



Table of Contents

PART I Introduction

| | |
|---|----------|
| I Introduction to Oracle Manufacturing and Supply Chain Products | 3 |
| Enterprise Business Flows | 4 |
| Identification/Creation of Demand | 4 |
| Communication of Design Requirements | 5 |
| Communication of Demand | 5 |
| Materials and Services | 5 |
| Money | 5 |
| Oracle E-Business Suite | 5 |
| Oracle Customer Relationship Management (CRM) | 6 |
| Oracle Manufacturing and Supply Chain Management | 6 |
| Oracle Financials | 6 |
| Inter-Enterprise Collaboration | 7 |
| Manufacturing Processes | 8 |
| Discrete Manufacturing | 8 |
| Repetitive Manufacturing | 8 |
| Flow Manufacturing | 9 |
| Supply Chain Stocking Strategies | 9 |
| Engineer-To-Order (ETO) | 9 |
| Make-To-Order (MTO) | 10 |
| Assemble-To-Order (ATO) | 10 |
| Pick-To-Order (PTO) | 11 |
| Make-To-Stock (MTS) | 11 |
| Choosing a Strategy | 11 |
| Overview of Oracle Manufacturing Products | 11 |
| Oracle Inventory | 12 |
| Oracle Bills of Material | 13 |
| Oracle Engineering | 14 |
| Oracle Work in Process (WIP) | 15 |
| Oracle Manufacturing Scheduling | 16 |
| Oracle Flow Manufacturing | 16 |
| Oracle Cost Management | 17 |
| Oracle Quality Management | 18 |

| | |
|--|-----------|
| Overview of Supply Chain Products | 18 |
| Manufacturing and Supply Chain Planning | 19 |
| Supply Chain Execution | 20 |
| Oracle Demand Planning | 20 |
| Oracle Master Scheduling/MRP | 21 |
| Oracle Advanced Supply Chain Planning | 21 |
| Order Management | 22 |
| Oracle Pricing | 22 |
| Oracle Release Management | 23 |
| Oracle Shipping | 24 |
| Oracle Warehouse Management | 24 |
| Oracle Purchasing | 25 |
| Oracle Supplier Scheduling | 25 |
| PART II | |
| Design and Manufacturing Engineering | |
| 2 Enterprise Structure | 29 |
| Enterprise Structure Components | 30 |
| Global Enterprise | 30 |
| Enterprise Structure Modeling in Oracle Applications | 30 |
| Multi-Org | 34 |
| Organization | 35 |
| Corporate Structure | 36 |
| Security Group | 36 |
| Business Group (BG) | 37 |
| Set of Books | 37 |
| Legal Entity | 37 |
| Cross Organization Reporting | 38 |
| Operations Structure | 38 |
| Operating Unit | 38 |
| Customer | 38 |
| Supplier | 39 |
| Supply Chain Structure | 39 |
| Inventory Organization | 39 |
| Distribution Center | 45 |
| Manufacturing Plant | 46 |
| Shipping Networks | 47 |
| Organization Structure | 47 |
| Subinventory | 48 |
| Stock Locator | 52 |
| Assigning Staging Lanes to Dock Doors | 57 |
| Summary | 58 |
| 3 Managing Items | 59 |
| Product Lifecycle Management | 60 |
| Items | 62 |
| Item Master Organization | 62 |
| Master Items Versus Organization Items | 62 |

| | |
|---|-----------|
| Defining an Item | 62 |
| Item Templates | 64 |
| Item Attributes | 65 |
| Item Attribute Controls | 65 |
| Status Attributes | 66 |
| Item-Defining Attributes | 66 |
| Attribute Groups | 67 |
| Item Relationships and Cross-References | 69 |
| Item Revisions | 70 |
| Categorizing Items | 70 |
| Category Codes and Category Sets | 70 |
| Category Set Assignment | 72 |
| Default Category Sets | 73 |
| Item Catalogs | 74 |
| Item Deletion | 76 |
| Items Open Interface | 76 |
| Item | 76 |
| Customer Item | 77 |
| Summary | 77 |
| 4 Managing Bills and Routings | 79 |
| Materials | 81 |
| Bill of Material Setup | 81 |
| Bill of Material Types | 82 |
| Phantom Subassemblies | 83 |
| Defining a Bill of Material | 83 |
| Copying Bills | 87 |
| Sharing Bills | 88 |
| Checking for Bill Loops | 88 |
| Mass Changing Bills of Material | 88 |
| The Entire Structure | 89 |
| Bill Compare | 90 |
| Deleting Bills | 91 |
| Product Families | 91 |
| Co-Products | 93 |
| BOM Business Object | 93 |
| Time | 96 |
| Workday Calendar | 96 |
| Manpower and Machines | 99 |
| Resources | 100 |
| Departments | 104 |
| Method | 108 |
| Routing | 108 |
| Flow Routing | 113 |
| Network Routings | 115 |
| Logical Data Model of Manpower, Machines, and Methods | 116 |
| Routing Business Object | 118 |
| Summary | 120 |

