Supply Chain Management and Logistics Strategy Overview

Peter Flensberg, Vice President T&L Development
October 9th, 2014
Agenda

- SCM Strategy at a glance
- Supply Chain Execution Platform
- SAP Transportation Management
- Selected Innovations
- Outlook
The stakes are high

Supply chains need to

- Be agile and responsive to changing customer expectations
- Quickly capitalize on trends with new products
- Enable entry to new markets
- Capture new customers before competition
- Maintain high customer loyalty

Supply chains have to be fundamentally faster to accommodate “the need for speed”
SAP Supply Chain Solution Vision
Enable Businesses to Transform their Supply Chains to Demand Networks

Supply Chain Monitoring
Ensure integrity and predict issues of the DEMAND NETWORK

Integrated Business Planning
Balance DEMAND plans with NETWORK constraints for profitability

Demand Driven Supply Networks
Sense & shape DEMAND and orchestrate the fulfillment NETWORK

Logistics & Order Fulfillment
The DEMAND NETWORK requires speed & efficiency in Logistics

Powered by SAP HANA
Key Strategic Moves in SAP SCM
30,000 Feet View
The Real Time Demand Driven Supply Networks
Accelerated process flow from order entry to delivery

Real time Supply networks reduce the lead time dramatically
(e.g. Retail delivery within hours)
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SAP Transportation Management History

A Long History of **TRANSPORTATION** Business, Process and IT **EXPERTISE**

1994: Shipment Execution (SAP ERP)
2001: Shipping Planning & Optimization (SAP APO)
2011: Holistic Transportation Management (SAP TM)
2013: Market-leading Supply Chain Execution (SCE Platform)
New Generation Transportation Management
Best-in-class, integrated, connected, real-time Supply Chain Execution Platform

Transportation Management  Warehouse Management
Track & Trace

Freight Forwarder
Shipper
Consinee
Carriers
The New SAP Transportation Management Solution
A major, integral part of the Supply Chain Execution Platform

SUPPLY CHAIN EXECUTION PLATFORM

SAP TM
TRANSPORTATION MGMT.
Freight Order Management, Planning, Execution & Settlement

SAP EWM
EXTENDED WAREHOUSE MGMT.
Warehouse Planning & Execution

SAP EM
EVENT MANAGEMENT
Transportation Execution Tracking & Event Management
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SAP TM Supports all Transportation Scenarios
A few examples...

Direct truck shipment

Truck networks

Multi-modal domestic shipment

Airfreight D2D

Airfreight shipment P2P

Ocean LCL shipment D2D

Ocean Bulk shipment D2D
Customer Scenario in Mining
Transportation Outbound Process

Pre-Carriage (Rail, Truck) | Main-Carriage (Ocean) | On-Carriage (Barge)

Sales / Purchasing | Transport Planning | Transport Execution | Monitoring | Freight Cost Management | Reporting / KPIs

- Master Data
- Dangerous Goods
- Sales / Purchase order
- Customs / Taxes
- Transportation Proposal
- Planning Main Carriage
- Planning Pre Carriage
- Planning On Carriage
- Time Slot Mgt.
- Check-In
- Yard Activities
- Check-Out
- Inbound / Outbound
- Event Handling
- Workflow / Status
- Monitoring
- Tactical Tendering
- Charge Calculation
- Agreements & Tariffs
- Cost Distribution
- Invoice Verification
- Data Consolidation
- Data Preparation
- KPI Reporting
- Transportation Cockpit
SAP Transportation Management

- Complete transportation management solution
- Interactive transportation and shipment planning, collaborative tendering
- Integrated logistics and fulfillment management, transportation execution visibility and monitoring
- Comprehensive freight cost management, Integrated freight and forwarding settlement
Deep, Native Integration with the SAP Business Suite

Out-of-the Box
Standard, preconfigured interfaces

End-to-End
Comprehensive procure-to-pay & order-to-cash integration

Real-Time
Synchronized processes with document flow & life-cycle mgmt.

SAP Business Suite

SAP Transportation Management

Lower TCO / TCI

Efficient Planning & Order Mgmt.

Accurate Visibility

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Comprehensive SAP Business Suite Integration Coverage

**Sales & Procurement**
- Sales order scheduling / available-to-promise
- Sales, purchase, returns & stock transfer orders

**Logistics Execution**
- Delivery & shipment processing
- Warehouse planning & execution (EWM)

**Environment Health & Safety Management**
- Compliant dangerous goods shipment

**Global Trade Services**
- International trade regulation compliance
- Customs export processing

**Financial Management**
- Carrier invoice verification & payment / self invoicing
- Sales order profitability & material valuation
SAP TM Overview

Transportation Sourcing
- Conduct bids for rate and capacity on trade lanes for modes & carriers
- Bid optimization
- Analyze & Forecast for better decisions
- One click contract creation

Transportation Order Management
- Freight Demand Creation & Quotation
- Automatic Demand creation
- Improve visibility via Document Flow
- Ocean Booking

Transportation Planning & Tendering
- Transportation Planning
- Freight Tendering
- Transportation Optimization
- Carrier Selection & Assignment
- Vehicle Routing & Scheduling
- Multi-Mode Capability

