PeopleSoft Supply Chain Integration with Maximo EAM

“Where to Draw the Seam”
Agenda

- About SpearMC
- Drawing the Seam
- Integration Overview
  - Accounting Interfaces
  - Catalog Interfaces
  - Inventory Management Interfaces
  - Procurement Interfaces
- Lessons Learned
- Q & A
About SpearMC.
Founded in 2004, SpearMC is a technology and professional services firm specializing in

- PeopleSoft FSCM, HCM and PeopleTools
- Maximo EAM
- Primavera Unifier
- Hyperion and Oracle BI
- NetSuite
- Applications Training
- Technology and Business Consulting
- Program and Project Management
- Business Transformation
We focus on local market delivery and capability development in line with industry focus areas unique to the regions we serve.

Our local and well-connected network of top-tier business analysts, technical leads, developers and project managers keep travel cost to a minimum.
Each member of our Leadership Team leverages over 20 years of experience in Technology, Financial and Business Transformation.
Industry focus areas include:

- Energy/Oil-Gas
- Utilities
- Healthcare
- Government
- Technology
- Consumer Products
- Financial Services
- Higher Education
About SpearMC

Oracle Gold Partner since 2008:

- Gold Level Partner
- PeopleSoft Specialization
- Applications Reseller
- Hardware Reseller
Drawing the Seam.
Background, 2008

- 12 Transmission & Distribution sites in one instance of Masterpiece (previously on SAP), under one management, standard processes, significant automation
- 5 Generation plant sites in 5 Maximo instances, multiple managements, diverse processes, minimal automation

Decision, 2009

- PeopleSoft selected as ERP, for financials and supply chain, including inventory.
  - Reduced overall interfaces
  - Improved Reporting (integrated)
  - PeopleSoft Inventory determined more robust and mature
Integration Overview.
Integration Overview

Maximo

Chart of Accounts

Work Orders

Catalog Information (Companies, Items)

Inventory Balances & Unit Costs

Material & Service Requirements (MRs & PRs)

Inventory Actuals (Material Issues & Returns)

P2P Actuals (PO Receipts, RTVs, PCard Expenses, Invoices)

PeopleSoft
Accounting Interfaces

- **Background**
  - PeopleSoft is the system of record for PGE’s general ledger

- **Trigger**
  - ChartField validation: upon WO approval
  - FWO: Upon ChartField validation of Work Order accounting

- **Frequency**
  - FWO: Multiple Times Daily
  - ChartFields: Once Daily

- **Lessons Learned**
  - Resolve accounting issues in Maximo prior to integration
Accounting Interfaces

Publish Chart of Accounts

• Basic function is to synchronize values from PeopleSoft and PowerPlant to Maximo of five accounting string components (aka ChartFields):
  o Business Unit
  o Operating Unit
  o GL Account
  o Cost Element
  o Department (RC Code)
  o Accounting Work Order (AWO)

• Updates the Active/Inactive status of each ChartField value in Maximo — either adding, inactivating or re-activating a ChartField value

• Facilitates cleaner accounting data by reducing accounting errors across systems
Establish AWO/FWO

- Approved task work orders in Maximo map to Field Work Orders (FWOs)
  - FWO is a chartfield component of the accounting string
  - FWO is leveraged in the Financials and Supply Chain systems to aggregate costs
- Accounting Work Orders (AWOs) are budgetary and operational groupings of task work orders.
- Upon approval of a work order in Maximo, the pairing of the FWO and its AWO are synchronized to Financial systems
- AWO/FWO pairing is validated downstream in purchasing, payables and inventory management to ensure costs to an FWO are hitting appropriate budget corresponding to the AWO
Accounting Interfaces

ChartField Validation WS

• Implemented as a web service provided by PeopleSoft
• Maximo invokes web service when work order is set to “Ready for Approval” (RAPPR)
• Web service validates the accounting string consisting of 5 ChartField values according to company-defined accounting rules
• Ensures accounting string on work order complies with accounting rules
• Accounting string used downstream for purchases and material issues
Catalog Interfaces

• Background
  o PeopleSoft is the system of record for items, vendors and manufacturers
  o Vendors and Manufacturers are mapped to Maximo Companies
  o Vendor-specific item information maintained in PeopleSoft; not interfaced into Maximo
  o Manufacturer-specific item information is synchronized with Maximo

• Trigger
  o Adds, updates and inactivation

• Frequency
  o Multiple times daily

• Lessons Learned
  o Scale frequency according to how often data is typically updated
  o Sequence of interfaces are important: vendor → manufacturer → item → item-storeroom relationship
Catalog Interfaces

Publish Companies

• Interface synchronizes Maximo Companies data as Vendors and Manufacturers are maintained in PeopleSoft
• PeopleSoft Manufacturers map to company records with type “M”
• PeopleSoft Vendors map to Maximo companies with type “V”
• Interface adds new company records in Maximo for manufacturers and vendors added in PeopleSoft
• Interface updates company records to Active or Inactive based on status of manufacturers and vendors in PeopleSoft
• Vendor/Manufacturer information is required in Maximo to associate to:
  o Incoming PO records
  o Source-vendor for asset purchase history
Catalog Interfaces

Publish Items

• PeopleSoft is the system of record for item catalog data
• Interface synchronizes Item Master data from PeopleSoft into Maximo
• Enables common identification system of materials/parts across Maximo and PeopleSoft
• Item Master contains information, including:
  o Description
  o Asset classification data
  o Originating manufacturer(s) and part numbers
  o Company-level stock vs. non-stock designation
• Vendor-specific item information is NOT synchronized into Maximo
  o Sole-source recommendations can be specified on downstream requisition interface
  o Sourcing decisions are confirmed within PeopleSoft in requisition-to-PO process
Catalog Interfaces