| | |
|--|------------|
| 5 Design Engineering | 121 |
| Developing Prototypes | 122 |
| Engineering Items | 122 |
| Engineering Bills and Routings | 123 |
| Accessing Engineering Information | 123 |
| Transferring to Manufacturing | 123 |
| Engineering Change Orders | 126 |
| ECO Setup | 127 |
| Defining ECOs | 130 |
| ECO Approval | 131 |
| Accessing ECOs | 135 |
| Rescheduling ECOs | 136 |
| Implementing ECOs | 137 |
| Canceling ECOs | 137 |
| Using ECOs for Mass Changes | 138 |
| Use-up ECOs | 138 |
| ECO Business Object API | 139 |
| Summary | 143 |
| 6 Assemble to Order and Pick to Order | 145 |
| Configure To Order Environment | 146 |
| Market Orientation versus Stocking Strategies | 146 |
| ATO/PTO Scenarios | 146 |
| The ATO/PTO Business Process | 148 |
| Setup for ATO/PTO | 148 |
| Ongoing Activities | 158 |
| Forecasting and Master Scheduling ATO Models/Items | 158 |
| Enter Sales Order | 159 |
| Select Options | 159 |
| Managing the Configuration Item | 160 |
| Manufacturing | 165 |
| Pick Releasing and Confirming Shipments | 166 |
| Invoicing | 167 |
| The Oracle Configurator | 167 |
| Summary | 168 |
| 7 Manufacturing Engineering | 169 |
| Process Layout | 170 |
| Product Layout | 170 |
| Line Layout | 171 |
| Final Assembly Line | 171 |
| Feeder Lines | 171 |
| Product Synchronization | 171 |
| Line Design Process and Factors | 171 |
| Designed Daily Rate | 173 |
| Flow Rate | 173 |
| Takt Time | 174 |
| Number of Line Operations | 174 |
| Operation Times | 175 |

| | |
|---|-----|
| Total Product Cycle Time | 176 |
| Line Output Levels | 178 |
| Designing Lines | 183 |
| Defining Flow Lines | 183 |
| Graphical Line Designer | 185 |
| Mixed Model Map | 187 |
| Operational Method Sheets | 191 |
| Building Quality into the Process | 192 |
| Pre-Operation Inspection | 192 |
| Control Charts | 192 |
| Quick Changeover | 192 |
| Line Performance | 193 |
| Line Flow Rate | 193 |
| Line Linearity | 193 |
| Summary | 195 |

PART III

Supply Chain Planning

| | |
|---|------------|
| 8 Planning Fundamentals | 199 |
| Basic Planning Logic | 200 |
| Recognition of Demand | 200 |
| Gross to Net Calculation | 202 |
| Recommendations | 203 |
| Bill of Material Explosion | 203 |
| Planning Cycles | 203 |
| Forecasting | 204 |
| Forecast Terminology and Structure | 205 |
| Generating Forecasts from Historical Information | 207 |
| Open Forecast Interface | 209 |
| Forecast Entries API | 210 |
| Forecast Consumption | 210 |
| Aggregate Forecasts | 215 |
| Forecast Explosion | 216 |
| Master Scheduling | 216 |
| Master Demand Schedules and Master Production Schedules | 217 |
| Master Schedule Load | 218 |
| Open Master Schedule Interface | 219 |
| Reviewing the Master Schedule | 220 |
| Schedule Relief | 221 |
| Two-Level Master Scheduling | 221 |
| Capacity Planning | 223 |
| Planning for Engineering Changes | 227 |
| Effectivity Dates | 227 |
| Engineering Change Orders (ECOs) | 227 |
| Schedule Date Changes | 228 |
| Discrete versus Repetitive Planning Logic | 228 |
| Repetitive Production Concepts | 229 |
| Repetitive Planning Logic | 230 |

