Digital Transformation of Supply Chains
Getting Sourcing, Supplier Management and Supply Chain on the Same Page
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Digital Disruption is here

96% are influenced by social media and reviews before buying

Sophisticated customers expect 100% service experience

83% of companies use public cloud, 51% workload through cloud today

Data Explosion: 90% of data generated in last 2 years

50.3% of commerce transactions through mobile

And Procurement technology?
A new generation of workers
Three silos that inhibit collaboration in your supply chain

#1 Psychological Silo
- Lack of visibility and control
- Fear of dependency and failure
- Stay within comfort zone

#2 Organizational Silo
- No view of bigger picture
- Local goals and performance metrics
- No cross department recognition

#3 Information Silo
- Tools not connected
- Different perspectives disjointed
- Data replication and rapid ageing
Example of an adopter: Intelligent Supply Chain

LIFECYCLE

Envision a Product

Engineering R & D

Plan Product, Source parts

Manufacture

Deliver Product to Channel

Customer Purchase

Activation

Customer Issues

Contact support to resolve

Receive units

Repair units

Fulfil to customer

Capture feedback

Optimize & Predict

Supply Chain Data

Digitized Infrastructure

Advanced Analytics and Machine Learning

Algorithmic decisions

Intelligent Supply Chain Cloud

External data

Social

Environmental

Economic

Data Driven Organization

• Data first
• Man – Machine harmony
• Analytical not operational
SAP Digital Framework

$2B investment

Customer Experience

Workforce Engagement

Digital Core

SAP S/4HANA

Business Transactions

Intelligent Insights

SAP Leonardo

IoT & Supply Chain

SAP Ariba

SAP Digital Procurement
Digital Transformation for Supply Networks

Ariba Business Network
$1+Trillion Spend
2+MM Trading Partners

Collaborative Sourcing
RFx, BOM’s, Compliance, Contracts, Risk, Pricing

Collaborative Planning
Forecast, Sched. Agreem., Inventory, Contract Mfg. Visibility

Collaborative Execution
PO’s, Changes, Confirmations, ASN, Quality, Consignment, Subcontracting, Returns

Collaborative Finance
Invoices, ERS, Status, SC Finance, Payments

Expectations ↑
- Digital Experience
- Faster Innovation
- Perfect Order
- Full Transparency

S4/HANA Digital Core

I BP
Demand
Supply
Control

Responsive
Efficient

Global
Complex

Extended Supply Chain

Contract Manufacturers
Distribution Partners
3PL’s
Direct Suppliers
N-Tier Suppliers
IOT

IOT

Value

• Price control
• Increase compliance
• Faster time-to-market

• Inventory ↓
• Assurance of Supply
• Lead time ↓

• Higher Service Levels
• Expedites ↓
• Manual Overhead ↓

• DPO ↑
• Free Cash ↑
• Exceptions ↓
SAP Ariba Solutions for Direct Spend: Supply Chain

Speed time to market, lower cost of goods sold, avoid supply chain disruptions
SAP Ariba Solutions for Direct Spend

End-to-end process management
Advanced negotiation & supplier selection
Multi-level BOMs sourcing & costing
Product lifecycle sourcing

Collaborative supply chain execution
Network intelligence
Supplier onboarding

Collaborative planning
ERP & PLANNING INTEGRATION
PLANNING COLLABORATION

MANAGE
DESIGN
PLANNING
SOURCE
CONTRACT
EXECUTION COLLABORATION
MANUFACTURE

SAP Ariba Supply Chain Collaboration
SAP Ariba Strategic Sourcing Suite
SAP Ariba Solutions for Direct Spend

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Supplier Management Challenges

Supply Chain / Manufacturing
- **Primary trigger:** Ensuring continuity of supply & product quality
- **Challenge:** Supply chain disruptions and product quality issues that could have been avoided with better risk insights and supplier performance visibility
- **Goal:** Clear visibility into supplier performance and risk

