shifts, 182 Scorecard by Duetto, 83-84 SeaWorld, 186 Segmentation, 196 Segmented markets, 85 Self-service concept, 183 Sell-through, 103 Server utilization, 176 Servers, 174 Service availability, 5 matrix, 6 Service delivery, 4 matrix. 5 Service delivery-external communication, 195 system, 13-14 Service demand, 6 matrix, 7 Service environments. 202 additional workflow considerations, 57-60 ambience design, 60-62 data requirements for layout decisions, 49-52

facility layout, 53-57 location decisions, 46-49 Service experiences components of guest experiences, 24 - 34designing guest experiences, 34-36 modeling and visualizing guest experiences, 36-37 Service failures and recovery, 202 causes of guest problems, 202-203 consequences of guest problems, 203-204 resolution of guest problems, 204-206 Service nature, 4 matrix, 5 Service process, 3 matrix, 3-4 Service quality, 192 dimensions, 192-193 gap model, 193–195 Service standards, 146 attrition, 149-151 labor standards and staffing models, 148-149 productivity and economic standards, 147-148 service standard-service delivery, 194-195 Service(s), 3 agents, 174 blueprint, 36 capacity, 6 concept, 11-13 concepting, 8-9 dimensions, 3-6 encounters, 28 execution, 5 expectation-service perception, 195 factories. 3 information, 7-8 itself, 202 losers, 16 marketing mix, 25 mode, 5

object, 4 package, 6-8 problems, 202 product, 14 provided, 8-9 provider, 202 qualifier, 16 received, 9 recovery paradox, 205 result, 4 scheduling, 4–5 service-profit chain, 9-11 setting, 5, 14 shops, 4 winner. 16 Servicescape, 31 SERVOUAL, 196-197 Sheraton Hotels & Resorts, 29–30 Sharing capacity, 183 Short-term forecasting, 75 Simple linear regression models, 78 Site selection, 47–49 Six Flags Entertainment Corporation, 33, 183 Six Sigma, 220-222 applying, 224-232 blending, 222 implementing, 223 toolbox, 224 Smoothing constant, 82 Social media, 200 Soft costs, 204 Sort, set-in-order, shine, standardize, sustain (five Ss), 215 Sourcing, 120 procurement and, 120–122 suppliers management, 124-125 suppliers selection, 122-124 Space, 50 optimization, 96-98 Space allocation strategies, 53–55 Space inventory inventory-based restrictions, 102-103 management and principles of, 102

principles of distribution channels management, 106-108 strategic capacity inventory with displacement analysis, 104-106 strategic pricing, 103-104 Spatial layout, 49 Spatial program, 51 Speed, 15-16 Spirit Airlines, 16 Split shifts, 156 Staff organization effective planning of labor scheduling, 155-158 labor productivity, 144–146 labor strategies, 151-155 service standards, 146-151 Staffing models, 148–149 Standard deviations, 220 Standard operating procedures (SOPs), 214 Starbucks Coffee Company, 9, 183-184, 202 Starbucks' Mobile Order & Pay program, 183–184 STARR Restaurants, 88 Statistical process control (SPC), 222-223 Statistically significant findings, 226 Statler Hotels, 46 Stay-through (see Sell-through) Stimulus-organism-response paradigm (SOR paradigm), 61 Stop-sell, 103 Strategic capacity inventory with displacement analysis, 104-106 Strategic pricing, 103–104 Strategic service vision, 11 elements, 11-13 St. Regis Hotels & Resorts, 8 Subjective models, 76–77 Substitute service recovery, 206 Supplier

assessment, 123 management, 124-125 selection, 122-124 Suppliers, Inputs, Processes, Outputs, Customers diagram (SIPOC diagram), 221 Supply, 73 shocks, 125 Supply chain resilience, 120 risk, 119-120 Supply chain management (SCM), 118(see also Yield management) hospitality supply chain management, 118-120 inventory management, 125-135 sourcing, 120-125 Supporting facilities, 7 Supporting services, 50 Surveying, 196 Sustainability, 123 Systematic layout planning process, 50 Systematic response, 205 Tangibles, 193 Target market segment, 11 Terminal experience, 196 Test for conformity, 228 Test of proportions, 227 THE FLASH Pass, 33, 183 Theming, 27 Three-sigma rule(*see*Empirical rule) Throughput rate, 28 Throughput time, 28 Time series models, 79-83 Timing, 51 Top-down method, 75 Total annual inventory cost, 130 Total production system (TPS), 215 Total quality management (TQM), 214-215 Total relative cost, 127 Touchpoints, 28 Toyota, 215

Training, 223 Travelport, 87 TripAdvisor, 15, 200

Uber, 7–8, 18, 57, 183 UberEats, 18, 57 UberPool, 183 Unbundling, 33 Unconstrained demand, 103 Union Square Café, 40 Union Square Hospitality Group, 88 Universal Orlando Resort, 31 Unrestricted demand, 104 Upstream flows, 118 Urban development, 48 U.S Bureau of Labor Statistics (BLS), 144 Utilization, 171

Variable labor hours, 146 Variable payroll costs, 146 Variation, 228 Virtual queueing, 183 Visual management tools, 216–218 Voice of the business (VoB), 192 Voice of the customer (VoC), 192, 226 Voice of the employee (VoE), 192 Voice of the process (VoP), 192 Vrbo, 39

Walt Disney World Resort, 16, 26, 31 Wash, 99 Weekly schedules, 156 Weighted moving average, 80–81 Weighting models, 123 Wolfgang Puck Restaurants, 88 Work in progress (WIP), 125 Worldbuilding, 31

Yelp, 200 Yield management, 85 applications, 87–88 basic yield management math, 86–87 benefits, 87 YOTEL, 29, 55