| | |
|---|------------|
| Repetitive Schedule Allocation | 234 |
| Repetitive Schedule Implementation | 234 |
| Configuring Repetitive Planning | 235 |
| Kanban Planning | 235 |
| Kanban Setup | 235 |
| Kanban Calculations | 237 |
| Generating and Implementing Kanban Plans | 238 |
| Planning Parameters and Profiles | 239 |
| Planning Parameters | 239 |
| MRP Profiles | 240 |
| Item and BOM Attributes | 240 |
| Planning Manager | 247 |
| Summary | 247 |
| 9 Demand Planning | 249 |
| Demand Planning Overview | 250 |
| What Demand Planning Does | 251 |
| Demand Planning User Interface | 251 |
| Demand Planning Technology | 252 |
| Demand Planning Terminology | 252 |
| Understanding the Demand Planning Environment | 253 |
| Understanding Demand Planning Roles | 254 |
| Demand Planning Integration Administrator | 254 |
| Planning Administrator | 254 |
| Planner | 254 |
| Planning Manager | 254 |
| Configuring Oracle Demand Planning | 254 |
| Demand Planning Dimensions | 255 |
| Demand Planning Hierarchies | 255 |
| Demand Planning Levels | 255 |
| Demand Planning Hierarchy Levels | 255 |
| Defining Events | 256 |
| Defining Introductions | 257 |
| Defining the Instances and Organizations to Be Collected from | 257 |
| Defining Demand Plans | 257 |
| Defining Demand Plan Headers | 258 |
| Demand Planning Administrator Functions | 261 |
| Setting Up Oracle Express System Parameters | 261 |
| Managing Predefined Reports | 261 |
| Managing Demand Plan Assignments | 262 |
| Setting Scenario Properties | 263 |
| Tracking the Progress of a Demand Plan | 265 |
| Understanding the Demand Planning Cycle | 265 |
| Understanding Where the Source Data Comes from | 266 |
| Running Collections | 267 |
| Pulling Information from the Planning Server | 267 |
| Reviewing Baseline Forecasts | 268 |
| Adjusting Forecasts | 268 |
| Submitting Forecasts | 270 |

| | |
|---|------------|
| Reviewing Aggregate Forecasts | 270 |
| Publishing Forecasts to the Source Instance | 270 |
| Getting Feedback | 270 |
| Summary | 273 |
| 10 Single Organization Planning | 275 |
| Types of Plans | 276 |
| Defining Plan Names | 277 |
| Plan Options | 278 |
| Generating the MRP Plan | 281 |
| Controlling Plan Generation | 281 |
| Reviewing the MRP Plan | 282 |
| Planner Workbench | 282 |
| Planning Information | 283 |
| Reviewing Planning Exceptions | 283 |
| Supply and Demand | 284 |
| Pegged Supply and Demand | 285 |
| Implementing Planning Recommendations | 286 |
| The Horizontal Material Plan | 288 |
| Item Information | 288 |
| Walking Up and Down a Bill of Material | 288 |
| The Enterprise View | 290 |
| Capacity Planning | 290 |
| Resource and Capacity Information | 291 |
| Simulations | 292 |
| Copying a Plan | 293 |
| Simulation Scenarios | 294 |
| Simulation Modes | 294 |
| Comparing Simulated Scenarios | 296 |
| Technical Overview of the Planning Process | 296 |
| Memory-based Snapshot | 297 |
| Memory-based Planner | 297 |
| Inter-Process Communication | 298 |
| Concurrent Manager Requirements | 298 |
| Summary | 299 |
| 11 Advanced Supply Chain Planning | 301 |
| What's Different? | 302 |
| Multiorganization Planning | 302 |
| Constraints | 303 |
| Optimization | 303 |
| Holistic Planning | 303 |
| Plan Types | 304 |
| Integrated Performance Management | 304 |
| Architecture | 305 |
| Modeling the Supply Chain | 306 |
| Multiple Organization Model | 306 |
| Multiple Sourcing Options | 306 |
| Assignment Hierarchy | 310 |

