

A collection of military medals and a pocket watch is arranged on a textured, light-colored surface. On the left, a blue and white checkered pocket watch is partially visible. Below it, a blue ribbon with a circular emblem is attached to a silver star-shaped medal. To the right, a red ribbon with a circular emblem is attached to another silver star-shaped medal. A pair of gold-rimmed glasses with thin temples lies across the center. In the bottom left corner, a round pocket watch with a compass rose is visible. The text 'Global Inventory Shipments - A Buy Sell Solution' is overlaid on the right side of the image in a green, serif font.

Global Inventory Shipments - A Buy Sell Solution

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Applied Materials



The Company

- ◆ Applied Materials is a semi conductor fabrication equipment manufacturer
- ◆ Head quarters in Santa Clara, CA with offices globally
- ◆ Manufacturing facilities are located in Texas, Santa Clara, Japan, Horsham and Israel



The RPD Group

- ◆ The Refurbished Product Group is a division of Applied Materials
- ◆ Manufacturing facilities are located in the US, Japan, Europe and the Far East
- ◆ The RPD US facilities also acts as a supplier of material for the other RPD sites
- ◆ The RPD organization uses Average Cost



Background

- ◆ Applied Materials Japan procures material two different ways
 - Locally Sourced Parts are purchased new from local suppliers
 - Non-LSP items are purchased from the Santa Clara factory
- ◆ Three different legacy systems are used to track inventory, supply and demand

Background Cont.

- ◆ The legacy systems are not integrated
- ◆ There is no traceability to the transactions





Current Process

- ◆ Approximately 80% of the material used by the AMJ facility is purchased from RPD in Santa Clara
- ◆ Material is requested via an excel spreadsheet.
- ◆ Available inventory shipped to AMJ after a miscellaneous issue
- ◆ The available inventory was rarely found in the RPD organization



Current Process cont.

- ◆ Shipments were entered into a Lotus Notes database (intransit database)
- ◆ Manual acceptance of charges was required to be done in the intransit database
- ◆ Discrepant material was not accepted in the database
- ◆ Material was returned to RPD US only if the value was greater than \$200
- ◆ All accounting transactions were performed in GL



Issues with Current Process

- ◆ The old process presented several issues:
 - Process is manual
 - Inaccurate inventory tracking
 - Incorrect material and quantities shipped
 - Discrepant material not accepted into the intransit database
 - Fee's only charged on material that is accepted
 - All accounting transactions are manually generated



New System Requirements

- ◆ The solution must be global and scaleable
- ◆ Transaction between regions could be in any currency
- ◆ Use specific exchange rates for transactions between regions
- ◆ Ability to change transaction currency at time of PO creation



New System Requirements cont.

- ◆ Need to see the impact in I/C COGS, I/C Revenue and I/C Receivable
- ◆ Need to be able to use a transfer price markup that may vary between different regions
- ◆ Need a document trail for audit purpose - Purchase Order, Invoice, etc.



New System Requirements cont.

- ◆ The shipping organization must approve the demand
- ◆ Users may not perform transactions that cross Set of Books
- ◆ Intercompany transactions between Japan and the US must be done in USD



Possible Solutions

Solution 1: Leave demand and shipment process as is.

Benefits: AMJ users retained control over inventory and payments.

Issues: No systemic method to

- create demand
- track material request
- track shipments
- value items
- assess intercompany charges.



Possible Solutions cont.

Solution 2: Use of Internal Requisition/
Internal Sales orders.

Benefits: A systemic method of creating
demand and tracking shipments.

Issue:

- demand would be created without the approval of the shipping organization
- does not address the intercompany markup
- requires users to transact across sets of books.
- does not impact COGS



Solution

The Buy - Sell Approach:

- the requesting organization creates a purchase order
- when approved would convert to a sales order in the supplying organization
- custom program is used to create a sales order
- standard Order Import process used

Benefit:

- supply and demand trail created
- shipping organizations would approve the transactions
- appropriate set ups would ensure relevant intercompany accounting and transfer price handling



A Buy Sell Solution Set Ups

- ◆ The supplying organization is set up as an intercompany supplier.
- ◆ A location is set up for each supplier and is attached as the default Ship-To Location.
- ◆ The requesting organization is set up as an intercompany customer.
- ◆ Critical elements for creating the sales order were defined at the customer ship to address.



