Seamless Collaboration with Suppliers and Logistics Service Providers

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Learning Points

- Collaboration with Suppliers and Logistics Providers to improve overall effectiveness and efficiency in Supply Chain

- Redefining EOQ (Economic Order Quantity) to optimize Total Cost, i.e.:
  - Material Purchase Cost
  - Logistics Cost
  - Ordering Cost
  - Inventory Carrying/Holding Cost
Return on Investment (RoI)

The RoI is measured through Net Cost Reduction:

- Overall Logistics Cost Reduction by 8-10%
- Redefining EOQ to reduce overall Inventory Carrying Cost by 6-9%
- Increased efficiency in purchasing administration by 15-20%
Client’s Business Need

Seamless Collaboration with Suppliers and Logistics Service Providers to generate value across the supply chain by:

- Improving Overall Inventory Management Effectiveness
  - Providing suppliers real time visibility on demand, inventory and delivery schedules
- Improving On-Time Delivery
- Logistics Cost Optimization
- Reducing Ordering Cost
- Self Service capabilities for internal users and suppliers to enhance efficiency in purchasing administration
Solution - Supply Network Collaboration

- Integrated Supply Chain Management solution leveraging SNC and SAP Enterprise Portal (EP)
  - Client Managed Inventory
    - Long Term Forecast Visibility for Suppliers
    - PO Collaboration and Scheduling Agreement Release
  - Supplier Managed Inventory
    - Collaborative Replenishment process for Supplier Managed Inventory (SMI)
    - Self Service capabilities for ASN, Invoice Flip and Reporting
    - Event-Driven notification with “Manage By Exception” capabilities
- Collaboration with Logistic Providers
- Simplified Supplier On-boarding process
Solution Overview - Architecture

SAP ERP 6.0 Systems

- ECC1
- ECC2
- ECC3
- ECC4

SAP Enterprise Portal (EP 7.0)

- LDAP

SAP Process Integration (PI 7.0)

- PO (Create, Change)
- ASN (Delete, Receive)
- Goods Receipt
- Demand and Stock
- Invoice IDoc
- Forecast delivery schedule

B2B Connection

- Delivery schedule XML
- Load Plan/Invoice XML

SAP SNC 7.0 (Supply Network Collaboration)

- Create/Delete ASN
- Goods Receipt
- Demand and Stock
- Forecast delivery schedule

Web Dispatcher

Logistics Service Provider

Real Experience. Real Advantage.
SNC - Client Managed Inventory Process

- SAP ECC (ERP 6.0) System
  - Master data transfer (CIF) (Material/Plant/Vendor/SA)
- Transfer Scheduling Agreement Release and PO (Batch Setup)
- Inbound Delivery
- GR(POD)
- Invoice
- Payment Status

- SAP PI 7.0

- SAP SNC 7.0
  - Display Delivery Due List
  - Flip ASN
  - Display GR
  - Flip Invoice
  - Payment Status Update

- SAP Portal 7.0

PO Collaboration and Scheduling Agreement Release for Client Managed Inventory
SNC - SMI Supplier Managed Inventory Process

- SAP ECC (ERP 6.0) System
  - Master data transfer (CIF) (Material/Plant/Vendor/SA)
  - Transfer Inventory and forecast data (Batch Setup)

- SAP PI 7.0
  - Inbound Delivery
  - GR(POD)
  - Invoice
  - Payment Status

- SAP SNC 7.0
  - Display SMI Monitor
  - Replenishment Planning (Planned Receipts)
  - Flip ASN
  - Display GR
  - Flip Invoice
  - Payment Status Update

- SAP Portal 7.0

Transfer Demand and Stock Data to Supplier
Supplier carries out Replenishment Planning using SMI Monitor
Logistics Service Providers Integration

- **Load Consolidation - Cost-based optimization**
  - Vehicle capacities (weight, volume, numbers of pallets ...)
  - Time window constraints
  - Handling requirements and handling capacities
  - Restrictions for combining different products
Transport Logistics (Process Before & After)

Moving from LTL (Less Than Truck Load) to FTL (Full Truck Load) - Milk Run Operations Model

Before

Individual deliveries to each manufacturer

After

Milk-run operations

Joint collection and delivery (milk-run)
Economic Logistics (Process Before & After)

**Earlier Process**

1. **Supplier 1**
   - Receive Delivery
   - Schedule & Manufacture material
   - Hire Truck
   - Pay Truck
   - Charge logistic cost
   - Create ASN
   - Load and Dispatch
   - Receive Material
   - Flip ASN into GR

2. **Supplier 2**
   - Receive Delivery Schedule & Manufacture material
   - Hire Truck
   - Pay Truck
   - Charge logistic cost
   - Create ASN
   - Load and Dispatch
   - Receive Material
   - Flip ASN into GR

3. **Supplier 3**
   - So On

**New Process**

1. **Supplier 1**
   - Receive Delivery Schedule & Manufacture material
   - Receive Load Plan from Logistics provider
   - Create ASN With load plan ref.
   - Load Truck
   - Receive Truck
   - Flip all ASNs pertaining to one truck into GR

2. **Supplier 2**
   - Receive Delivery Schedule & Manufacture material
   - Receive Load Plan from Logistics provider
   - Create ASN With load plan ref.
   - Load Truck
   - Receive Truck
   - Flip all ASNs pertaining to one truck into GR