Publish Item-Storeroom

- PeopleSoft is the system of record for item-storeroom data
- Interface synchronizes Item-Storeroom information from PeopleSoft into Maximo
- Item-Storeroom information includes:
  - Storeroom-level stock vs. non-stock designation
  - Replenishment lead-times
  - Storeroom-level item unit cost
- Stock vs. non-Stock designation used downstream for driving whether planned material item lines on a work order are sourced from inventory as material reservation or direct purchased
Inventory Management Interfaces

• Background
  – PeopleSoft is the system of record for inventory functions
  – Only information needed to manage work order costs sent back to Maximo

• Trigger
  – MSR: Maximo Work Order approval; submission of desktop requisition
  – Issue: Depletion of quantity in PeopleSoft charging a work order
  – RMA: Putaway of returned material in PeopleSoft crediting an work order
  – Item Balances: Batch Job

• Frequency
  – Multiple Times Daily

• Lessons Learned
  – Dynamics of business should drive frequency of integrations
Material Reservation

- Transfers stock material requirements specified on Maximo Work Order (WO) or Maximo Desktop Requisition (DR) into PeopleSoft for the creation of a Material Stock Request (MSR)
- Send work order schedule and status updates to PeopleSoft to maintain the changing nature of the initial requirement and dispatch plans
- Material Stock Request (MSR) records in PeopleSoft leveraged in material demand planning and replenishment processes
- Enable supply chain organization to deliver supply at the right time, at the right place, and at the right cost
Material Issues/Returns

- Material Issuance recorded in PeopleSoft charged to a work order is captured as an actual cost to the asset in Maximo.
- Returns of material back to storeroom recorded in PeopleSoft credits back the cost to the corresponding work order.
- PeopleSoft sends back to Maximo:
  - Master reservation REQUESTNUM
  - Item# and Quantity
  - FWO
  - Future Enhancement: unit cost based on perpetual weighted average maintained in PeopleSoft for the source-from storeroom
- Interface accommodates walk-up material issues, whereby material charged to a work order are still captured as an actual cost even if not planned on the originating work order
Inventory Management Interfaces

Publish Item Balances

• Synchronizes Maximo storeroom quantity balances and average unit price with PeopleSoft Inventory daily
• Storeroom quantity balances are just refreshed; detailed transaction history is not replicated in Maximo to maintain the balance
• Necessary so that Maximo users can see proper on-hand inventory balances and unit costs in each storeroom
  o Work order estimating – the updated cost of the item is required on the WO estimate
  o Visibility to stock inventory levels, purchased material status are necessary in planning and scheduling work
Procurement Interfaces

- **Background**
  - PeopleSoft is the system of record for all procure-to-pay functions

- **Trigger**
  - Requisition: Maximo Work Order approval; submission of desktop requisitions
  - PO: Dispatch of PO charged to work order
  - Receipt: Receipt of a PO charged to work order
  - RTV: Return crediting work order

- **Frequency**
  - Multiple Times Daily

- **Lessons Learned**
  - Conduct transactions within systems of record
Procurement Interfaces

Purchase Requisition

• Transfers non-stock Materials and Services requirements specified on Maximo Work Order (WO) or Maximo Desktop Requisition (DR) into PeopleSoft for the creation of a Purchase Requisition (PR)

• Send work order schedule and status updates to PeopleSoft to maintain the changing nature of the initial requirement and dispatch plans

• Purchase requisitions are sourced by procurement resources to source to a purchase order in PeopleSoft

• Once requisition is sourced to a purchase order, changes in material/service requirements must be manually communicated and applied to the purchase order

• Sole-source vendor can be recommend in Maximo and is transmitted to PeopleSoft, but vendor-selection determined within PeopleSoft
Procurement Interfaces

Publish Purchase Order

• Required to create a copy of the Purchase Order from PeopleSoft into Maximo
  o Used for mapping originating Maximo PR to receipt downstream
  o Currently does not accommodate change orders made in PeopleSoft
  o Asset record in Maximo requires traceability on PO line details
    • Vendor
    • Manufacturer
    • Model Number of equipment, parts and materials

• Triggered by dispatch of the PO to the vendor within PeopleSoft
Procurement Interfaces

Publish Receipts/Returns

• Material or Service receipt recorded in PeopleSoft charged to a work order is captured as an actual cost to the asset in Maximo.
  - Only applies to direct purchase material and services
  - Does not apply to materials to replenish storerooms
• Returns of material to vendor (RTV) recorded in PeopleSoft credits back the cost to the corresponding work order.
• Interface accommodates ad-hoc purchases, whereby non stock materials and services charged to a work order are still captured as an actual cost even if not planned on the originating work order
PCard & Invoice Only Interfaces

• Background
  o PeopleSoft is the system of record.
  o PCard data is cost only with users textural description.

• Trigger
  o When payment is made

• Frequency
  o Once a month

• Lessons Learned
  o Consider integrating non-PO/invoice-only vouchers
Publish PCard Expenses

- PCard purchases are low-dollar, unplanned purchases incurred in the field
- Sends PCard transaction detail to Maximo upon reconciliation and payment of each PCard transaction
- Allows visibility into the entire cost of a work order, which includes charges incurred using a P-Card
- PCard lines are recorded on the Actuals tab of a work order
Procurement Interfaces

Publish Invoices

• Interface planned for development
• Capture costs that do not follow other procurement flows:
  o Requisition-to-Purchase Order-to-Invoice
  o PCard
  o Material Reservation-to-Issue
• Captures miscellaneous services that are recorded in PeopleSoft non-PO vouchers and are paid for after-the-fact
Q & A.
Thank You.