Transportation Execution & Visibility
- Print/send transportation documents
- Automated Carrier Collaboration Portal, Web UI, E-Mail or Message
- Full Track and Trace Visibility

Transportation Charge Management
- Calculate charges
- Freight Invoicing: Customer/Supplier
- ERP Financials Integration & Settlement
- Freight Contracts Management
- Rate Sheets & Scale Tables Management
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Strategic Freight Management
T&L Collaboration Portal
Load Optimization
GANTT Chart Planning
Analytics
Strategic Freight Management

Strategic Freight Selling
Carrier/LSP

RFQ
Quote
RFQ/Quote Negotiation & Generation

Strategic Transportation Agreement Building

Profit Maximization
Cost Minimization
Cost Analysis

Commodity & Capacity
Service levels
Rating
Transportation Requirement
Trade lanes

Carrier/Customer KPIs
Analytics & Simulations
Carrier/Customer/Factsheet

Strategic Freight Procurement
Shipper
Carrier/LSP

RFQ
Quote
RFQ/Quote Negotiation & Generation
Freight Procurement Process

Step 1: SAP BW

Step 2: SAP SFP RFQ Prepare

Step 3: Compare Responses

Step 4: Simulate Estimated

Step 5: Award Summary

Step 6: One-Click Contract Creation

To TM Freight Order Processing
T&L Collaboration Portal

Freight Agreement Management
Freight Forwarder

Strategic Freight Procurement

Self Billing Invoice Submission*
Dispute Management*

Shipper
Consignee
Carriers

Capacity & Demand Planning
Order Mgmt. & Freight Planning
Warehouse Execution
Freight Exec. & Monitoring
Freight Settlement

Freight Order Management

Freight Tendering
Event Notification & Handling

Freight Tendering
Freight Quotations
Event Handling

Freight RFQs
Freight RFQs
Freight Orders for Executo

Open
Open
Open
Pending

Strategic Freight Mgmt. & Contract Life-cycle Mgmt.

* Roadmap topics for future release
## Freight Order Management

**Freight Tendering**

As a carrier, you can view the freight requests for quotation (RFQs) that you have received from a shipper. You can also view the freight quotations that you have submitted to your shipper for a specific freight RFQ.

If you do not make any changes, you can accept one or more freight RFQs. If you make changes, you can accept just one freight RFQ. You can reject one or more freight RFQs and provide a rejection reason. You can also view details about the tendered freight order, such as item details, location information, and business partners.

### More Information
- User Settings
- Personalization in Freight Order Management
- Freight Request for Quotation
- Stop Sequence
- Acceptance or Rejection of a Freight RFQ
- Requested Dates and Acceptable Dates

### Freight Requests for Quotation

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Load Optimization

- Loading pallets into trucks, trailers, containers

- Rules-based load optimization, considering:
  - Dimensions
  - Axle weight constraints
  - Stacking rules
  - LIFO loading
  - Etc.

- 3-d visualization of load plan
Example – Truck
Last-In First-Out, Colored by Destination Location
Manual Planning with Gantt Charts

Visibility on usage and availability of your own fleet (trucks, trailers)
View the plan from time perspective in an intuitive graphical fashion

Interactive resource-based planning
Drag and drop

Monitoring the execution of your transportation plan

Real-time planning in the cockpit
Adjust plan based on reported events
Manual Planning with Gantt Charts
Visibility, Usability & Flexibility

Visibility
Usage of trucks & trailers
Downtimes & nonworking times
Execution status & reported times for freight orders
Notifications for overload, empty movements & time conflicts

Planning Scenarios
Truck planning (freight orders & truck resources)
Truck & trailer planning (trailer units & trailer resources)
Re-planning based on events from execution
SAP Smart Business for Transportation and Logistics Overview
Analytical FIORI Apps TM – Transportation Orders
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# SAP TM high level roadmap

## Rail Shippers
- O2C for rail carriers & Q2P for rail shippers
- Strategic freight management
- T&L collaboration portal
- Labor demand planning
- SCE platform on HANA

## Truck for shippers
- Gantt chart planning
- Empty Provisioning & Triangulation
- Load optimization
- Invoice submission & match pay via portal

## Logistics Service prov.
- Hub handling
- Ocean schedules handling
- Strategic freight management
- Driver planning
- Round offs all modes
- Pallet building in load optimization
- Customs & security filing
- Embedded LSP

## Ecommerce / B2C/ retail
- Last mile delivery
- Milk run planning
- Mid term, planning
- HANA profitability
- Carrier business network
- Mixed pallets
- BRIM integration
- Slot booking (DAS)

## Supply chain convergence
- Bulk commodity enhancements (TM)
- Integrated SC Planning & Exec. e.g. forecasting
- Real-time strategic planning & simulation

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“SAP is the **leading supplier** of TMS. Their growth over the last year has been **astonishing.**”*

SAP is #1 in TMS & WMS

**#1 in the overall & software TMS market**

**#1 in the software WMS market**

**SAP is #1 in Market Growth***

26% YoY SCE market growth in 2012

2.7x faster than the market

2x key peer vendors

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Thank you

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