| | |
|--|-----|
| Sourcing and Assignment APIs | 314 |
| Global SCP and Subset Planning | 314 |
| Master Scheduling the Supply Chain | 314 |
| Constraint-based Planning | 314 |
| Enabling Constraint-based Planning | 315 |
| Types of Constraints | 315 |
| Modeling Supplier Capacity | 318 |
| Optimized Planning | 318 |
| Optimization Objectives | 319 |
| ASCP Setup | 321 |
| Create Planning Flexfields | 321 |
| Defining Instances | 322 |
| Demand Priority Rules | 322 |
| Defining the Plan | 322 |
| Data Collection | 325 |
| Types of Collection | 326 |
| Running Collections | 326 |
| Running the Plan | 328 |
| The ASCP Planner Workbench | 328 |
| Left Pane (Navigator) | 328 |
| Right Pane | 329 |
| Additional Views | 334 |
| Display Preferences | 337 |
| Typical Scenarios | 337 |
| Simulations | 339 |
| Simulation Scenarios | 339 |
| Simulation Modes | 339 |
| Comparing Simulated Scenarios | 340 |
| Performance Management | 341 |
| Key Performance Indicators | 341 |
| Exception Messages | 341 |
| Summary | 342 |

PART IV

Supply Chain Execution

| | |
|---|------------|
| 12 Order Management | 347 |
| Basic Order Flows | 348 |
| Setting Up an Efficient Order Desk | 348 |
| Defining the Items You Sell | 348 |
| Defining the Customers You Sell To | 357 |
| Deciding How to Process Outbound Orders | 360 |
| Setting Up Standard Content for Order Documents | 370 |
| Release Management Setup | 372 |
| Freight and Special Charges | 374 |
| Taxation | 374 |
| Enforcing Credit Policies | 376 |
| Compensating Your Salesforce | 378 |

| | |
|---|------------|
| Creating a Global Picture of Availability | 378 |
| Global Order Promising | 378 |
| Order Promising Terminology | 380 |
| Configuring Sources of Supply and Demand | 380 |
| Setting Profile Options | 382 |
| Entering and Managing Orders | 382 |
| Using the Order Organizer | 382 |
| Entering Sales Orders | 383 |
| Managing Availability and Delivery Commitments | 396 |
| Acknowledging Customers | 401 |
| Making Updates to Large Numbers of Orders and Lines | 401 |
| Invoicing Orders | 401 |
| Processing Returns and Requests for Credit | 402 |
| Special Order Flows | 404 |
| Summary | 409 |
| I3 Procurement Management | 411 |
| Solutions for Requisitioners | 412 |
| Internet Requisitions | 412 |
| Setting Your Profile | 416 |
| Administering Catalogs | 416 |
| Forms-based Requisitions | 418 |
| Strategic Sourcing and Supply-based Management | 425 |
| Supplier Lists | 425 |
| Requests for Quotations | 427 |
| Quotations | 428 |
| Sourcing | 429 |
| AutoCreate | 435 |
| Finding Requisitions in the Requisition Pool | 436 |
| Adding Lines to Target Documents | 436 |
| Purchase Orders | 437 |
| Major Purchase Order Features | 439 |
| Finding Purchase Orders with Purchase Order Summary | 441 |
| Entering Search Criteria | 441 |
| Viewing Search Results | 441 |
| Entering and Maintaining Purchase Orders | 442 |
| Purchase Order Header Information | 442 |
| Purchase Order Line Information | 444 |
| Price Breaks | 445 |
| Shipments | 445 |
| Distributions | 446 |
| Supplier Scheduling | 447 |
| Defining Bucket Patterns | 447 |
| Defining Schedule Options | 447 |
| Creating the Schedule | 449 |
| Managing Cumulative Quantities | 451 |
| Communicating the Schedule to Suppliers | 452 |