A Buy Sell Solution Set Ups cont.

- ◆ New order type is defined.
 - I/C-Intercompany
- ◆ The sales person is used to determine the I/C Receivable and I/C Revenue accounts.
- ◆ Transfer price and other relevant information defined at supplier site level.



A Buy Sell Solution Process

- ◆ The requesting organization creates a PO using intercompany supplier and appropriate site.
 - Each item has a purchase price of \$0.
- ◆ A custom interface program copies approved PO data to the Open Interface table launching the Order Import program.
- ◆ An intercompany sales order is created in the supplying organization.
 - The order is in an 'Entered' status.



A Buy Sell Solution Process cont.

- ◆ The custom interface then updates the PO with the current price of the item and SO number.
- ◆ On successful creation of the SO the custom program notifies the Supplying organization and the Buyer.
- ◆ The transfer price is added to each item on the SO.
 - The selling price is calculated by the interface program.
 - Based on supplier site descriptive flexfield.
 - Not transferred to the PO.



A Buy Sell Solution Process cont.

- ◆ Shipments are processed by the supplying organization.
 - Pick Release, Ship Confirm and Interfaces.
 - Correct COGS charged based on order type.
- ◆ The Auto Invoice program is used to create Intercompany A/R Invoices.
- ◆ The requesting organization receives the material against the open PO.
- ◆ Intercompany accounts are cleared/reconciled in GL.



Open Issues and Resolutions

Issue: Any modification to an approved intercompany purchased order is not transferred to the associated intercompany sales order.

Solution: The custom interface sets the Purchase order to a 'Freeze' state once the sales order has been created.



Open Issues and Resolutions cont.

Issue: If an item on the purchase order is not enabled in the supplying organization or if an item has a value of \$0, the custom interface can not create the sales order.

Solution:

- modify the approval workflow to not approve the purchase order if either condition exists.
- e-mail notification is sent to the buyer and the supplying organizations with the item information.
- the error is corrected and the PO is approved.



Going Forward

- ◆ The manufacturing facilities in California and Texas also act as suppliers to
 - RPD Manufacturing facilities in Europe, Far East and;
 - Applied Materials manufacturing in Horsham and Israel
- ◆ The global Buy-Sell solution can be used in these business scenarios.
- ◆ Additional set ups for customer/supplier, sales person will be required.



Additional Benefit

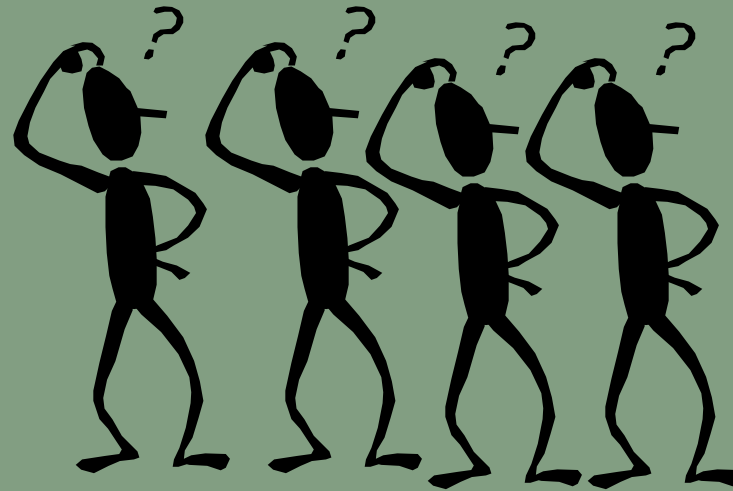
- ◆ The RMA process with the legacy system was very poor:
 - Disposition was based on the value of the item
 - Discrepant material was never received into AMJ inventory
 - Replacement material was shipped to Japan without any backup documentation
 - No method to track what was shipped back to RPD



Additional Benefit cont.

- ◆ With the Buy - Sell solution the RMA process improved:
 - All items must be received into inventory and dispositioned
 - Material that was returned to RPD US requires an RMA number
 - Transfer price reversal is dependent upon the receipt of an RMA in the shipping organization
 - Replacement material is shipped on a new SO

?? Questions ??



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