3. **Supplier 3**
   - So On

**Simplified/Economic logistics & receiving process**
Real Experience. Real Advantage.

**Simplified Supplier On-boarding Process**

**Earlier Process**

1. Identify Vendor for portal collaboration. Obtain user details
2. Fill up vendor on-boarding request, variant names, job names, data feed job time
3. Send request to support organization to onboard vendor
4. Raise request for other accesses (fill form)
5. Wait for 7 days to onboard vendor (7 days SLAs)
6. Support to create variants in ECC, update solutions on old portal, raise ticket for ERP to create user IDs
7. Verify onboarding & inform supplier/users
8. Wait for other accesses to complete

**Customized New Process for Quick Supplier Onboarding**

1. Identify Vendor for portal collaboration. Obtain user details
2. Trigger e-form via registration process, All accesses in one go
3. Automated email to User in 2 hrs.

Supplier On-boarding time reduced from 7 Days to 2 Hours
Solution Snapshot - SMI Overview

### SMI Overview

**Customer Location Number**: PLBTPS@QPT002

**Product**
- BTP_BRAKE_1_TIER@QPT002
  - **UoM**: SCM
  - **SoH**: 87
  - **PrpQ**: 0
  - **GTIN**: 00000000000000
  - **Customer Loc. No.**: PLBTPS@QPT002
  - **Customer**: BTP_ORG_CU
  - **Duration**: 4.00
- BTP_TURBO_1_TIER@QPT002
  - **UoM**: SCM
  - **SoH**: 108
  - **PrpQ**: 0
  - **GTIN**: 00000000000000
  - **Customer Loc. No.**: PLBTPS@QPT002
  - **Customer**: BTP_ORG_CU
  - **Duration**: 4.00

**Last Refresh**: 06.07.2007 23:07 CET
Solution Snapshot - SMI Details

SMI Details - Product view

Selection Area
Go  Open Selection

Product Data

Time Buckets Profile  History Comparison (Inventory)  Inventory Monitor Settings

Loc/Prod/APN:  PLBTPS@OPT002 / BTP_BRAKE_1_TIER@OPT002  Customer:  BTP_ORG_CU
My Product No.:  My Cust. Loc. No.:  
S/N:  87  Unrestr./Cons. Stock:  87/0
B/C Stk:  0/0  Min/Max Stk:  50/200
Lead Time:  4.00  GTIN:  00000000000000
Last Update Inv.:  06.07.2007 21:14:29  Last Update Dem.:  06.07.2007 22:20:48

Key Figures

Grid  Graphic

Print Version  Export  Grid Arrangement: SMI No Ship-From Location  Save  Propose Planned Receipts  Audit Trail  History Comparison  ASN Overview  Rcpt/Reqmt List  Expand All  Personal

Collapse All  Notes On

- PLBTPS@OPT002  Key figure  Initial  01.07.2007  02.07.2007  03.07.2007  04.07.2007  05.07.2007  06.07.2007  07.07.2007  08.07.2007  W'28.2007
- BTP_BRAKE_1_TIER@OPT002
- PLBTPS@OPT002  Demand  0  150  150  150  150  150  150  150  150  1060
- PLBTPS@OPT002  Average Demand  0  0  0  0  0  0  0  0  0  0
- PLBTPS@OPT002  Raw Net Demand  0  0  0  0  0  0  0  0  0  0
- PLBTPS@OPT002  Planned Receipts  0  250  100  200  0  0  0  0  0  0
- PLBTPS@OPT002  In-Transit Quantity  0  0  0  0  0  0  0  0  0  0
- PLBTPS@OPT002  Projected Stock  87  187  137  -13  37  -113  -283  -13  137  -913
- PLBTPS@OPT002  Days' Supply  0.58  1.24  0.91  0.00  0.24  0.00  0.00  0.00  0.91  0.00
- PLBTPS@OPT002  Minimum Proposal  0  113  13  63  213  163  313  463  218  963
- PLBTPS@OPT002  Maximum Proposal  113  263  163  213  363  313  463  613  363  1113
Value Adds

- Enabled true collaboration between planner/supplier with a single view of the data
- Process automation resulting in Simplified Registration Process for Quick On-boarding of Suppliers
- Process Automation for Logistics Service Providers to manage end-to-end transportation
- Intuitive and Easy to adopt user interface through SAP EP
- Common collaboration platform for all applications
Key Learnings

- Supplier Change Management is an essential process
- Do not plan for rolling out the solution for all suppliers at once
  - Identify key materials and suppliers that are potential candidate for the pilot
  - Identify supplier’s readiness with the infrastructure to allow seamless integration
- Performance issues for introducing the new solution to the suppliers
Best Practices

- Harmonize diversified processes

- Master Data is critical and foundational for accurate forecasting

- Focus on Usability, Adaptability and Scalability
  - Standardized solution
  - Simple to use

- Emphasize on enhanced supply chain efficiency through Collaboration

- Involve Suppliers and Logistics Providers early on, for better solution adoption
Future Solution Enhancements

Logistics Center/Hub for Optimized Goods Delivery to Plants (Inventory Managed by Logistics Provider)

Conventional Transport

Transport enabled by Logistics Center/Hub
Thank you for participating.

Please remember to complete and return your evaluation form following this session.

For ongoing education on this area of focus, visit the Year-Round Community page at www.asug.com/yc