| | |
|--|------------|
| Internet Supplier Portal | 453 |
| Supply-based Management | 453 |
| Purchasing | 453 |
| Receiving | 453 |
| Invoices | 454 |
| Configuring Oracle Purchasing | 454 |
| Locations | 454 |
| Buyers | 454 |
| Approval Groups and Their Assignments | 454 |
| Adding Notes to Purchasing Documents | 455 |
| Purchasing Options | 456 |
| Requisition Templates | 458 |
| Document Types | 459 |
| Line Types | 459 |
| Periods | 459 |
| Purchasing Workflows | 460 |
| Important Item Attributes for Purchasing | 465 |
| Importing Requisitions | 465 |
| Submitting Requisition Import | 466 |
| Requisition Import Interface Table | 466 |
| Create Document Workflow Functions | 466 |
| Summary | 467 |
| 14 Receiving | 469 |
| Managing Inbound Shipments | 470 |
| Receipts | 471 |
| Finding Expected Receipts | 472 |
| Receipt Headers | 473 |
| Receipt Lines | 473 |
| Express Receiving | 475 |
| Unordered Receipts | 475 |
| Receiving Transactions | 476 |
| Finding Receipts to Transact | 476 |
| Inspecting Receipts | 476 |
| Delivery | 476 |
| Reviewing Receiving Transactions | 477 |
| Transaction Header Results | 477 |
| Transaction Line Results | 477 |
| Correcting Receiving Transactions | 477 |
| Returns to Vendor | 477 |
| Managing Shipments | 478 |
| Receiving Options | 478 |
| Summary | 479 |
| 15 Inventory and Warehouse Management | 481 |
| Units of Measure (UOM) | 483 |
| Material Transactions | 484 |
| Transaction Source Types | 484 |
| Transaction Actions | 484 |

| | |
|--|-----|
| Transaction Types | 484 |
| Transaction Reasons and Corrective Actions | 485 |
| Cost Groups | 485 |
| Material Status Control | 486 |
| Executing Transactions | 488 |
| Move Orders | 490 |
| Material Workbench | 492 |
| Movement Statistics | 492 |
| Managing Lots | 493 |
| Lot Attributes | 494 |
| Lot Splitting | 494 |
| Lot Merging | 494 |
| Lot Genealogy | 495 |
| Managing Serialized Items | 496 |
| Serial Attributes | 496 |
| Serial Genealogy | 497 |
| On-Hand Balances | 497 |
| The Quantity Tree | 498 |
| Reservations | 499 |
| Implementing Consigned Inventory | 500 |
| The Rules Framework | 500 |
| Business Objects | 500 |
| Rules | 501 |
| Strategies | 503 |
| Strategy Assignments | 505 |
| Strategy Search Order | 507 |
| Where Used Inquiries | 508 |
| Rules Logical Data Model | 509 |
| Applications of the Rules–Strategy–Business Object Framework | 509 |
| Applications of the Standalone Rules Framework | 509 |
| Inventory Accuracy | 512 |
| ABC Analysis | 512 |
| Cycle Counting | 515 |
| Physical Inventory | 518 |
| Inventory Planning | 519 |
| Min–Max Planning | 520 |
| Reorder Point Planning | 521 |
| Replenishment Counting | 522 |
| Replenishment Tasks | 523 |
| Data Field Identifiers in Barcode Scanning | 523 |
| Attribute-Level DFI | 523 |
| Region-Level DFI | 524 |
| The DFI String | 524 |
| Compliance Labeling | 524 |
| Container Management | 527 |
| License Plate Numbers | 529 |
| Cartonization | 531 |
| Container Transactions | 534 |

