- Oracle Order Management
- Oracle Advanced Planning & Scheduling
Supply Chain
E-Business *Today*

- **Customers**
- **Orders**
- **Web Store**
- **CLERKS**
- **ERP Applications**
- **Suppliers & Partners**
- **Fax**
E-Business *Tomorrow*

- **Portal**
- **Web Store**
- **Direct/Tele Sales**
- **Customer Service**
- **Self-Service Applications**
- **Enterprise Applications**
- **Business Intelligence Systems**
- **Service Providers**
- **Suppliers & Partners**

**Customers**

**Employees**
The Internet *Changes*
The Supply Chain

- Not Just A Technology Change
- A New Way Of Doing Business
Internet Technology Redefines Supply Chain Integration

**Traditional Model:**
- One tier
- 
- 

**Networked Model:**
- N-tier
- 
-
More Efficient Supply Chains

*From Vertical Integration ...*

Suppliers → Manufacturer → Distributor → Retailer → Consumers

*... To Internet-Driven Virtual Enterprise*

Suppliers → MFG Partner → Logistics Partner → Virtual Manufacturer → Internet → Consumers
Global Supply Chain

SCM  Internet  Value Chain

III - "Chain"  IV - "Chain"

I - "Chain"

II - "Chain"

- 90%  
- Internet

- "Chain"

- "Chain"

- "Chain"

- "Chain"

- "Chain"

- "Chain"

- "Chain"

- "Chain"

- "Chain"
Internet Supply Chain Architecture

Architecture needs to be based on ...

<table>
<thead>
<tr>
<th>Web Deployment</th>
<th>No Installation Costs</th>
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<tbody>
<tr>
<td>Self Service</td>
<td>No Training Costs</td>
</tr>
<tr>
<td>Workflow</td>
<td>Cross Enterprise Processes</td>
</tr>
<tr>
<td>Business Intelligence</td>
<td>Performance Measurement</td>
</tr>
</tbody>
</table>
What is ERP package

- Process Obstacles
  - People
  - Technology
  - Culture
  - Policies & Regulations

- Process Enablers
  - People
  - Technology
  - Culture
  - Policies & Regulations

Wall of Changes

- FINANCE
- HUMAN RESOURCES
- PRODUCT FULFILLMENT
- CUSTOMER VALUE MANAGEMENT

Resourse Flow
ERP’s coverage is expanding
How the internet changes ERP

- Local → Global
- Internal Focus → Customers, Suppliers
- Administrative → Self-Service
- Transactions → Business Intelligence
SCM Flow & Oracle SCM Products
Oracle SCM Overview

e-Business, SCM, (Virtualization), (Demand Chain), (Supply Chain), (Integration), (Collaboration), (Synchronization), (Digitalization), Self Service, e-Business, SCM.
Oracle SCM Flow
SCM Solution
Order Management
Current Business Trends

- Customer
- Demand Type
- Business Flow
- Partner

Many first-time
- Pull
  - Seasonal,
  - Multi-Directional
  - ex.EA
- Global
  - Full Supply Chain

Push
- One Direction
  - ex.Pallet
- Regional

Customer
- Demand Type
- Business Flow
- Partner

One Direction
- ex.Pallet
- Regional

Full Supply Chain
Oracle Order Management
- Product Family

- Products Family
- Advanced Configuration
- Global ATP
- e-Commerce Gateway
- e-Business needs
Oracle Order Management - New Architecture

Order Management Engine

- Sales Order Workbench
- Industry-specific faces
- iStore
- Telesales
- Field Sales
- Service
- Internet, Workflow, Objects
- Tailored Order Forms
- Shipment Planning
- Advanced Configurator
- Reservations
- Adv. Pricing & Deals
- Credit Card Payments
- Global ATP/CTP
- Electronic Demand Mgmt
- Self Service Tracking
- Warehouse
- Carriers
- Credit Agencies
- High Volume EDI/XML

Oracle
Oracle Order Management
- Business Flows

Buyer/Seller  ERP Data  e-HUB

Information on:
- Customers
- Vendors
- Orders: PO & SO
- Shipments
- AP Payments

Information on:
- Customers
- Vendors
- Orders: PO & SO
- Shipments
- AR Payments

e-HUB

- Products
- Requested Dates
- Delivery Dates
- Payment Terms
- Prices
- Freight Terms
- Quantity/UOM
- Ship To/Bill To
- Metrics
- SOs/POs
- Billing/Payment Info
- POD/Shipments T&T