Operations, Risk & Compliance
- **Primary trigger:** concerned about integration with existing ERP systems (IT). Concerned about regulatory, reputational and financial risk impact
- **Challenge:** high cost and difficulty of integration with ERP (IT). Reactive, after-the-fact risk management may lead to costly business disruptions
- **Goal:** want cost effective integration and a 360 view of suppliers (IT). Want to be more efficient and proactive in driving preventive measures to minimize business disruptions (GRC)

Suppliers
- **Primary trigger:** Fatigue. Constantly updating multiple customer systems
- **Challenge:** Continuous requests to enter information into multiple systems from multiple contacts across the customer business including finance, procurement and risk & compliance
- **Goal:** Have a single system in which to maintain relevant data that’s easy to access
SAP Ariba Supplier Management Architecture

SAP Ariba Source-to-Settle application suite

Common supplier record

Onboarding
Due Diligence & Qualification
Segmentation
Performance management
Development & phase-out

Vendor model
Qualification matrix
Segmentation matrix
Spend matrix

Segmentation by Risk
Preliminary Due Diligence
Engagement Risk Assessments
Risk Remediation
Ongoing Monitoring

Supplier Risk

Sync business process

Two-way sync

Sync business process

SAP Business Suite and other ERPs
MDG-S
Other DWs
SQL and NoSQL DBs
Other ERPs

External data sources

News sources
Government sources
Ratings sources
Financial sources

Supplier-managed information

Government sources
Ratings sources
Financial sources

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Example of an adopter: Leading chemicals company

Key Takeaways: Digital business interaction:

- Harmonizes across categories (direct/indirect/MRO)
- Integrating a global network to collaborate
- Incremental solution capabilities every quarter
- Natively integrated into SAP ECC
- Reduction of manual touches
Assessing Supplier Risk

Supplier engagements*

- Inherent
- Relationship
- Performance
- Supplier ratings

Incidents

- Legal & regulatory compliance
- Environmental & social
- Financial
- Operational

Supplier risk scoring model

Exposure

Assessments

Adjudication*

Remediation*

* Include planned innovations.

Integreted Open Configurable

Business continuity

Business reputation
Comprehensive risk categories

**Regulatory and legal compliance**
- Sanctions and watch lists
- Bribery and corruption
- Legal
- IT security
- Fraud
- Anticompetitive behavior
- Corporate crime

**Environmental and social**
- Human rights
- Labor issues
- Health and safety
- Environmental issues
- Conflict minerals
- Unethical practice
- Decertification

**Financial**
- Bankruptcy
- Insolvency
- Mergers and acquisitions
- Divestiture
- Credit rating downgrade
- Downsizing
- Liquidation
- Tax issue

**Operational**
- Natural disasters and accidents
- Plant disruption or shutdown
- Labor issues
- Product issues
- Project delays
SAP Ariba Strategic Sourcing Suite
Application Innovation: Product Sourcing - Multi-Level Material Hierarchies (BOM)

Product Capabilities

- ERP/PLM integration
- Multi-Level BOM Tagging and Rollup, additional costs
- Volume/time based pricing, price history
- RFP’s and Auctioning, Supplier 360 view
- Category and Program Management
- Contract creation and collaboration, incl. e-signatures
- Dashboard driven exception management

Key Benefits

- Automate end-to-end processes
- Eliminate data re-entry
- Real time pricing visibility
- Easier reporting and filtering
Supply Chain Collaboration requires a Business Network

**Point-to-Point Integration**
- Processes customized per trading partner
- EDI formats and connectivity standards
- No business logic
- No aggregated data content or history

**Business Networks**
- Standardized processes
- Multiple connectivity options
- Configurable rules and business logic
- Community intelligence
- 1-time connect for buyer or seller
SAP Ariba Supply Chain Collaboration
Collaborative network for real-time visibility