| | |
|--|------------|
| Task Management | 536 |
| Task Type Assignment Engine | 536 |
| Task Dispatching Engine | 538 |
| Warehouse Control Board | 538 |
| Receiving and Putaway | 539 |
| Creating Receipts | 540 |
| Putaway | 541 |
| Implementing Opportunistic Cross-Docking | 542 |
| The Order Fulfillment Process | 543 |
| Dock Scheduling | 543 |
| Pick Methodologies | 543 |
| Wave Picking | 546 |
| Pick Execution | 548 |
| Loading the Vehicle from the Staging Lane | 550 |
| Currently Loaded Tasks | 551 |
| Kanban Materials Management | 551 |
| Pull Sequences | 553 |
| Kanban Planning | 556 |
| Graphical Kanban Workbench | 560 |
| Kanban Execution | 561 |
| Open Interfaces and Application Programming Interfaces | 564 |
| Summary | 566 |
| 16 Manufacturing Execution | 569 |
| Overview | 570 |
| Information Flow | 570 |
| Material Requirements | 572 |
| Scheduling | 573 |
| Production Methods | 576 |
| Configuring Oracle Work in Process | 577 |
| WIP Parameters | 578 |
| WIP Accounting Classes | 580 |
| Shop Floor Statuses | 580 |
| Labor Rates | 581 |
| Profile Options | 581 |
| Defining Jobs and Production Schedules | 582 |
| Discrete | 582 |
| Repetitive | 588 |
| Flow Manufacturing | 590 |
| Assemble to Order | 594 |
| Configure to Order (CTO) | 595 |
| Work Order Interface | 596 |
| Material Control | 596 |
| Material Requirements | 596 |
| Component Issues and Returns | 598 |
| Backflushing | 599 |
| By-Product Recovery | 601 |
| Phantom Assemblies | 601 |
| Open Transaction Interface | 602 |

| | |
|---|------------|
| Shop Floor Control | 602 |
| Dispatch Reports and Job Paperwork | 602 |
| Move Transactions | 603 |
| Discrete Workstation | 605 |
| Open Move Transaction Interface | 607 |
| Using Shop Floor Statuses | 608 |
| Outside Processing | 609 |
| Rework Production | 612 |
| Assembly Scrap | 615 |
| Manufacturing Scheduling | 615 |
| Configuring Oracle Manufacturing Scheduling | 615 |
| Execution Options | 617 |
| Scheduler Workbench | 618 |
| Resource Management | 621 |
| Auto-Charging Resources | 621 |
| Resource Transactions | 622 |
| Open Resource Transaction Interface | 624 |
| Outside Processing Charges | 625 |
| Oracle Shop Floor Management System | 625 |
| Configuring OSFM | 626 |
| Lot Transactions | 628 |
| Completions | 631 |
| Completing Discrete Jobs | 632 |
| Completing Repetitive Schedules | 633 |
| Work Order-less Completions | 634 |
| Closing and Purging Jobs and Schedules | 638 |
| Closing Discrete Jobs | 638 |
| Purging Jobs and Schedules | 639 |
| WIP Costing | 640 |
| Standard Costing in WIP | 640 |
| Average Costing in WIP | 641 |
| Flow Manufacturing Costing | 642 |
| OSFM Costing | 643 |
| Cost Transfers | 643 |
| Summary | 643 |
| 17 Outbound Logistics | 645 |
| Oracle Shipping Overview | 646 |
| Terminology | 646 |
| Shipping Activities | 647 |
| Configuring Oracle Shipping | 649 |
| Shipping Parameters | 649 |
| Rules | 649 |
| Freight Information | 650 |
| Documents | 651 |
| Transportation Calendars | 652 |
| Shipping Exceptions | 653 |
| Containers and Item Relationships | 653 |

| | |
|--|-----|
| Pick Release | 654 |
| Online Pick Release | 654 |
| Concurrent Pick Release | 655 |
| Release Through the Shipping Transactions Form | 655 |
| Move Orders | 656 |
| Order Cancellations | 656 |
| Shipping Transactions | 656 |
| Query Manager | 656 |
| Data Manager | 659 |
| Shipping Entities | 660 |
| Shipping Actions | 664 |
| Summary | 670 |

PART V

Support Functions

| | |
|--|------------|
| 18 Costing | 673 |
| Setting Up Costing | 675 |
| Costing Organizations and Children Organizations | 676 |
| Item Attributes for Costing | 676 |
| Structure of Item Costs | 676 |
| Defining and Viewing Item Costs and Transaction Values | 684 |
| Defining Item Costs | 684 |
| Viewing Item Costs | 685 |
| Mass Editing Costing Information | 688 |
| Copying Costs | 688 |
| Accounting for Value Movements | 688 |
| Viewing Transaction Costs | 690 |
| Processing Costs | 691 |
| Costing Methods | 692 |
| Standard Costing | 692 |
| Average Costing | 701 |
| Cost Layering Methods | 708 |
| Periodic Costing | 711 |
| Period Close | 716 |
| Summary | 717 |
| 19 Quality Management | 719 |
| Collection Elements | 720 |
| Collection-Element Types | 720 |
| Defining Collection Elements | 721 |
| Collection-Element Values | 723 |
| Collection-Element Specification Limits | 724 |
| Quality Actions | 724 |
| Collection-Element Actions | 727 |
| Collection-Element Alert Actions | 729 |
| Launch a Workflow Action | 730 |
| Associating Output Variables with Actions | 730 |