Buyer

Seller
Planning System Phase

Planning Evolution

1970’s
• 
• 

1980’s
• 
• 

1990’s
• 
• 
• 

2000’s
• 
• Planning
• Planning and Execution
• ROI
Oracle APS - Major Component

Demand Planning

Internet
Scenario

Global ATP Server

Global Order Promising
ATP / CTP / CTD check

Advanced Supply Chain Planning

(Holistic Planning)
Planning
(KPI)

Manufacturing Scheduling

Global ATP Server

Manufacturing Scheduling

Oracle APS - Major Component
Oracle APS
- Oracle Demand Planning

- Exponential Smoothing - Holt-Winters
- Seasonal Adjustment - Trend Lines
- Intermittent Demand
- Automatic Outlier Detection and Filtering

- Statistical Selection From Hundreds of Models
- Knowledge Base of Exception Rules
Oracle APS
- Oracle Demand Planning

- Top Down
- Bottom Up
- Middle-Out
- Locking

- Units of Measure
  - Currency, Units, etc.
Oracle APS
- Oracle Demand Planning

- Multiple Units of Measure
- Multiple Forecast Scenarios
- Sales Forecast
- Marketing Forecast
- Management Forecast
- Budget
- Unconstrained
- Constrained
- Consolidation and Adjustment
- Top Down
- Bottom Up
- Middle-Out
- Locking

<table>
<thead>
<tr>
<th>Channel</th>
<th>Product</th>
<th>Geography</th>
<th>Units, Half-Winners</th>
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</thead>
<tbody>
<tr>
<td>Channel</td>
<td>Product</td>
<td>Geography</td>
<td>Units, Half-Winners</td>
</tr>
</tbody>
</table>

Multiple forecast scenarios:
- Unconstrained
- Constrained

Consolidation and adjustment methods:
- Top-down
- Bottom-up
- Middle-out

Oracle APS - Oracle Demand Planning

Oracle APS - Multiple Units of Measure

Oracle APS - Multiple Forecast Scenarios

Oracle APS - Sales Forecast

Oracle APS - Marketing Forecast

Oracle APS - Management Forecast

Oracle APS - Budget

Oracle APS - Unconstrained

Oracle APS - Constrained

Oracle APS - Consolidation and Adjustment

Oracle APS - Top Down

Oracle APS - Bottom Up

Oracle APS - Middle-Out

Oracle APS - Locking
Oracle APS
- Oracle Global ATP Server

- Turbo Charged Existing ATP
- Global ATP/CTP/CTD
  - Multi-Level Supply Chain
  - ATP / CTP / CTD
  - Supplier Capacity Constraints
- Distributed ATP Server
  - Consolidated Supply and Demand
  - Access From Multiple Order Entry Systems
Oracle APS
- Oracle Advanced Supply Chain Planning

*Only Enterprise Applications solution to offer...*

- [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] Planning [ ] [ ]
- [ ] [ ] [ ] [ ] [ ] (KPI) [ ] [ ]
- [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
- [ ] [ ] [ ] [ ] [ ] Planning Server
- [ ] [ ] [ ] [ ] Internet [ ] [ ] Collaborative [ ] [ ]
Oracle APS
- Oracle Advanced Supply Chain Planning

Oracle ASCP - Oracle Advanced Supply Chain Planning
Supply Chain Network - Supplier, Multi-Manufacturer, Logistics Partner, Customer

PLAN - (Location), (Time horizons), (Manufacturing method), Material and Resource

DATA COLLECTION

Holistic Planning and Scheduling

All Supply chain Location

All Time horizons
- short term, mid-term, long range planning

All MFG Methods
- (Discrete, Repetitive, Project, Flow, Process Manufacturing)