Buyer
- Forecast/demand
- Purchase/subcontract order
- Schedule agreement release
- Component ship notice
- Component inventory data
- Goods receipt notice
- Consignment inventory status
- Quality notification/response
- Self-billing/ERS invoice
- Payment

Supplier/Contract manufacturer
- Forecast commit
- PO confirmation
- Component receipt notice
- Manufacturing visibility **
- Component consumption
- Advance ship notice
- Deviation request/response
- Invoice

Manufacturing and retail collaborative processes
- Enable collaboration with direct materials trading partners
- Complement and extend back-end systems
- Provide instant visibility into availability of supply

** B2B only, UI/upload planned in upcoming releases
Example: Adopter in Pharma Industry

External manufacturing model dictates that we record all material handling / quality activity for company-owned material at CMO in our internal systems.

BEFORE

Most Significant Challenges
1. Data exchanged & planning process vary by CMO relationship – (no standard process, work, data)
2. SAP Blueprint (process + transactions) does NOT support current process - “Workarounds” have become the process (lot trace, order status, delivery stats, deviations maintained outside SAP)
3. Volume of manual transactions and data entry steadily increasing with ExM Volume and new internal data demands

Most Significant Impacts
A. Quality/Compliance – Impaired ability to utilize standard systems and processes for batch release, deviations - and execute those processes efficiently, effectively.
B. Reliable Supply – Transaction delays (backlog, errors) and batch release delays create production delays at the next node. Poor data for risk management reporting.
C. World Class Supplier – ExM data quality impacts planning (CMO demand changes, poor forecast), no sufficient input data for integrated planning & analysis

Orders
Inventory transfers
Yields
Deviations
Batch Testing Results
Usage Decisions
Shipments
Batch ID’s

Partner
Ops, Quality, Planning
Data entry
System(s) of Record

Company
Phone/Email

“Manual “ Information flow

“Work-arounds”

SAP

Physical material flow

Receive company input
Ship to next node

Data entry

Next make operation
Supply Chain Improvements

**AFTER**

Company’s model for ExM dictates that we record all material handling/quality activity for company-owned material at CMO in our internal systems.

**Program Components**

1. **Process and System improvement** – SAP Blueprint for ExM/EQA revised for current/future needs (including Advanced Planning)
2. **Leverage Ariba Network** – via Ariba Supply Chain Collaboration (SCC) to automate order, inventory, quality transactions, improve timeliness and quality of information
3. **Process Standardization** – As each CMO on-boarded, standard planning cadence, quality process, data expectations established and enforced

**Most Significant Benefits**

- **Enhance Visibility**
- **Improve Efficiency**
- **Increase Control**
SAP Ariba offers suppliers choice on how to collaborate digitally

- **Ariba Light Enablement**
  - Interactive Email
  - Order and Invoices

- **Supplier self Enablement**
  - Portal:
    - File Upload and/or
    - PO Flip

- **Ariba Enablement Services**
  - System-to-System

- **Ariba Network**
  - portal customer
  - PO, OC, INV via email only
  - Full transaction set

- **Ariba Network**
  - portal customer
  - Full transaction set, EDI, cXML

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Buyer and Supplier Performance Dashboard
Mobile app for buyers and planners
What makes Cloud Integration Gateway Innovative

Cloud Integration Gateway

Integration Wizard
Self Testing Framework
Developer Tools
Monitoring

Powered by
HANA Cloud Integration

Purchase Order
Order Confirmation
Advance Ship Notification
Invoices
Remittance
Scheduling Agreement Releases & Forecast
Goods Receipt
Consignment Movement
List & others

Powered by HANA Cloud Integration

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Digital Transformation Journey

1. Digitize the process
2. Analytics on digitized data
3. Cognitive and Machine Learning
Thank you

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YOUR FEEDBACK IS IMPORTANT

Please take a few minutes to complete this brief survey.

Survey link:

www.instituteforsupplymanagement.org/IH17

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