| | |
|--|------------|
| Specifications | 732 |
| Specification Types | 732 |
| Defining Specifications | 732 |
| Collection Plans | 734 |
| Collection-Plan Elements | 735 |
| User-Defined Formulas Using Assign a Value Actions | 735 |
| Associating Collection Plans with Transactions | 736 |
| Collecting Data | 737 |
| Direct Data Collection | 738 |
| Data Collection During Transactions | 738 |
| Collection Import | 738 |
| Mobile Quality Applications | 739 |
| Analysis Tools | 739 |
| Copying Settings | 739 |
| Pareto Charts | 740 |
| Histograms | 742 |
| Trend Charts | 743 |
| Control Charts | 745 |
| Descriptive Statistics | 749 |
| Statistical Process Control (SPC) | 749 |
| Process Capability Studies | 750 |
| Cp | 750 |
| Cpk | 751 |
| Conducting a Process Capability Study | 752 |
| Summary | 753 |
| 20 Pricing | 755 |
| Defining Price Lists | 757 |
| Price List Lines | 757 |
| Administering Price Lists | 758 |
| Price Qualifiers—Setting Up Rules of Eligibility | 759 |
| Qualifier Groups | 760 |
| Modifiers | 760 |
| Modifier Summary Information | 762 |
| Combining Discounts | 763 |
| Defining the Subject of the Modifier | 765 |
| Discount and Charges | 766 |
| Defining Other Types of Discounts and Sales Incentives | 767 |
| Formula-based Pricing | 769 |
| Agreements | 770 |
| Overview of the Pricing Flow | 770 |
| Extending Oracle Pricing | 772 |
| Setting Up Qualifiers | 773 |
| Setting Up New Pricing Attributes | 773 |
| Defaulting Rules in Pricing | 774 |
| Brief Technical Overview | 774 |
| Specification of the Calculate Price API | 775 |
| Main Tables | 776 |
| Summary | 776 |

PART VI
Business Intelligence

| | | |
|-----------|---|------------|
| 21 | Business Intelligence for Manufacturing and Supply Chain | 779 |
| | Business Intelligence Technologies | 780 |
| | Personal Home Page and Oracle Portal | 780 |
| | Balanced Scorecard | 782 |
| | Activity-based Costing and Management | 783 |
| | Performance Management Framework (PMF) | 783 |
| | Performance Management Viewer (PMV) | 784 |
| | Discoverer Worksheets and End User Layer (EUL) | 784 |
| | Business Views and View Generator | 785 |
| | Enterprise Data Warehouse | 786 |
| | Business Intelligence Applications | 787 |
| | Supply Chain Intelligence | 787 |
| | Manufacturing Intelligence | 790 |
| | Purchasing Intelligence | 793 |
| | Summary | 798 |
| 22 | Case Study: Neptune Corporation | 799 |
| | Design and Manufacturing Engineering | 800 |
| | Enterprise Structure | 800 |
| | Managing Items, Bills, and Routings | 801 |
| | Design Engineering | 804 |
| | Assemble-to-Order and Pick-to-Order Products | 805 |
| | Manufacturing Engineering | 805 |
| | Supply Chain Planning | 807 |
| | Demand Planning | 807 |
| | Advanced Supply Chain Planning | 808 |
| | Supply Chain Execution | 810 |
| | Order Management | 810 |
| | Supply Base and Procurement Management | 811 |
| | Inbound Logistics | 812 |
| | Inventory and Warehouse Management | 814 |
| | Manufacturing Execution | 816 |
| | Outbound Logistics | 817 |
| | Support Functions | 817 |
| | Cost Management | 818 |
| | Quality Management | 819 |
| | Pricing | 819 |
| | Business Intelligence | 820 |
| | Summary | 820 |
| | Index | 823 |