All Material / Resource
- Supplier Planning
Graphical Supply Chain
```
<table>
<thead>
<tr>
<th>Category</th>
<th>M1</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>M25</th>
<th>M24</th>
<th>M28</th>
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</tbody>
</table>

Graph showing trends over Group 0 to Group 5 over different weeks.
Objectives of KPI (Defaults)
1. On Time Delivery
2. Inventory Turns
3. Margin Percentage

Oracle APS : Integrated Performance Management

Business Intelligence System

Establish Targets
Perform Transactions
Measure Results

Supply Chain Planning

Adjust Plan

Exceptions

Workflow

Out of Tolerance

Out of Tolerance

Notifications
Oracle APS: Integrated Performance Management

**Business Intelligence System**
- Performance Management Framework
- Personal Home Page
- Pre-Built:
  - KPIs with Alerts
  - Intelligence Reports
  - Analytical Applications
- Discoverer End User Layer
- Search Engine
- Web Based

**Alerts**
- Internet Sales Channel Exceeds Plan
- Period to Date Profitability at Risk
- On-Time Customer Deliveries Below Plan
Oracle APS
- Oracle Manufacturing Scheduling

- Finite Capacity
- Bottleneck
- Reschedule
- Dynamic Scheduling
- Drag & Drop
Oracle APS
- Oracle Manufacturing Scheduling

Oracle Manufacturing Scheduling, Resource, Material, Finite Scheduling, Bottleneck, Reschedule, Dynamic Forward & Backward Schedule, Gantt, Bar Graph, Graphical User Interface (GUI).

Job No/Operation/Resource, start/end date.

Graph Type, Table (u).
Oracle APS
- Oracle Manufacturing Scheduling

Drag and Drop Entire Job

Click near the center of the Job bar, drag entire Job
Oracle APS Benefit

- Supply Chain Network
- Transaction
  - Program
  - Set Up
- 
- 
- 
- (KPI) Holistic Planning
- 
- Business Partner Collaboration
- Supply Chain Planning Models
  - Subset Planning
    - Supply Chain DRP Plan, MPS Plan, MRP Plan
  - Holistic Planning
    - Supply Chain Plan
Oracle APS Positioning

<table>
<thead>
<tr>
<th>Demand Planning</th>
<th>ATP</th>
<th>Supply Chain Planning</th>
<th>Manufacturing Planning</th>
<th>Manufacturing Scheduling</th>
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</thead>
<tbody>
<tr>
<td>Oracle Demand Planning</td>
<td>Oracle Global ATP Server</td>
<td>Oracle Advanced Supply Chain Planning</td>
<td>Oracle Advanced Factory Planning</td>
<td>Oracle Advanced Manufacturing Scheduling</td>
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<tr>
<td>Rhythm Demand Planner</td>
<td>Rhythm Due Date Quoter</td>
<td>Rhythm Supply Chain Planner</td>
<td>Rhythm Factory Planner</td>
<td>Rhythm Advanced Scheduler</td>
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<td>i2 Demand Planning</td>
<td>i2 Advanced Due Date Quoter</td>
<td>i2 Advanced Supply Chain Planner</td>
<td>i2 Advanced Factory Planner</td>
<td>i2 Advanced Manufacturing Scheduling</td>
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<td>Manugistics Demand Planning</td>
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<td>Manugistics Supply Chain Planner</td>
<td>Manugistics Factory Planner</td>
<td>Manugistics Advanced Manufacturing Scheduling</td>
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<td>Paragon Detailed Manufacturing Scheduling</td>
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<tr>
<td>Others...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Oracle, i2, Manugistics, Paragon, Others...
Oracle APS Customers

- Mykrolis
  - Millipore
  - 2001

- Haworth
  - i2
  - Oracle APS

- Hitachi Data Systems
  - Hitachi
  - APS/CRM/HR
Supply Chain Collaboration

The old model

ERP

ERP

Spread-sheets

ERP

E-mail

ERP
Supply Chain Collaboration

The old model - In search for velocity

- Supply Chain
- Communications vs
- Inventory Cost
Transition to Networked Supply Chain

- Single-Plant: Long Cycle Times, Unsynchronized
- Multi-Plant: Automating Txn Flows, Intra-enterprise
- APS: Supply Chain Optimization, Tier-1 Collaboration

Value to core business:
- High
- Low

Collaboration level:
- Lowest
- Highest
Oracle Supply Chain Exchange

Information Sharing & Supply Chain Collaboration

Exchange
- Message hub
- Real-time visibility to constraints
- Constraint detection and resolution
- Tight integration with procurement, product development
- Business intelligence, and logistics
- Collaborative planning and optimization
Oracle Advanced Planning Suite

e-Business planning solution

- Intra-Enterprise Planning:
  - Oracle Advanced Planning and Scheduling
- Inter-Enterprise Planning:
  - Oracle Supply Chain Exchange

Performance Measurement:
- Oracle Supply Chain Intelligence
Key Elements of an Exchange

**Exchange Supply Chain Collaboration**

- Supply chain
- Supply chain planning
- Collaborative

**A multi-tier, integrated supply chain**

**Exchange**

**Transformational product development**

- On-line
- Collaborative

**E-enabled, dynamic trading communities**

- On-line
- Catalog purchasing
Demo
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